

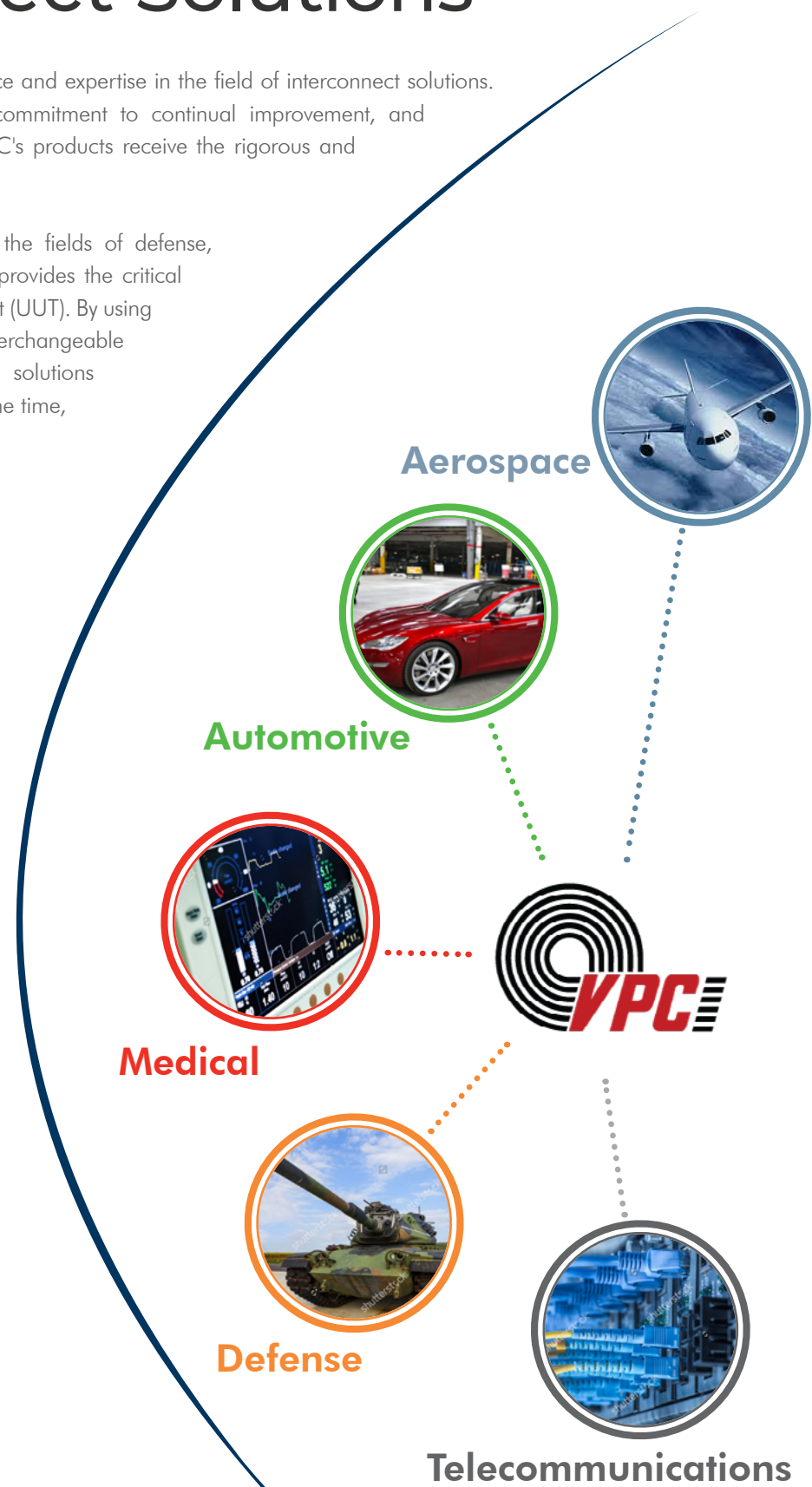
# Interconnect Solutions

VPC offers over 60 years of unparalleled experience and expertise in the field of interconnect solutions. VPC's commitment to uncompromising quality, commitment to continual improvement, and exceptional value means you can rest assured VPC's products receive the rigorous and expedient testing you demand.

Used by test and measurement professionals in the fields of defense, aerospace, automotive, medical, and more, VPC provides the critical connection between the tester and the unit under test (UUT). By using a receiver on the tester side and mating it with an interchangeable test adapter (ITA), VPC's modular and scalable solutions allow multiple types of I/O to be easily mated at one time, simplifying the test process.

## Why VPC?

- Protect and extend the life of expensive test equipment
- Increase throughput by quickly and easily adapting tester to multiple UUTs
- Both standard and customized solutions to meet your specific needs
- A dedicated team of engineers to help you design and meet your system requirements
- Simplified cable and patchcord management
- Wiring configuration for virtually any type of test and measurement instrumentation



## Table of contents

### Products

|                                      |     |
|--------------------------------------|-----|
| SIM Solutions                        | 02  |
| iSeries                              | 14  |
| G2, G6, & G10                        | 54  |
| S6, G12, and G12x Platform Solutions | 76  |
| G18 Solutions                        | 94  |
| Pull-Thru Solutions                  | 104 |
| 9025 and 9050 Solutions              | 126 |
| Additional Accessories               | 152 |
| Contacts, Modules, and Tools         | 154 |
| SIM Signal/ VTAC .....               | 156 |
| QuadraPaddle Signal .....            | 160 |
| TriPaddle Signal .....               | 174 |
| Mini Power .....                     | 186 |
| Mini Coaxial .....                   | 189 |
| Micro Power .....                    | 202 |
| Micro Coaxial .....                  | 203 |
| High Power .....                     | 214 |
| High Frequency Coaxial .....         | 216 |
| Thermocouple .....                   | 231 |
| Fiber Optic .....                    | 228 |
| Pneumatic .....                      | 237 |
| Vacuum .....                         | 240 |

### Technical Information

|                  |     |
|------------------|-----|
| Cable Management | 243 |
| Cross Reference  | 246 |



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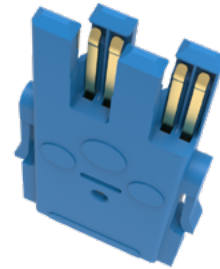
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# Snap-In-Modular (SIM) Solutions

## What is SIM Technology?

The Snap-In-Modular (SIM) insert is a proprietary snap-in technology that uses latches to anchor the insert to a SIM module. The inserts for VTAC, QuadraPaddle, and VTAC Right Angle are each interchangeable in 90 Series SIM modules and i2 MX connectors.

Whether you are using patchcords or custom PCBs in your solution, SIM inserts provide the opportunity to use HSD contacts in broadband applications.

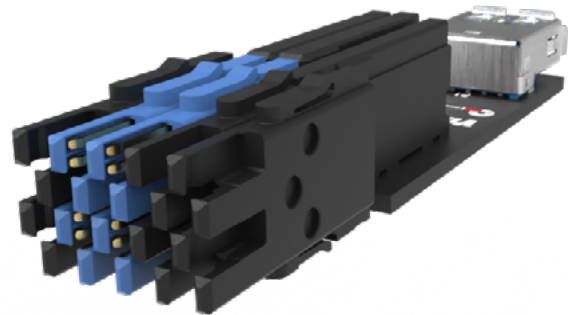


VTAC Insert

## High Speed PCB Connections

VTAC also comes in a right angle PCB configuration, the VTAC Right Angle insert. It is ideal for a variety of applications that require a wireless solution for your project.

VTAC Right Angle is sold as part of a kit to help connect custom PCBs to a 90 Series receiver module or i2 MX ITA. These contacts are capable of data transfer rates of more than 10 Gbps.



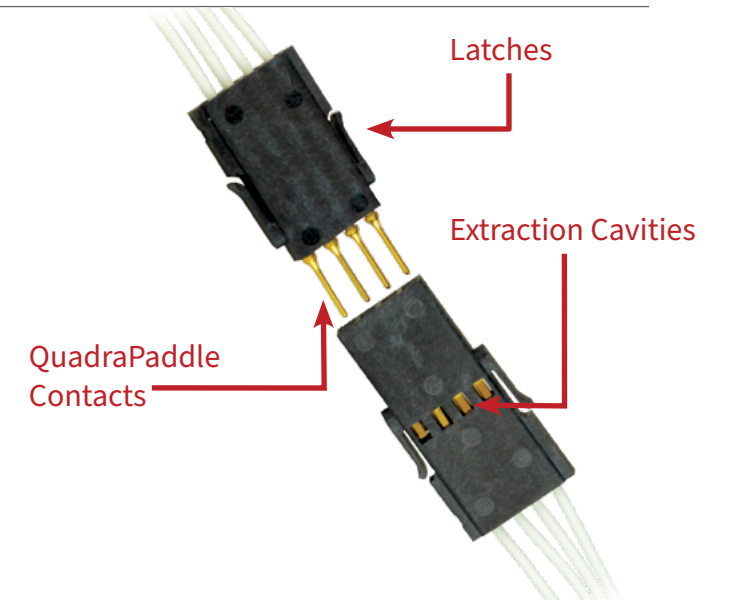
## Useful Applications

VTAC Right Angle is ideal for Pull Thru applications. Connecting your PCB to your ITA, you can harness the speeds required for rapid data acquisition.

Due to the design of the VTAC Right Angle, you can still configure your ITA to use patchcords since the right angle inserts only consume a fraction of a traditional PCB adapter.

## SIM QuadraPaddle Options

Not every application requires high speed data transfer. We also offer a SIM QuadraPaddle insert for signal or lower speed applications. You can outfit an i2 MX and 90 Series with both high and low speed, giving you increased scalability and versatility to meet any project's needs.



## Use SIM Anywhere You Use VTAC

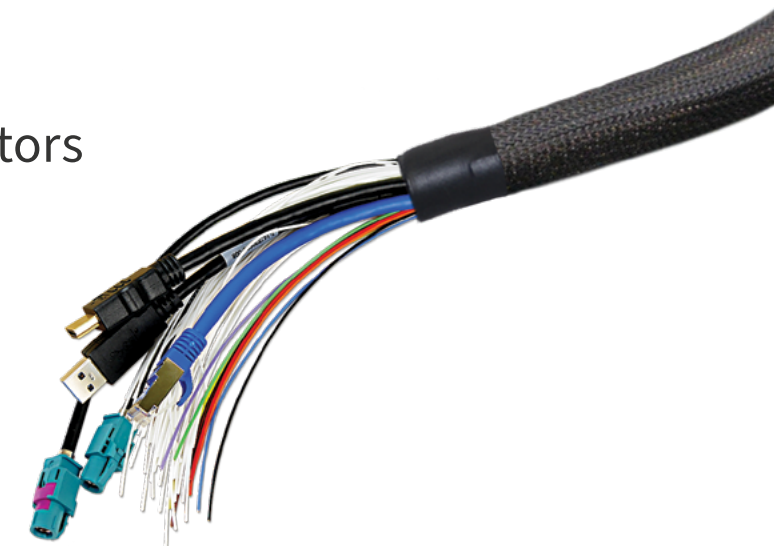
The added variety of contacts give you more options to leverage high speed technology in your solution.

The 90 Series SIM modules have 34 positions available to accept SIM VTAC HSD, SIM VTAC Right Angle, or SIM QuadraPaddle. Alternatively, the i2 MX connectors have 22 positions available for solutions where a smaller footprint is required.

## Compatible with COTS Connectors

Whether you choose patchcords or right angle inserts for a PCB solution, all SIM inserts are compatible with commercial-off-the-shelf (COTS) connectors, including:

- USB 3.0
- HDMI
- Mini-SAS HD
- RJ45
- VHDCI
- RosenbergerHSD
- DVI
- SATA
- QSFP
- InfiniBand



## SIM Technology

Each of the Snap-In-Modular (SIM) inserts share the same footprint, which makes them all compatible with VPC's i2 MX connector and 90 Series SIM modules. The added compatibility means more options to intermix insert types within a single module and to conduct tests at a range of signal speeds.

### Features and Benefits

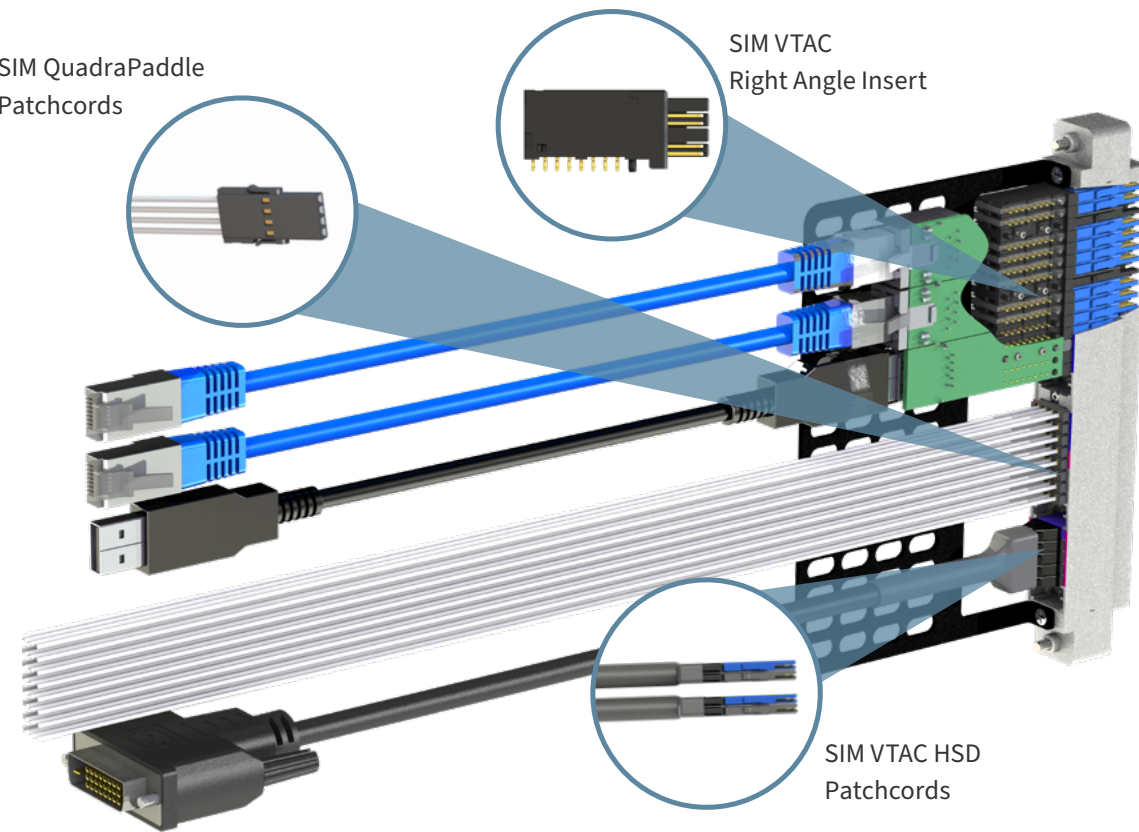
- Stackable I/O in a small footprint
- Transfer data at speeds more than 10 Gbps (12.5+ Gbps with patchcords)
- Precision-welded patchcords and PCB configuration eliminates signal crosstalk from other contacts and ensures signal integrity
- Opportunity to use both patchcords and custom PCBs in the same solution
- Easy to remove contacts to allow for trouble-shooting



VTAC

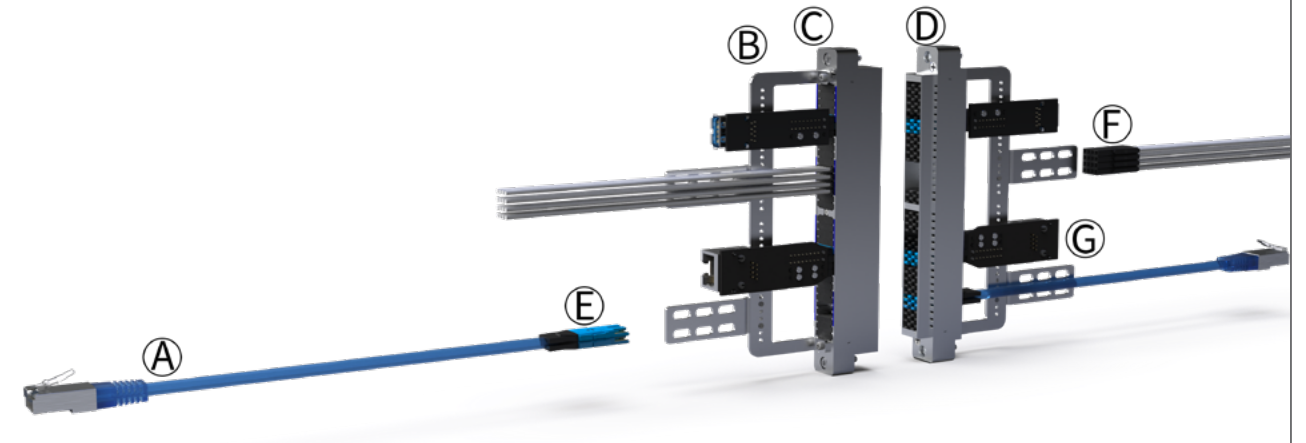
SIM QuadraPaddle Patchcords

SIM VTAC Right Angle Insert



SIM Receiver Configuration

## SIM 90 Series Configuration

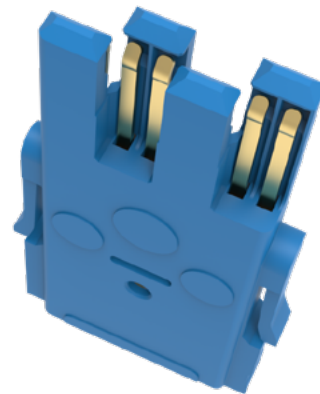


- |                                 |  |
|---------------------------------|--|
| A. RCV/ITA VTAC HSD Patchcords* | E. SIM VTAC HSD Inserts                  |
| B. Strain Relief Plate          | F. SIM RCV/ITA QuadraPaddle Flying Leads |
| C. SIM ITA Module               | G. VTAC PCB Adapter                      |
| D. SIM ITA Module               |  |

| Part #                            | Description   |
|-----------------------------------|---|
| <b>SIM INSERTS - RECEIVER/ITA</b> |   |
| 510 180 101                       | Signal Insert, Receiver, SIM QuadraPaddle, 4 Position   |
| 510 181 101                       | Signal Insert, ITA, SIM QuadraPaddle, 4 Position  |
| 610 151 101                       | High Speed Insert, Receiver/ITA, SIM, 12.5 Gbps, 50µ", VTAC HSD (Only Available in Patchcords)            |
| 610 151 103                       | High Speed Insert, Receiver/ITA, SIM, 50µ", VTAC HSD, Double Ended Insert (For Use with Right Angle Only) |
| 610 151 104                       | High Speed Insert, Receiver/ITA, SIM, 50µ", VTAC HSD, Right Angle Insert                                  |
| 610 151 105                       | High Speed Insert, Receiver/ITA, SIM, 50µ", VTAC HSD, Retention Insert (For Use with Right Angle Only)    |
| 610 151 106                       | High Speed Insert, Receiver/ITA, SIM, 50µ", VTAC HSD Kit (For Use with Right Angle Only)                  |
| <b>SIM MODULES</b>                |   |
| 510 170 101                       | SIM Module, Receiver, 34 Position   |
| 510 171 101                       | SIM Module, ITA, 34 Position  |
| <b>CABLE ASSEMBLIES</b>           |   |
| 7-152 924 000-036                 | Cable Assembly, Receiver, SIM QuadraPaddle Insert, 36", Flying Leads                                      |
| 7-152 924 000-072                 | Cable Assembly, Receiver, SIM QuadraPaddle Insert, 72", Flying Leads                                      |
| 7-151 924 000-036                 | Cable Assembly, ITA, SIM QuadraPaddle Insert, 36", Flying Leads   |
| 7-151 924 000-072                 | Cable Assembly, ITA, SIM QuadraPaddle Insert, 72", Flying Leads   |
| <b>ACCESSORIES</b>                |   |
| 510 109 568                       | Strain Relief Plate for 34 Position Receiver/ITA SIM Module   |
| 610 151 102                       | Blank Insert Kit, Receiver/ITA, SIM VTAC HSD, 10 Pieces   |

## VTAC Insert

| Contact Specifications          |   |
|---------------------------------|---|
| Data Rate                       | 12.5+ Gbps per differential pair                            |
| Crosstalk                       | 30 dB min   |
| Characteristic Impedance        | 100+/- 10 Ω - differential pair<br>50+/- 5 Ω - single ended |
| Operating Voltage and Current   | 3 amps max. continuous (350 volts max.)                     |
| Contact Resistance              | 40 mΩ max. per mated contact                                |
| Insulations Resistance          | 1000 MΩ min.  |
| Dielectric Withstanding Voltage | 1050 VDC RMS min.   |
| Mating Force                    | 12 oz max. [340 g] per insert                               |
| Insert Material                 | Outer shell - black LCP<br>Male contact - alloy 7025        |
| Contact Termination             | Welded  |
| Contact Plating                 | 50 μ" Au over 100 μ" Ni                                     |

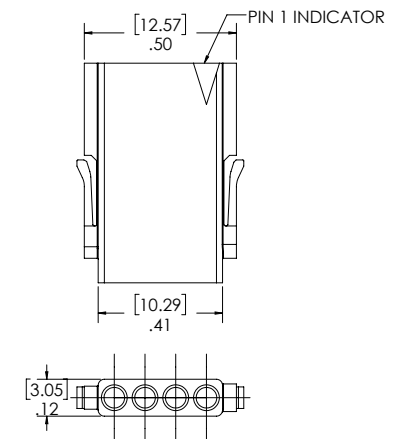
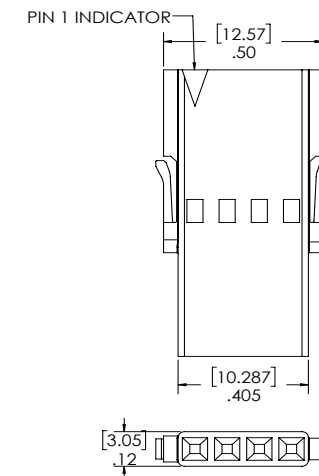


Receiver/ITA Contact

### High Speed Insert, Receiver/ITA, SIM, 12.5 Gbps, 50μ", VTAC • Part # 610 151 101

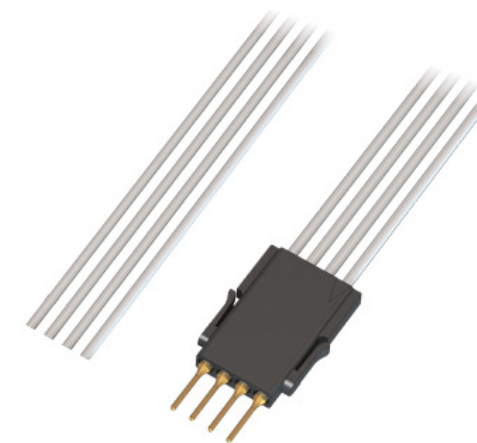
| Part #                            | Description   |
|-----------------------------------|---|
| <b>VTAC PATCHCORDS - RECEIVER</b> |   |
| 7-142702731-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, Rosenberger HSD Plug, 1 Position      |
| 7-142877655-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, 36", DVI-D Male Dual Link, 5 Position |
| 7-142890690-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, USB 3.0 Type A Male, 2 Position       |
| 7-142890691-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, USB 3.0 Type A Female, 2 Position     |
| 7-142890692-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, USB 3.0 Type B Male, 2 Position       |
| 7-142891693-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, HDMI Male, 3 Position                 |
| 7-142892700-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, SATA Male, 1 Position                 |
| 7-142893694-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, RJ45 Plug, 2 Position                 |
| 7-142861000-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, Twinax Flying Leads, 1 Position       |
| 7-142895000-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, 24 AWG, Flying Leads, 1 Position      |
| 7-142896722-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, Mini-SAS HD Plug, 4 Position          |
| <b>VTAC PATCHCORDS - ITA</b>      |   |
| 7-141702731-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, Rosenberger HSD Plug, 1 Position           |
| 7-141877655-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, 36", DVI-D Male Dual Link, 5 Position      |
| 7-141890690-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, USB 3.0 Type A Male, 2 Position            |
| 7-141890691-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, USB 3.0 Type A Female, 2 Position          |
| 7-141890692-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, USB 3.0 Type B Male, 2 Position            |
| 7-141891693-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, HDMI Male, 3 Position                      |
| 7-141892700-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, SATA Male, 1 Position                      |
| 7-141893694-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, RJ45 Plug, 2 Position                      |
| 7-141861000-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, Twinax Flying Leads, 1 Position            |
| 7-141895000-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, 24 AWG, Flying Leads, 1 Position           |
| 7-141896722-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, Mini-SAS HD Plug, 4 Position               |

## SIM QuadraPaddle Insert



Signal Insert, Receiver, SIM QuadraPaddle, 4 Position • Part # 510 180 101

Signal Insert, ITA, SIM QuadraPaddle, 4 Position • Part # 510 181 101

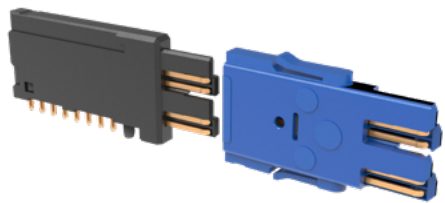


| Specifications                     |  |
|------------------------------------|--|
| Insert Material                    | Black liquid crystal polymer                                     |
| Operating Temperature              | Operating • -55° C to 125° C<br>Non-operating • -65° C to 225° C |
| Available Contact Positions        | 4  |
| SIM Module Insert Positions Needed | 1  |

The SIM QuadraPaddle insert was added to the SIM product family to bring more versatility. Sharing the same footprint as the SIM VTAC HSD insert, each SIM QuadraPaddle insert can fill one SIM insert slot within a SIM 90 Series module or i2 MX.

## SIM VTAC Right Angle Kit

| Contact Specifications          |   |
|---------------------------------|---|
| Data Rate                       | 10+ Gbps per differential pair                              |
| Crosstalk                       | 30 dB min   |
| Characteristic Impedance        | 100+/- 10 Ω - differential pair<br>50+/- 5 Ω - single ended |
| Operating Voltage and Current   | 3 amps max. continuous<br>(350 volts max.)                  |
| Contact Resistance              | 40 mΩ max. per mated contact                                |
| Insulation Resistance           | 1000 MΩ min.  |
| Dielectric Withstanding Voltage | 1050 VDC RMS min.   |
| Mating Force                    | 12 oz max. [340 g] per insert                               |
| Insert Material                 | Outer shell: black LCP<br>Male contact: alloy 7025          |
| Contact Plating                 | 50 μ" Au over 100 μ" Ni                                     |




SIM VTAC Right Angle Kit (Receiver/ITA)  
Part # 610 151 106

This two-piece kit includes Part # 610 151 103 and Part # 610 151 104 to allow custom PCBs to attach to SIM VTAC HSD inserts.


| Part #             | Description   |
|--------------------|---|
| <b>SIM INSERTS</b> |   |
| 610 151 103        | High Speed Insert, Receiver/ITA, SIM, 50μ", VTAC HSD, Double Ended Insert (For Use with Right Angle Only) |
| 610 151 104        | High Speed Insert, Receiver/ITA, SIM, 50μ", VTAC HSD, Right Angle Insert                                  |
| 610 151 105        | High Speed Insert, Receiver/ITA, SIM, 50μ", VTAC HSD, Retention Insert (For Use with Right Angle Only)    |
| 610 151 106        | High Speed Insert, Receiver/ITA, SIM, 50μ", VTAC HSD Kit (For Use with Right Angle Only)                  |
| <b>TOOLS</b>       |   |
| 910 112 130        | Extraction Tool, SIM, Receiver/ITA  |
| 910 112 132        | Tool, Insertion, Right Angle, VTAC HSD (For Use with Right Angle Only)                                    |
| <b>ACCESSORY</b>   |   |
| 610 151 102        | Blank Insert Kit, Receiver/ITA, SIM VTAC HSD, 10 Pieces   |

## Fully Loaded SIM VTAC Right Angle Kit

| Contact Specifications          |   |
|---------------------------------|---|
| Data Rate                       | 10+ Gbps per differential pair                              |
| Crosstalk                       | 30 dB min   |
| Characteristic Impedance        | 100+/- 10 Ω - differential pair<br>50+/- 5 Ω - single-ended |
| Operating Voltage and Current   | 3 amps max. continuous<br>(350 volts max.)                  |
| Contact Resistance              | 40 mΩ max. per mated contact                                |
| Insulation Resistance           | 1000 MΩ min.  |
| Dielectric Withstanding Voltage | 1050 VDC RMS min.   |
| Mating Force                    | 12 oz max. [340 g] per insert                               |
| Insert Material                 | Outer shell: black LCP<br>Male contact: alloy 7025          |
| Contact Plating                 | 50 μ" Au over 100 μ" Ni                                     |



34 Position Receiver SIM Module  
Part # 510 170 102



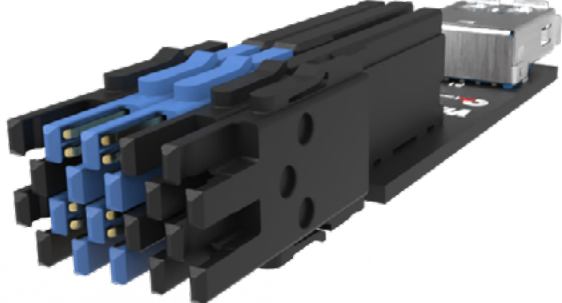
34 Position ITA SIM Module  
Part # 510 171 102

This fully loaded SIM module kit comes with 34 SIM VTAC HSD double-ended and VTAC Right Angle inserts Part # 610 151 106. The module kit comes with two PCB brackets to help to secure and reinforce the module to a PCB. It also comes with two 2-56 captive module screws, and four M2 x 5 mm flathead screws.

| Part #              | Description   |
|---------------------|---|
| <b>PCB ADAPTERS</b> |   |
| 510 170 102         | SIM Module, Receiver, Fully Loaded with SIM VTAC Double Ended and Right Angle Inserts (610 151 106)       |
| 510 171 102         | SIM Module, ITA, Fully Loaded with SIM VTAC Double Ended and Right Angle Inserts (610 151 106)            |
| <b>SIM INSERTS</b>  |   |
| 610 151 103         | High Speed Insert, Receiver/ITA, SIM, 50μ", VTAC HSD, Double Ended Insert (For Use with Right Angle Only) |
| 610 151 104         | High Speed Insert, Receiver/ITA, SIM, 50μ", VTAC HSD, Right Angle Insert                                  |
| 610 151 105         | High Speed Insert, Receiver/ITA, SIM, 50μ", VTAC HSD, Retention Insert (For Use with Right Angle Only)    |
| 610 151 106         | High Speed Insert, Receiver/ITA, SIM, 50μ", VTAC HSD Kit (For Use with Right Angle Only)                  |
| <b>TOOLS</b>        |   |
| 910 112 130         | Extraction Tool, SIM, Receiver/ITA  |
| 910 112 132         | Tool, Insertion, Right Angle, VTAC HSD, (For Use with Right Angle Only)                                   |
| <b>ACCESSORY</b>    |   |
| 610 151 102         | Blank Insert Kit, Receiver/ITA, SIM VTAC HSD, 10 Pieces   |

## PCB Adapters

| Contact Specifications          |   |
|---------------------------------|---|
| Data Rate                       | 10+ Gbps per differential pair  |
| Crosstalk                       | 30 dB min   |
| Characteristic Impedance        | 100+/- 10 $\Omega$ - differential pair<br>50+/- 5 $\Omega$ - single ended |
| Operating Voltage and Current   | 3 amps max. continuous (350 volts max.)                                   |
| Contact Resistance              | 40 m $\Omega$ max. per mated contact                                      |
| Insulation Resistance           | 1000 M $\Omega$ min.  |
| Dielectric Withstanding Voltage | 1050 VDC RMS min.   |
| Mating Force                    | 12 oz max. [340 g] per insert   |
| Insert Material                 | Outer shell: blue LCP<br>Male contact: alloy 7025                         |
| Contact Termination             | Right angle pressfit  |
| Contact Plating                 | 50 $\mu$ " Au over 100 $\mu$ " Ni   |

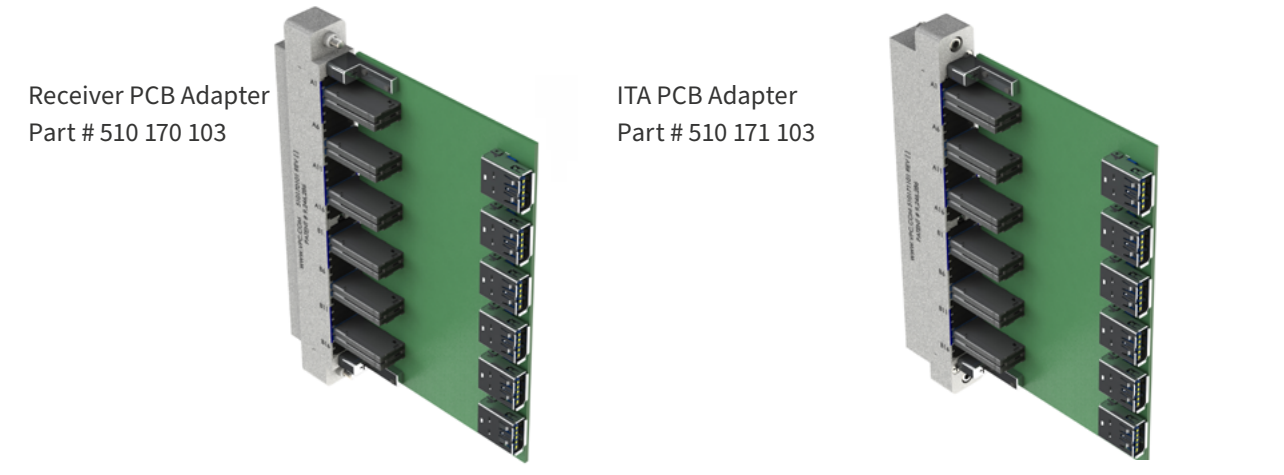


5 Position PCB Adapter  
Receiver | ITA  
510 170 104 | 510 171 104

| Part #              | Description   |
|---------------------|---|
| <b>PCB ADAPTERS</b> |   |
| 510 170 104         | PCB Adapter, Receiver, SIM, VTAC HSD, 5 Position, to 1 USB 3.0  |
| 510 171 104         | PCB Adapter, ITA, SIM, VTAC HSD, 5 Position, to 1 USB 3.0   |
| 510 170 105         | PCB Adapter, Receiver, SIM, VTAC HSD, 6 Position, to 1 Cat 6  |
| 510 171 105         | PCB Adapter, ITA, SIM, VTAC HSD, 6 Position, to 1 Cat 6   |
| <b>SIM INSERTS</b>  |   |
| 610 151 103         | High Speed Insert, Receiver/ITA, SIM, 50 $\mu$ ", VTAC HSD, Double Ended Insert (For Use with Right Angle Only) |
| 610 151 104         | High Speed Insert, Receiver/ITA, SIM, 50 $\mu$ ", VTAC HSD, Right Angle Insert                                  |
| 610 151 105         | High Speed Insert, Receiver/ITA, SIM, 50 $\mu$ ", VTAC HSD, Retention Insert (For Use with Right Angle Only)    |
| <b>TOOL</b>         |   |
| 910 112 130         | Extraction Tool, SIM, Receiver/ITA  |
| <b>ACCESSORY</b>    |   |
| 610 151 102         | Blank Insert Kit, Receiver/ITA, SIM VTAC HSD, 10 Pieces   |

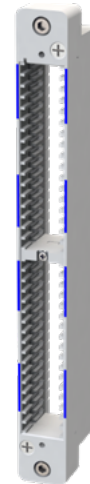
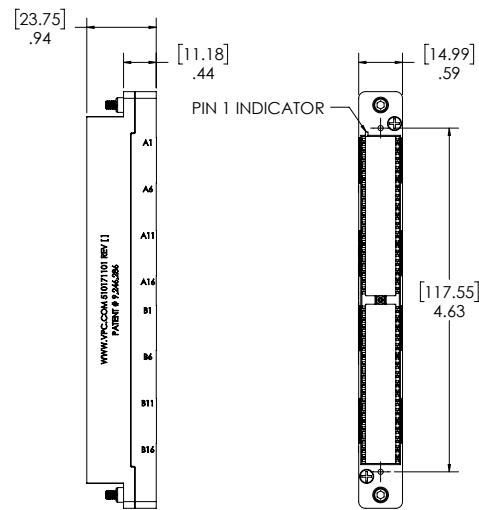
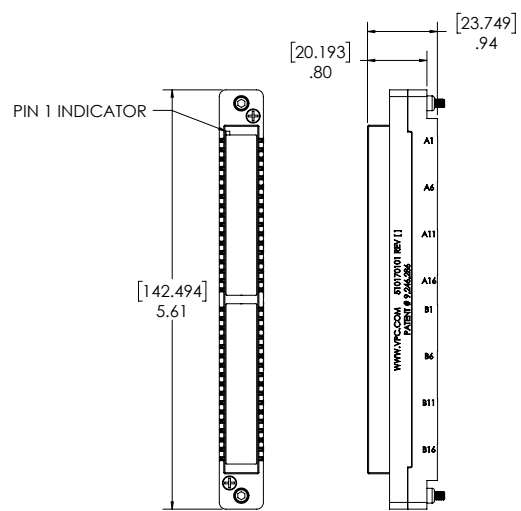
## PCB Adapters

| Contact Specifications          |   |
|---------------------------------|---|
| Data Rate                       | 10+ Gbps per differential pair          |
| Operating Current               | 2 amps                                  |
| Operating Temperature           | -55° C to 105° C                        |
| Max. Current                    | 3 amps max. continuous (350 volts max.) |
| Dielectric Withstanding Voltage | 300 VDC RMS min.                        |
| Insulation Resistance           | 1000 M $\Omega$ min.                    |



| Part #              | Description   |
|---------------------|---|
| <b>PCB ADAPTERS</b> |   |
| 510 170 103         | PCB Adapter, Receiver, SIM, VTAC HSD, 34 Position, to 6 USB 3.0   |
| 510 171 103         | PCB Adapter, ITA, SIM, VTAC HSD, 34 Position, to 6 USB 3.0  |
| <b>SIM INSERTS</b>  |   |
| 610 151 103         | High Speed Insert, Receiver/ITA, SIM, 50 $\mu$ ", VTAC HSD, Double Ended Insert (For Use with Right Angle Only) |
| 610 151 104         | High Speed Insert, Receiver/ITA, SIM, 50 $\mu$ ", VTAC HSD, Right Angle Insert                                  |
| 610 151 105         | High Speed Insert, Receiver/ITA, SIM, 50 $\mu$ ", VTAC HSD, Retention Insert (For Use with Right Angle Only)    |
| <b>TOOL</b>         |   |
| 910 112 130         | Extraction Tool, SIM, Receiver/ITA  |
| <b>ACCESSORY</b>    |   |
| 610 151 102         | Blank Insert Kit, Receiver/ITA, SIM VTAC HSD, 10 Pieces   |

## 34 Position SIM Module Inserts



SIM Module, Receiver, 34 Position • **Part # 510 170 101**

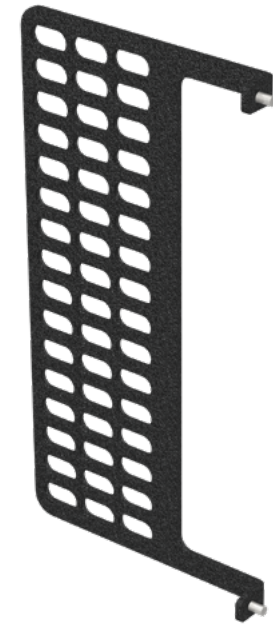
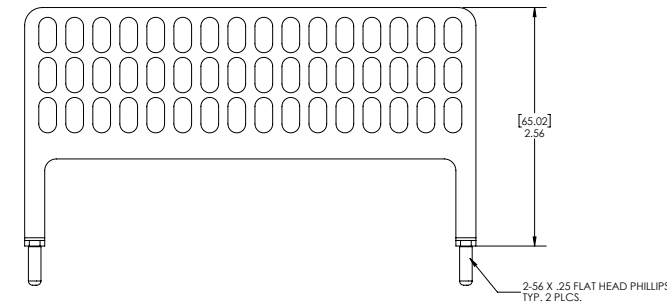
ITA • **Part # 510 171 101**

### Specifications

|                             |                    |
|-----------------------------|--------------------|
| Material                    | Nickel plated zinc |
| Operating Temperature       | -40°C to 125°C     |
| Available Contact Positions | 34                 |
| Module Positions Needed     | 1                  |

The 90 Series SIM receiver and ITA modules can accept up to 34 SIM inserts, including: SIM VTAC HSD, SIM QuadraPaddle, and SIM VTAC Right Angle.

## SIM Solutions • Accessories



The strain relief plate is made of aluminum and is black powder coated. It includes four wire ties and stainless steel hardware.

Strain Relief Plate, Receiver/ITA, SIM Module • **Part # 510 109 568**



Blank inserts are for unused SIM insert slots. One blank insert fills a SIM single insert slot and fits in either receiver or ITA 90 Series modules or the i2 MX. Ten blank inserts are included per part number.

Blank Insert Kit Receiver/ITA, SIM, 10 Pieces • **Part # 610 151 102**

# Endless Possibilities

with i2 Micro iCon

## Innovative Engagement Design

- Spring-locking tabs fasten over latching post for secure engagement
- Keying pins and rectangular locking mechanism ensure even and precise engagement
- Removable ITA backshell enables easy wire access



## Exceptional Capabilities

- Options include: i2 wired, i2 direct to PCB, i2 to flex print, and i2 to PCB adapter
- High-density signal connector offers 168 signal positions
- i2 Hybrid connector offers 120 signal and 12 Micro Power/Micro Coaxial positions



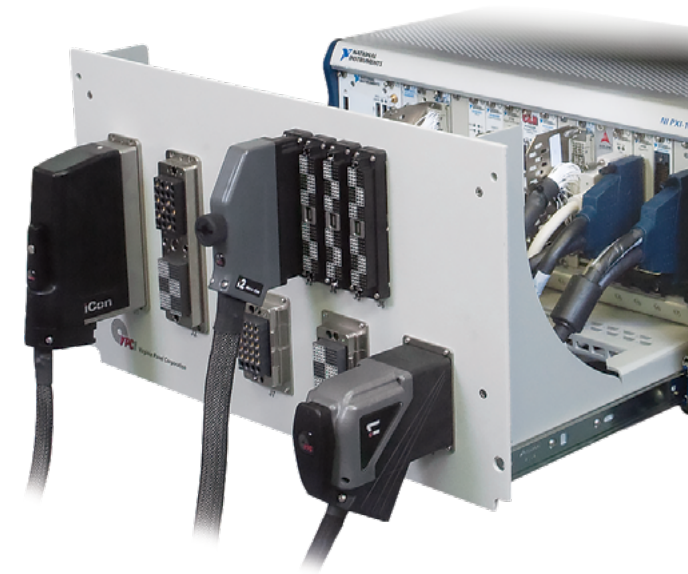
## Compact and Stackable

- Sleek .8" footprint enables horizontal stackability in a multi-connector layout
- 30° angled cable exit minimizes vertical space between connectors



## PCB Capable

- High-density signal headers enable direct connection to PCB adapter or PXI card
- Header contains solderless compliant pins for easy integration
- Twin female QuadraPaddle contacts can be directly connected to the PCB using right angle headers





## i2 Micro iCon • 1 Module Solution

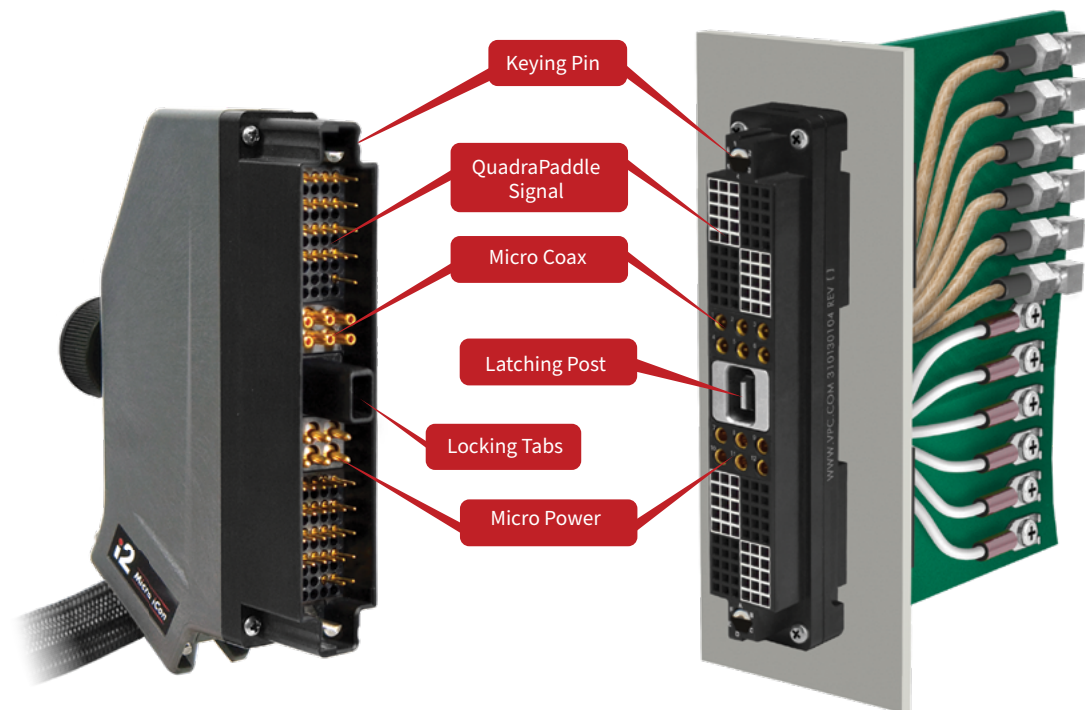
i2 Micro iCon meets the need for a slim-line, low I/O connector. Designed for the small connector market, i2 offers a sleek .8" footprint with capabilities for discrete-wiring, horizontal, and right-angle PCB mounting.

### Features and Benefits

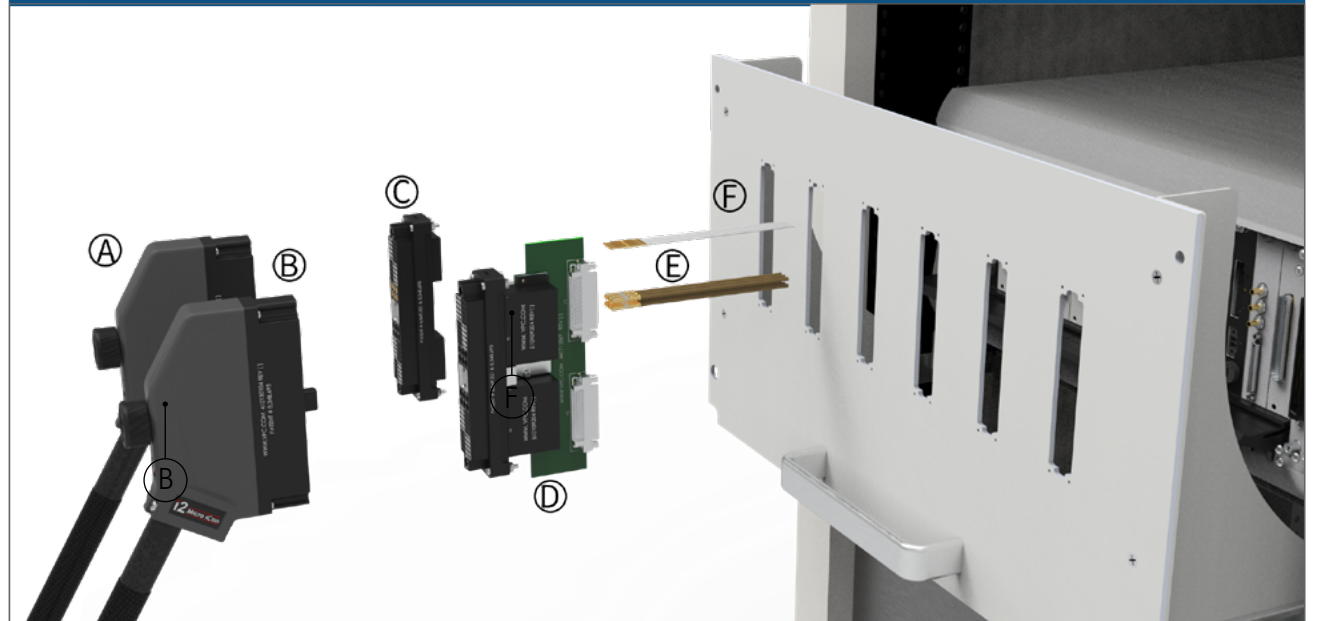
- 168 signal points available with QuadraPaddle technology
- Hybrid version offers 120 signal and 12 Micro Coaxial/Micro Power positions
- 30° cable exit for vertical stackability
- 0.8" footprint for horizontal stackability
- Integrated spring locking tabs ensure even and secure engagement
- Keying pins to prevent connector mismatch and damage to pins
- Direct connection to PCB with the 84 or 60 pin header
- Connection options include: i2 direct to PCB, i2 to flex print, i2 to PCB adapter card, and i2 discrete-wired
- Engineered for over 10,000 cycles



i2 Receiver and ITA



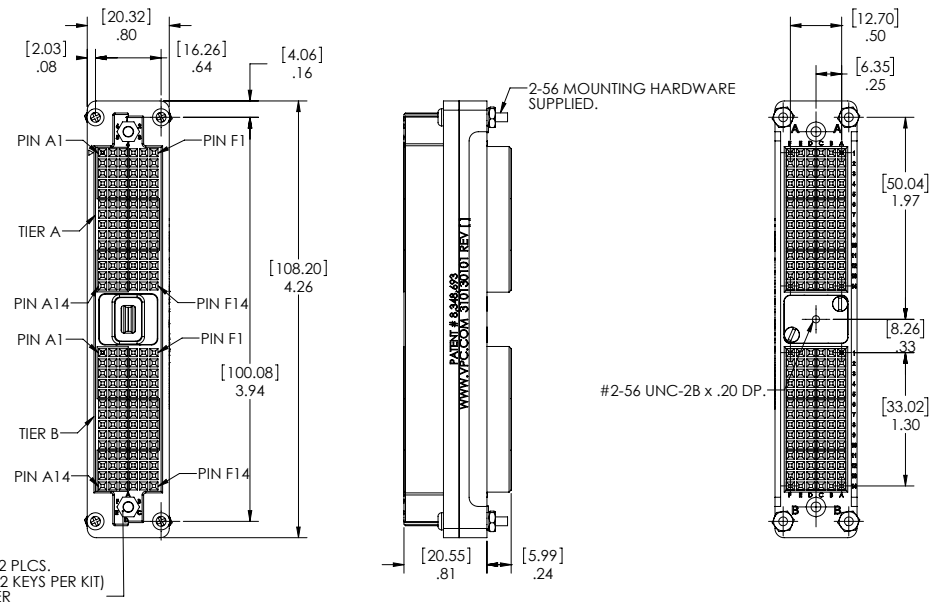
## i2 Micro iCon Slide Mount Configuration



- A. ITA Backshell
- B. i2 Micro iCon ITA
- C. Receiver Module
- D. 84 Pin Header
- E. Receiver Patchcords
- F. Mounting Panel

| Part #                  | Description   |
|-------------------------|---|
| <b>RECEIVERS</b>        |   |
| 310 130 101             | Receiver, i2 Micro iCon, 168 Position, Fully Loaded with Twin Female Contacts (610 138 200)               |
| 310 130 102             | Receiver, i2 Micro iCon, 168 Position, for Crimp Contacts   |
| 310 130 104             | Receiver, i2 Micro iCon, 120/12 Position Hybrid, Fully Loaded with Twin Female Contacts (610 138 200)     |
| 310 130 105             | Receiver, i2 Micro iCon, 120/12 Position Hybrid, for Crimp Contacts                                       |
| 310 130 107             | Receiver, i2 Micro iCon, 168 Position, Unloaded, for Twin Female Contacts (610 138 200)                   |
| <b>ITAS</b>             |   |
| 410 130 101             | ITA, i2 Micro iCon, 168 Position  |
| 410 130 104             | ITA, i2 Micro iCon, 120/12 Position Hybrid  |
| 410 130 106             | ITA, i2 Micro iCon, 168 Position, with Oversized Backshell  |
| <b>CABLE ASSEMBLIES</b> |   |
| 410 130 409             | Cable Assembly, ITA, i2 Micro iCon, QuadraPaddle, 36", Flying Leads                                       |
| 410 130 425             | Cable Assembly, ITA, i2 Micro iCon, QuadraPaddle, 72", Double Ended                                       |
| 410 130 426             | Cable Assembly, ITA, i2 Micro iCon Hybrid, QuadraPaddle, Micro Power and Micro Coaxial, 72", Double Ended |
| <b>MOUNTING OPTIONS</b> |   |
| 310 113 586             | Mounting Panel, i2 Micro iCon, 6U, 6 Positions, with Slide Mounting (slide kit required)                  |
| 310 113 607             | Cover Plate, i2 Micro iCon, for Mounting Panel Cutouts, Painted Gray                                      |
| <b>SLIDE KITS</b>       |   |
| 310 113 451             | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180 lbs.   |
| 310 113 411             | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180 lbs.   |
| 310 113 500             | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180 lbs.   |
| <b>ACCESSORIES</b>      |   |
| 310 113 461             | Keying Pin Kit, iSeries, Receiver and ITA   |
| 310 113 559             | Strain Relief Plate, i2 Micro iCon, Receiver  |
| 310 113 562             | Bracket, i2 Micro iCon, Receiver, for PCB Mounting  |
| 310 113 569             | Protective Cover, i2 Micro iCon, Receiver   |
| 410 112 924             | Protective Cover, i2 Micro iCon, ITA  |
| 510 109 204             | Header, i2 Micro iCon, Receiver, 84 Pin, for PCB Mounting   |
| 510 109 206             | Header, i2 Micro iCon, Receiver, 60 Pin, for PCB Mounting   |
| 510 150 207             | i2 PCB Adapter, Receiver, QuadraPaddle, 168 Position, to 2 PCB Mounted 68 Pin Male SCSI Connectors        |
| 510 150 208             | i2 PCB Adapter, Receiver, QuadraPaddle, 168 Position, to 2 PCB Mounted 68 Pin Female VHDCI Connectors     |

## i2 Micro iCon Loaded Twin Female Contacts • Receiver



Receiver, i2 Micro iCon, 168 Position, Fully Loaded with Twin Female Contacts (610 138 200)  
**Part # 310 130 101**

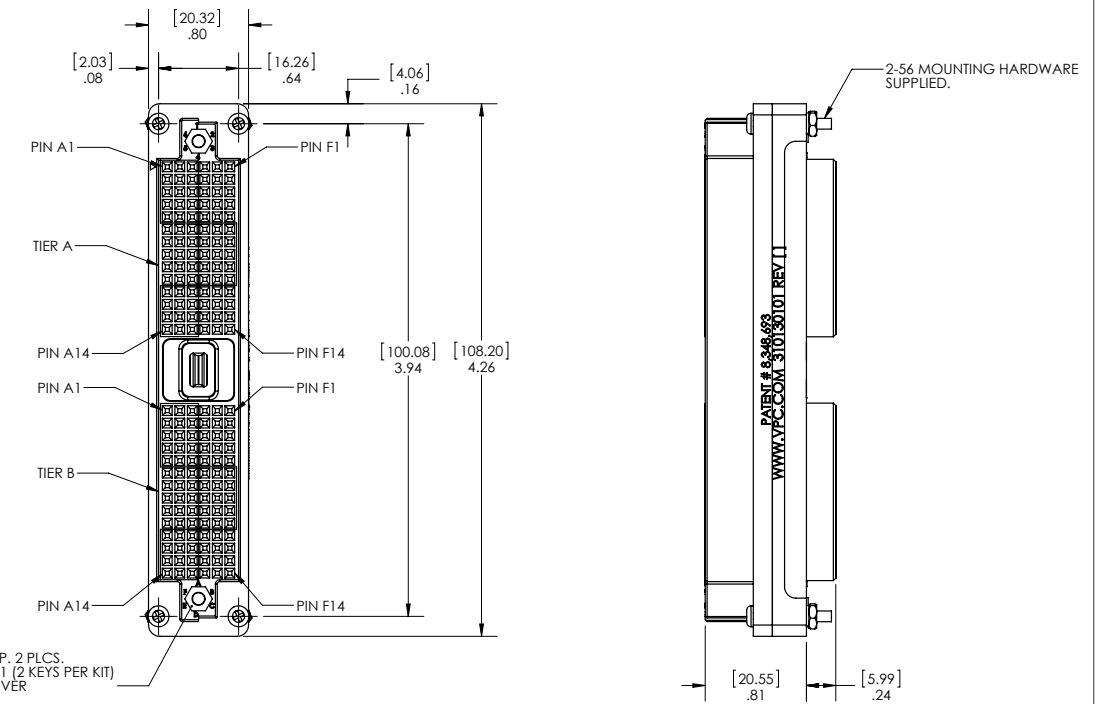
### Receiver Specifications

|                   |  |
|-------------------|--|
| Weight            | .18 lbs [.08 kg]   |
| Frame Material    | Glass reinforced thermoplastic   |
| Hardware Material | Stainless steel alloy  |
| Contact Positions | 168 (loaded)   |
| Cycle Life        | 10,000 cycles  |
| Temperature       | -55° C to 105° C   |
| Vibration Random  | 11.6 g's RMS (Condition V PSD 0.1 MIL-STD-1344, Method 2005/EIA364-28) |
| Vibration Sine    | 15 g's (Condition III MIL-STD-1344, Method 2005/EIA364-28)             |
| Temperature       | -55° C to 105° C   |



The i2 Micro iCon receiver is capable of holding up to 168 QuadraPaddle contacts. QuadraPaddle modules are molded on .100" (2.54 mm) centers to meet the need for high-density I/O in a compact assembly. This i2 receiver is fully loaded with QuadraPaddle twin female signal contacts, Part # 610 138 200. An unloaded crimp version is also available, Part # 310 130 102.

## i2 Micro iCon Unloaded Twin Female Contacts • Receiver



Receiver, i2 Micro iCon, 168 Position, Unloaded, for Twin Female Contacts (610 138 200)  
**Part # 310 130 107**

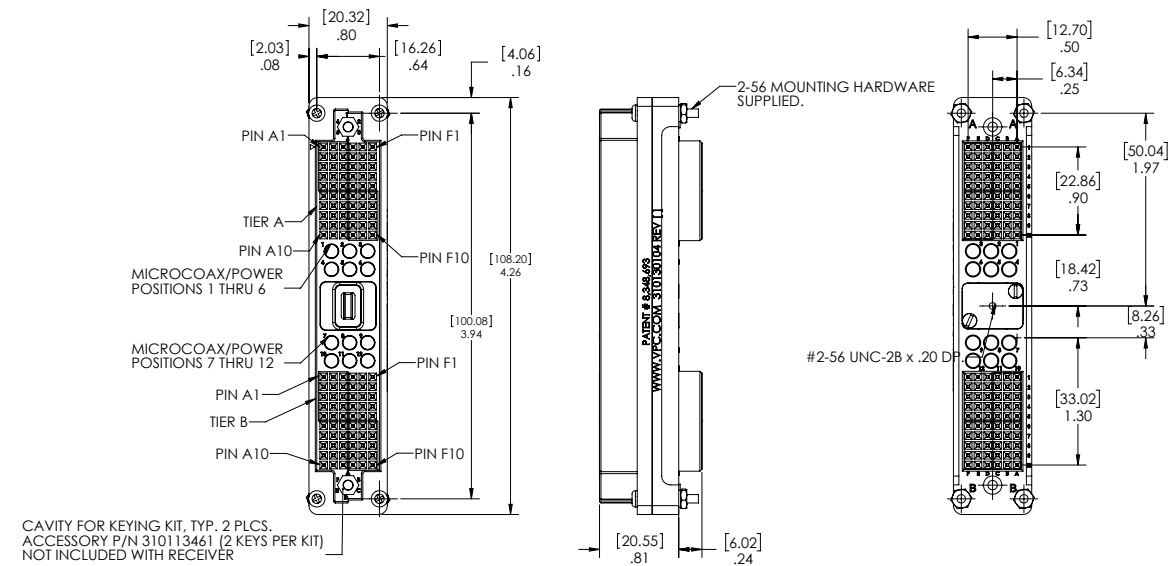
### Receiver Specifications

|                   |  |
|-------------------|--|
| Weight            | .14 lbs [.06 kg]   |
| Frame Material    | Glass reinforced thermoplastic   |
| Hardware Material | Stainless steel alloy  |
| Contact Positions | 168  |
| Cycle Life        | 10,000 cycles  |
| Shock             | 50 g's (Condition A MIL-STD-1344, Method 2004/EIA364-27)               |
| Vibration Random  | 11.6 g's RMS (Condition V PSD 0.1 MIL-STD-1344, Method 2005/EIA364-28) |
| Vibration Sine    | 15 g's (Condition III MIL-STD-1344, Method 2005/EIA364-28)             |
| Temperature       | -55° C to 105° C   |



This i2 Micro iCon receiver comes ready to load with twin female contacts Part # 610 138 200.

## i2 Micro iCon • Hybrid Receiver



Receiver, i2 Micro iCon, 120/12 Position Hybrid, Loaded with Twin Female Contacts (610 138 200)  
Part # 310 130 104

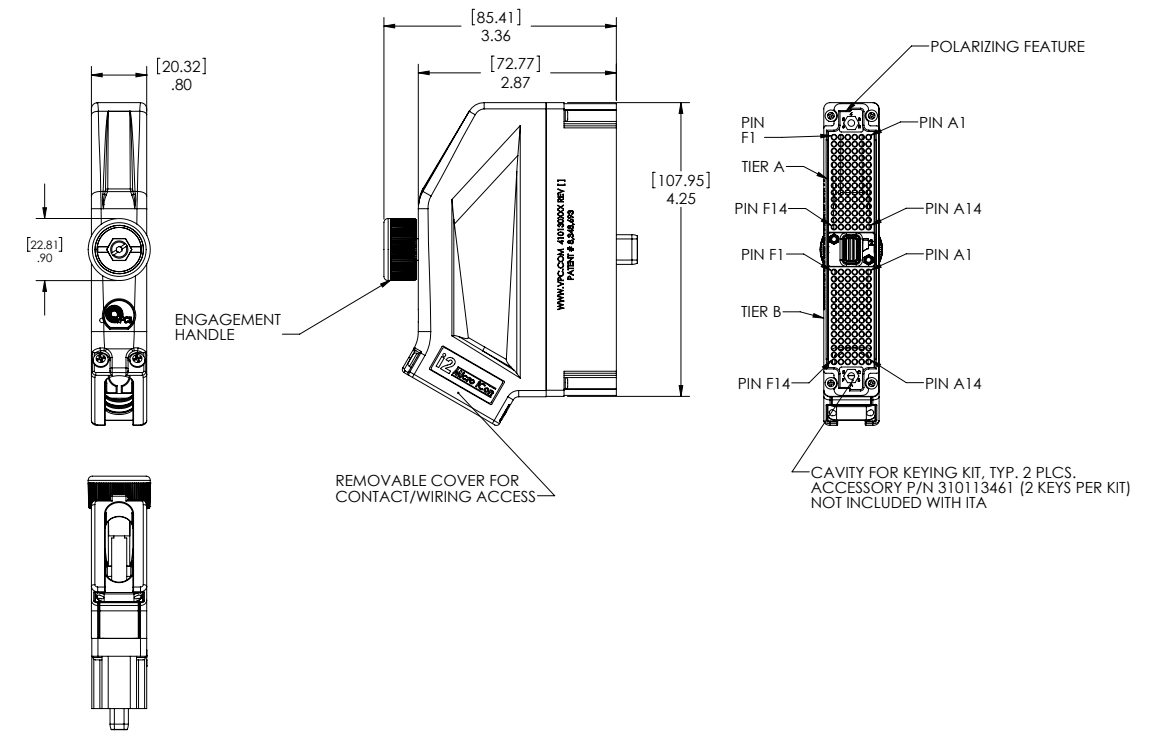
### Receiver Specifications

|                   |                                 |
|-------------------|---------------------------------|
| Weight            | .25 lbs [.11 kg]                |
| Frame Material    | Glass reinforced thermoplastic  |
| Hardware Material | Stainless steel alloy           |
| Contact Positions | 120 signal, 12 Micro Coax/Power |
| Cycle Life        | 10,000 cycles                   |
| Temperature       | -55° C to 105° C                |



The i2 Micro iCon hybrid receiver is capable of holding up to 120 QuadraPaddle and 12 Micro Coax or Micro Power contacts. This i2 receiver is loaded with QuadraPaddle twin female signal contacts, Part # 610 138 200. An unloaded crimp version is also available, Part # 310 130 105.

## i2 Micro iCon • 168 Position ITA



ITA, i2 Micro iCon, 168 Position • Part # 410 130 101

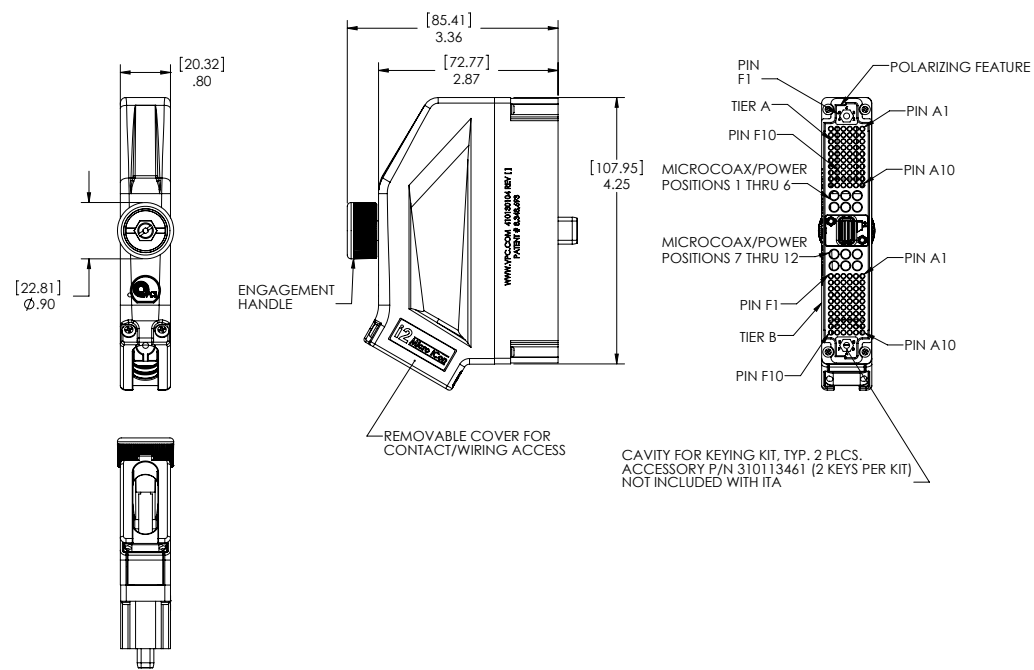
### ITA Specifications

|                            |                                |
|----------------------------|--------------------------------|
| Weight                     | .25 lbs [.11 kg]               |
| Frame Material and Housing | Glass reinforced thermoplastic |
| Hardware Material          | Stainless steel                |
| Latch Material             | Nickel plated beryllium copper |
| Backshell Material         | Glass reinforced thermoplastic |
| Cable Clamp Material       | Powder coated aluminum         |
| Contact Positions          | 168 signal                     |
| Cycle Life                 | 10,000 cycles                  |
| Temperature                | -55° C to 105° C               |



The i2 Micro iCon ITA is capable of holding up to 168 QuadraPaddle contacts. The 30 degree U-shaped cable clamp allows ITA modules to be pre-wired before assembly and can hold cable bundles with an oblong bushing effective diameter of .77". The removable backshell allows easy access to wiring for maintenance and probing.

## i2 Micro iCon • Hybrid ITA



ITA, i2 Micro iCon, 120/12 Position Hybrid • Part # 410 130 104



### ITA Specifications

|                            |                                 |
|----------------------------|---------------------------------|
| Weight                     | .25 lbs [.11 kg]                |
| Frame Material and Housing | Glass reinforced thermoplastic  |
| Hardware Material          | Stainless steel                 |
| Latch Material             | Nickel plated beryllium copper  |
| Backshell Material         | Glass reinforced thermoplastic  |
| Cable Clamp Material       | Powder coated aluminum          |
| Contact Positions          | 120 signal, 12 Micro Coax/Power |
| Cycle Life                 | 10,000 cycles                   |
| Temperature                | -55° C to 105° C                |

The i2 Micro iCon hybrid ITA is capable of holding up to 120 QuadraPaddle and 12 Micro Coaxial or Micro Power contacts. The 30 degree U-shaped cable clamp allows ITA modules to be pre-wired before assembly and can hold cable bundles with an oblong bushing effective diameter of 0.77". The removable backshell allows easy access to wiring for maintenance and probing.

## i2 Micro iCon • Accessories



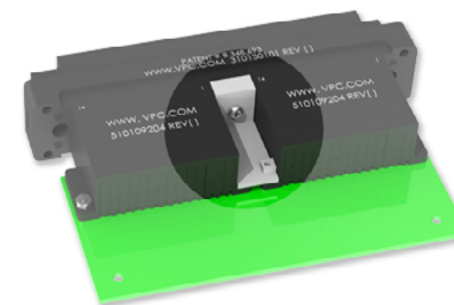
The 84 pin header for i2 Micro iCon contains solderless pins and enables a direct connection from the i2 standard receiver to a PCB such as a PXI card.

Header, Receiver, i2 Micro iCon, 84 Pin, for PCB Mounting • Part # 510 109 204



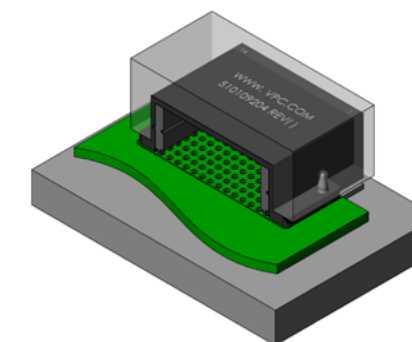
The 60 pin header for i2 Micro iCon contains solderless pins and enables a direct connection from the i2 Hybrid receiver to a PCB such as a PXI card.

Header, Receiver, i2 Micro iCon, 60 Pin, for PCB Mounting • Part # 510 109 206



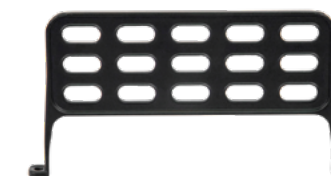
The i2 Micro iCon mounting bracket secures the PCB to the receiver module.

Bracket, Receiver, i2 Micro iCon, for PCB Mounting Part # 310 113 562



The press kit tool for i2 PCB headers aids in pressing the press fit pins into the header.

Tool, Press Kit, for i2 PCB Headers Part # 910 121 199



The i2 Micro iCon strain relief plate attaches to the wiring side of the receiver and can be secured before receiver installation.

Strain Relief Plate, i2 Micro iCon, Receiver Part # 310 113 559

# More Configurability

i2 MX

## Expanded Options

The i2 MX builds upon on the success of the popular i2 Micro iCon, offering a configurable connector in a slim .8" footprint. Now with multiple I/O options to choose from, i2 MX allows you to engineer the ideal connector to meet your test application needs.

Featuring an all metal backshell and an innovative cable exit, i2 MX provides maximum cable bundle capacity with available electromagnetic interference (EMI) protection. i2 MX meets the demand for higher levels of signal performance necessary in today's testing applications.

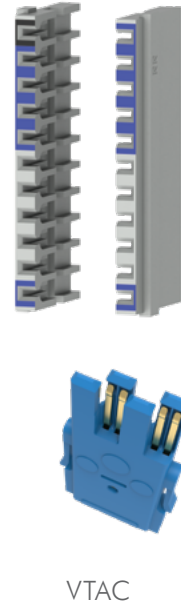
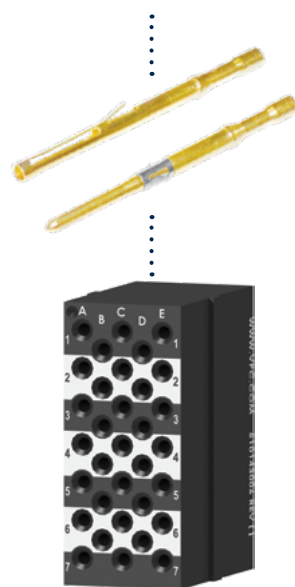
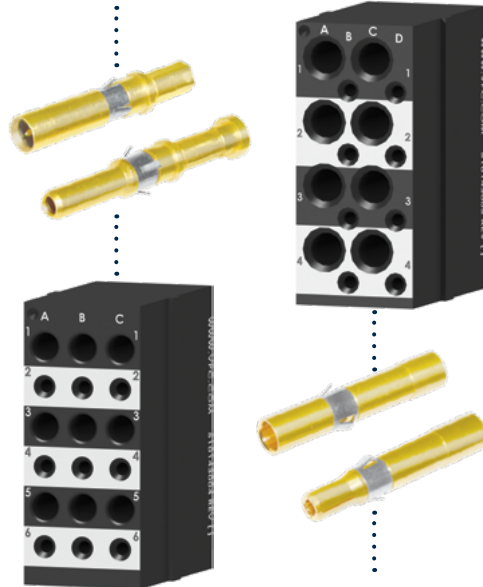
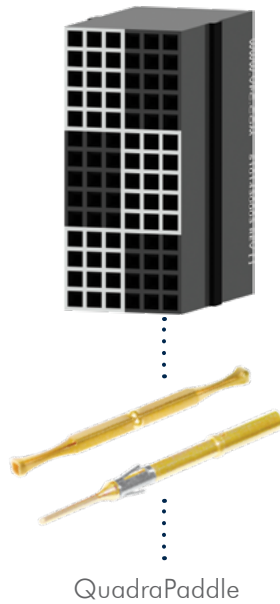


## Configured for Any Test

The i2 MX offers more contact options than the standard i2, allowing the flexibility to choose multiple modular inserts to fit your needs.

Micro Power and Coax

TriPaddle



QuadraPaddle

Mini Power and Coax

VTAC

## Innovative Design Features

- Slimmer, metal engagement knob allows increased horizontal stackability
- EMI option provides effective shielding performance and ensures signal integrity
- Multiple contacts supported: QuadraPaddle, TriPaddle, SIM VTAC HSD, Power, and Coax
- Reversible all-metal backshell for multiple mounting options



## Modular

Various modular inserts available for increased contact selection

## Scalable

Can be used within multiple VPC interfaces, including 90 Series

## Configurable

Interchangeable modular inserts to fit requirement needs

## i2 MX • 2 Module Solution

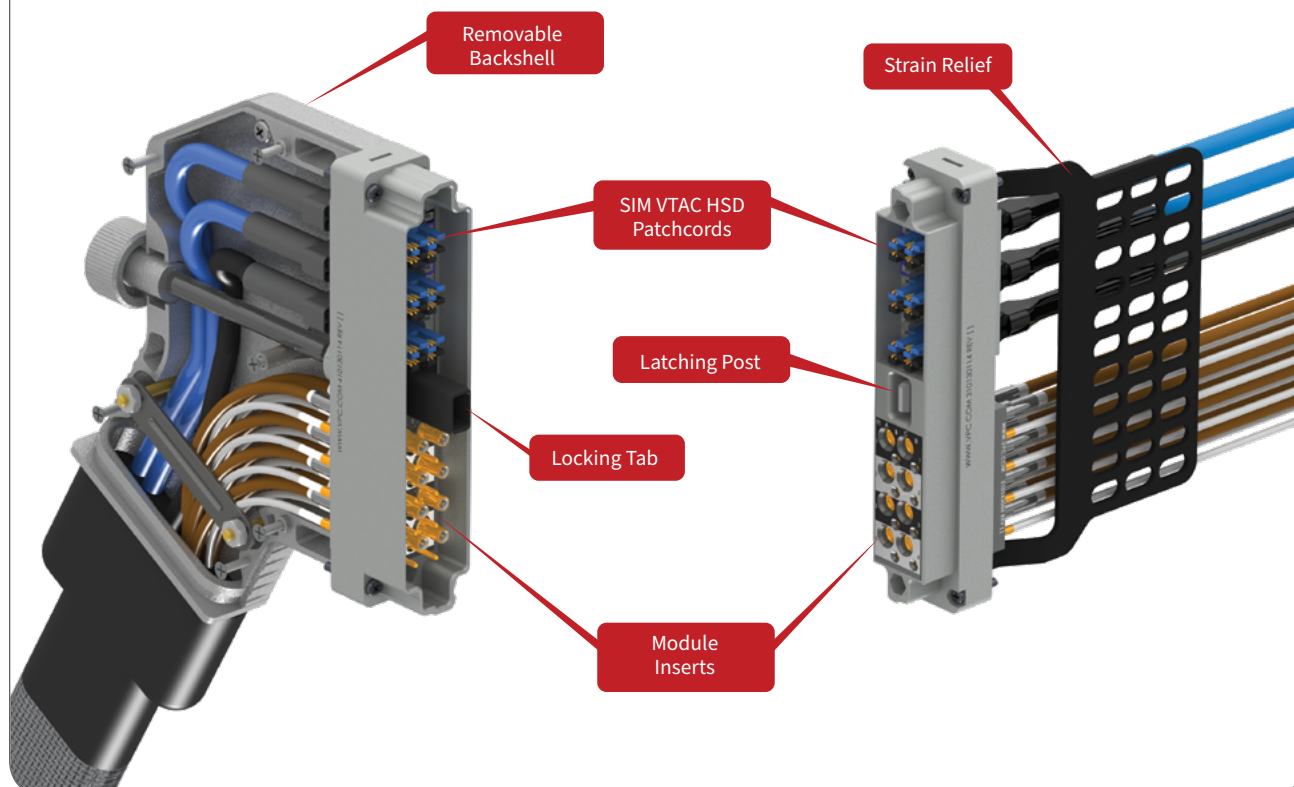
The i2 MX was engineered to retain the popular features of the i2 Micro iCon, while addressing the need of electromagnetic interference (EMI) shielding in the testing industry. The i2 MX also features the modularity and versatility of the iCon, offering a greater variety of I/O options.

### Features and Benefits

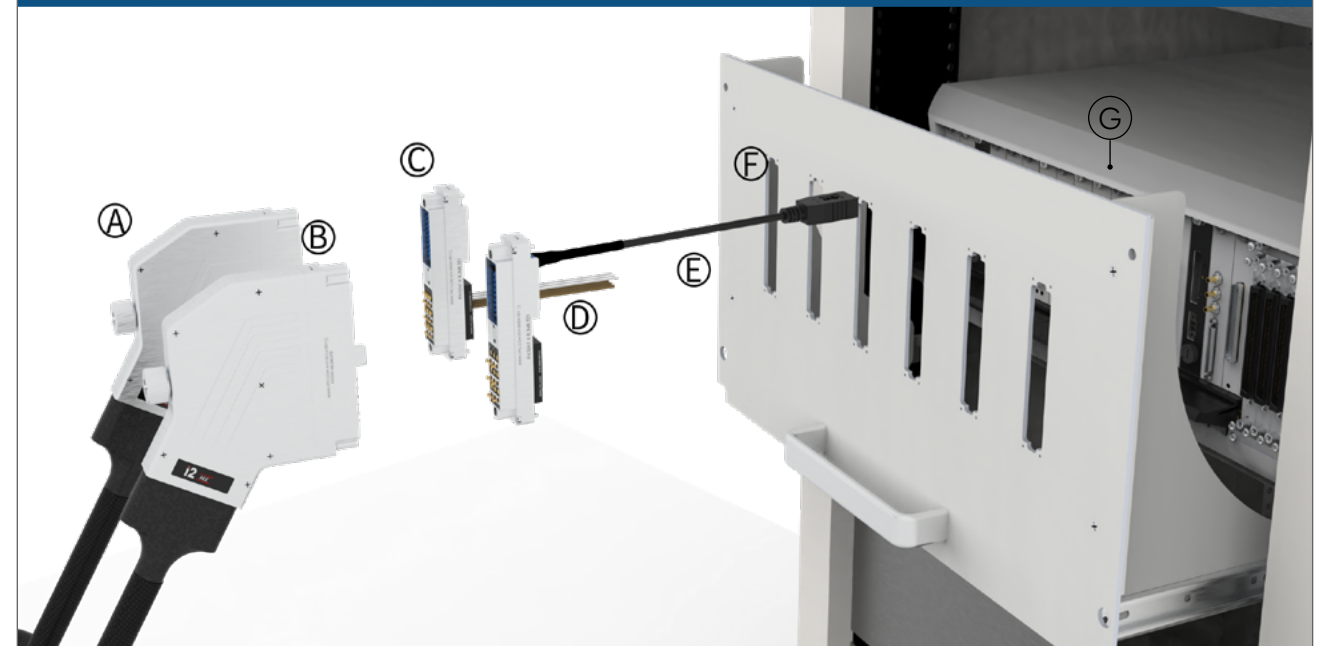
- EMI-shielding minimizes EMI leaks to and from other sources
- Oblong cable exit provides clearance for maximum cable bundle capacity and EMI-shielding
- Multiple I/O's supported: signal, coax, power, and high speed
- Easy access for trouble-shooting and maintenance with removable side panel on ITA backshell
- Specifically designed receiver strain relief for reliable patchcord alignment and security
- Engineered for over 10,000 cycles



i2 MX Receiver and ITA



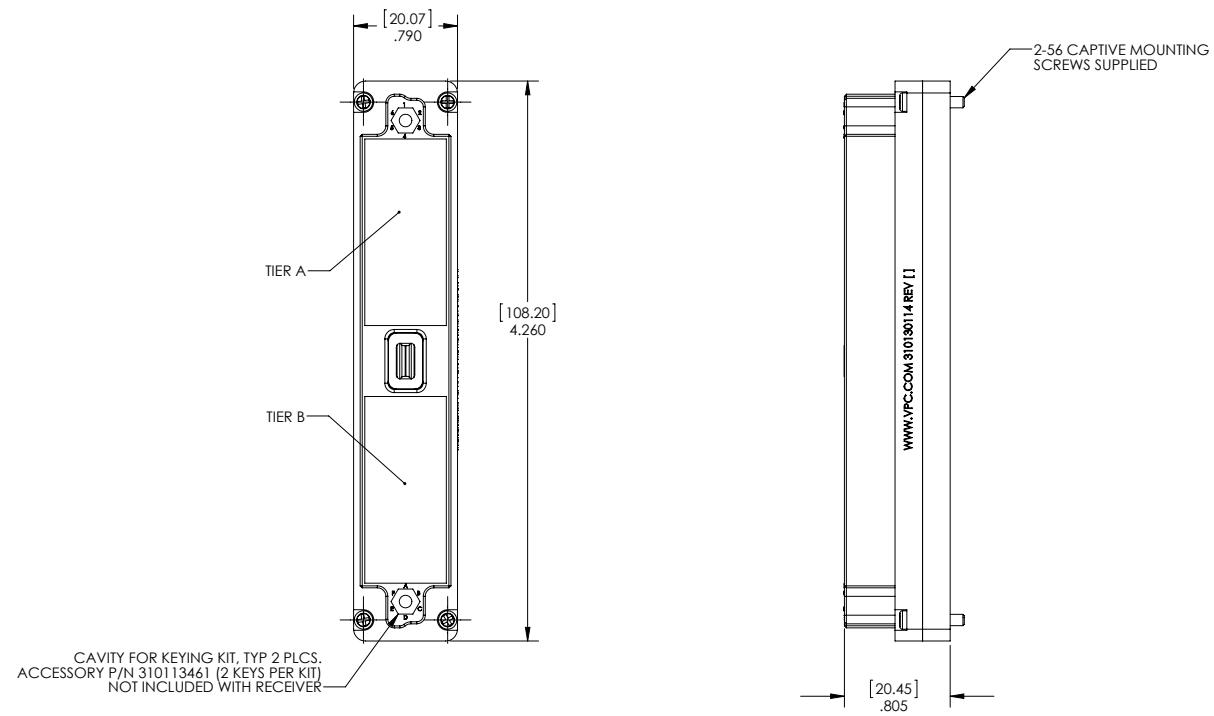
## i2 MX Panel Mount Configuration



- A. i2 MX ITA Backshell
- B. ITA Module Frame
- C. i2 MX Receiver
- D. Receiver Patchcord
- E. VTAC Patchcord
- F. Mounting Panel
- G. (unlabeled in list)

| Part #                          | Description   |
|---------------------------------|---|
| <b>RECEIVERS</b>                |   |
| 310 130 113                     | Receiver, i2 MX, 2 SIM Module Inserts, 22 Position, EMI-Shielded  |
| 310 130 114                     | Receiver, i2 MX, EMI-Shielded   |
| 310 130 202                     | Receiver, i2 MX, 2 QuadraPaddle Module Inserts, Fully Loaded with Twin Female Contacts (610 138 200), EMI-Shielded  |
| 310 130 204                     | Receiver, i2 MX, 2 TriPaddle Signal/Micro Power and Micro Coaxial Module Inserts, EMI-Shielded                      |
| 310 130 205                     | Receiver, i2 MX, QuadraPaddle Module Insert, Crimp/Micro Power and Micro Coaxial Module Insert, EMI-Shielded        |
| <b>ITAS</b>                     |   |
| 410 130 114                     | ITA, i2 MX, EMI Backshell, with Cable Exit  |
| 410 130 116                     | ITA, i2 MX, 2 SIM Module Inserts, 22 Position, EMI Backshell  |
| 410 130 117                     | ITA, i2 MX, EMI Backshell, without Cable Exit   |
| 410 130 202                     | ITA, i2 MX, 2 QuadraPaddle Module Inserts, Crimp, EMI Backshell   |
| 410 130 204                     | ITA, i2 MX, 2 TriPaddle Signal/Micro Power and Micro Coaxial Module Inserts, EMI Backshell                          |
| 410 130 205                     | ITA, i2 MX, QuadraPaddle Module Insert, Crimp/Micro Power and Micro Coaxial Module Insert, EMI Backshell            |
| <b>SIM INSERTS</b>              |   |
| 610 151 101                     | High Speed Insert, Receiver/ITA, SIM, 12.5 Gbps, 50µ", VTAC HSD (Only Available in Patchcords)                      |
| 510 180 101                     | Signal Insert, Receiver, SIM QuadraPaddle, 4 Position   |
| 510 181 101                     | Signal Insert, ITA, SIM QuadraPaddle, 4 Position  |
| <b>MODULE INSERTS, RECEIVER</b> |   |
| 510 143 001                     | SIM Module Insert, Receiver, i2 MX, 11 Position   |
| 510 143 002                     | QuadraPaddle Signal, Module Insert, Receiver, i2 MX, 84 Position, Crimp   |
| 510 143 003                     | QuadraPaddle Signal, Module Insert, Receiver, i2 MX, 84 Position, Fully Loaded w/Twin Female Contacts (610 138 200) |
| 510 143 004                     | TriPaddle Signal/Micro Power and Micro Coaxial, Module Insert, Receiver, i2 MX, 9/9 Position                        |
| 510 143 005                     | TriPaddle Signal/Mini Power and Mini Coaxial, Module Insert, Receiver, i2 MX, 8/8 Position                          |
| 510 143 006                     | TriPaddle Signal, Module Insert, Receiver, i2 MX, 33 Position   |
| <b>MODULE INSERTS, ITA</b>      |   |
| 510 144 001                     | SIM Module Insert, ITA, i2 MX, 11 Position  |
| 510 144 002                     | QuadraPaddle Signal, Module Insert, ITA, i2 MX, 84 Position, Crimp  |
| 510 144 004                     | TriPaddle Signal/Micro Power and Micro Coaxial, Module Insert, ITA, i2 MX, 9/9 Position                             |
| 510 144 005                     | TriPaddle Signal/Mini Power and Mini Coaxial, Module Insert, ITA, i2 MX, 8/8 Position                               |
| 510 144 006                     | TriPaddle Signal, Module Insert, ITA, i2 MX, 33 Position  |
| <b>ACCESSORIES</b>              |   |
| 310 113 461                     | Keying Pin Kit, iSeries, Receiver and ITA   |
| 310 113 667                     | Protective Cover, i2 MX, Receiver, EMI-Shielded   |
| 310 113 681                     | Strain Relief Plate, i2 MX, Receiver  |
| 410 112 924                     | Protective Cover, i2 Micro iCon, ITA  |
| 510 109 204                     | Header, i2 Micro iCon, Receiver, 84 Pin, for PCB Mounting   |

## i2 MX • Receiver



Receiver, i2 MX, EMI-Shielded **Part # 310 130 114**

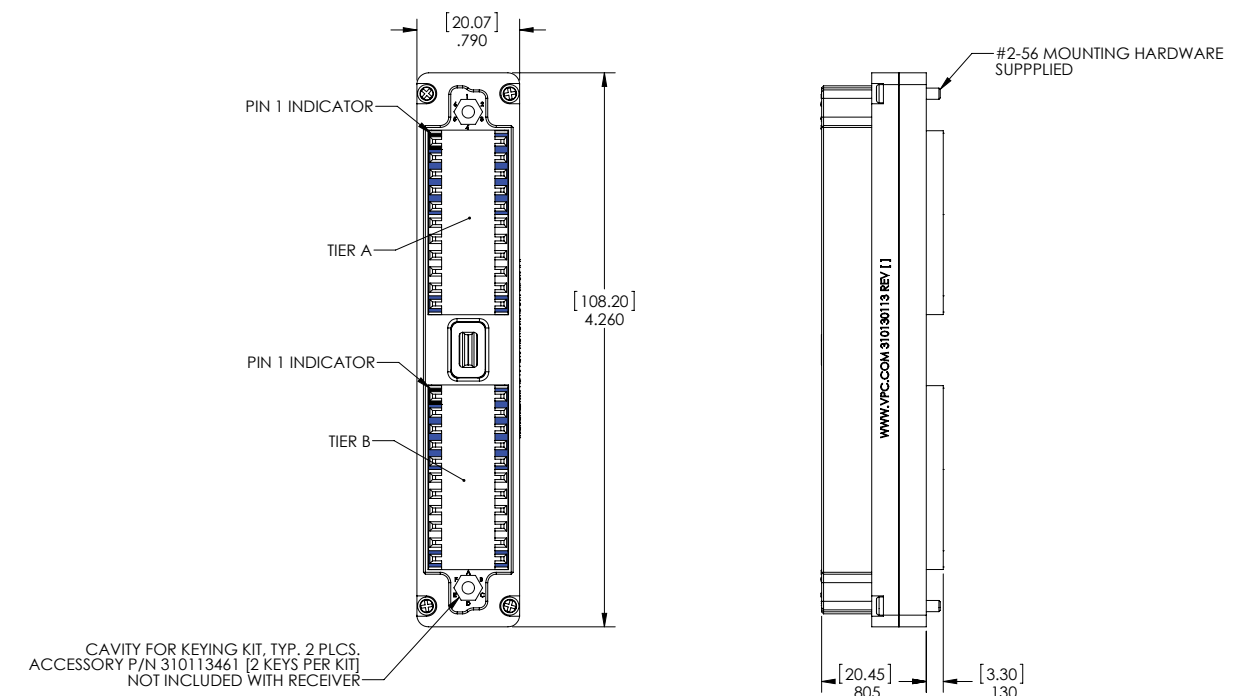
### Receiver Specifications

|                                   |                    |
|-----------------------------------|--------------------|
| Weight                            | .17 lbs [.08 kg]   |
| Frame Material                    | Nickel plated zinc |
| Hardware Material                 | Stainless steel    |
| Available Module Insert Positions | 2 positions        |
| Cycle Life                        | 10,000 cycles      |
| Temperature                       | -40° C to 125° C   |



The i2 MX receiver accepts two module inserts, which allows a variety of signal, power, coax, thermocouple, and fiber optic connections. Pre-configured receivers are also available. For more information, please refer to the previous exploded-view diagram on page 41.

## i2 MX • Receiver with SIM Module Inserts



Receiver, i2 MX, 2 SIM Module Inserts, 22 Position, EMI-Shielded **Part # 310 130 113**

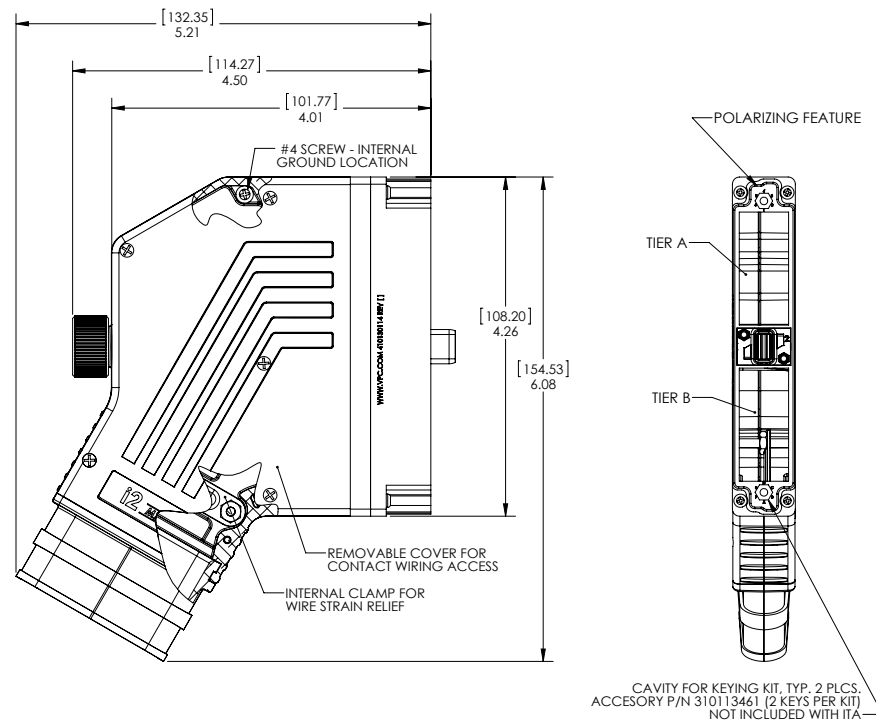
### Receiver Specifications

|                                   |                    |
|-----------------------------------|--------------------|
| Weight                            | .23 lbs [.10 kg]   |
| Frame Material                    | Nickel plated zinc |
| Hardware Material                 | Stainless steel    |
| Available SIM Insert Positions    | 22 positions       |
| Available Module Insert Positions | 2 positions        |
| Cycle Life                        | 10,000 cycles      |
| Temperature                       | -40° C to 125° C   |



This i2 MX receiver includes two SIM module inserts which allows it to be configured with 22 SIM QuadraPaddle inserts or 22 SIM VTAC HSD inserts.

### i2 MX • ITA



ITA, i2 MX, EMI Backshell, with Cable Exit • **Part # 410 130 114**

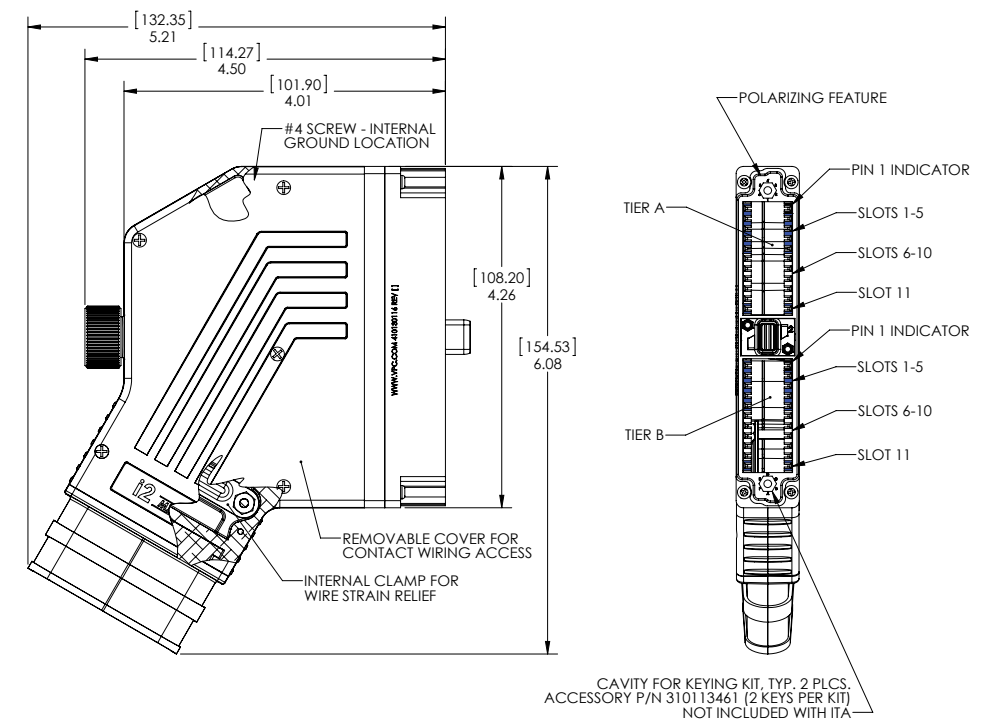
#### ITA Specifications

|                                   |   |
|-----------------------------------|---|
| Weight                            | .63 lbs [.28 kg] without protective cover |
| Frame Material                    | Nickel plated zinc                        |
| Hardware Material                 | Stainless steel                           |
| Latches                           | Nickel plated beryllium copper            |
| Backshell                         | Nickel plated aluminum                    |
| Available Module Insert Positions | 2 positions                               |
| Cycle Life                        | 10,000 cycles                             |
| Operating Temperature             | -40° C to 125° C                          |



The i2 MX ITA accepts two module inserts, which allows a variety of signal, power, coax, thermocouple, and fiber optic connections. The cable exit is one inch in diameter. Pre-configured receivers are also available.

### i2 MX • ITA with SIM Module Inserts



ITA, i2 MX, 2 SIM Module Inserts, 22 Position, EMI Backshell • **Part # 410 130 116**

#### ITA Specifications

|                                   |   |
|-----------------------------------|---|
| Weight                            | .69 lbs [.31 kg] without protective cover |
| Frame Material                    | Nickel plated zinc                        |
| Hardware Material                 | Stainless steel                           |
| Latches                           | Nickel plated beryllium copper            |
| Backshell                         | Nickel plated aluminum                    |
| Available SIM Insert Positions    | 22 positions                              |
| Available Module Insert Positions | 2 positions                               |
| Cycle Life                        | 10,000 cycles                             |
| Operating Temperature             | -40° C to 125° C                          |



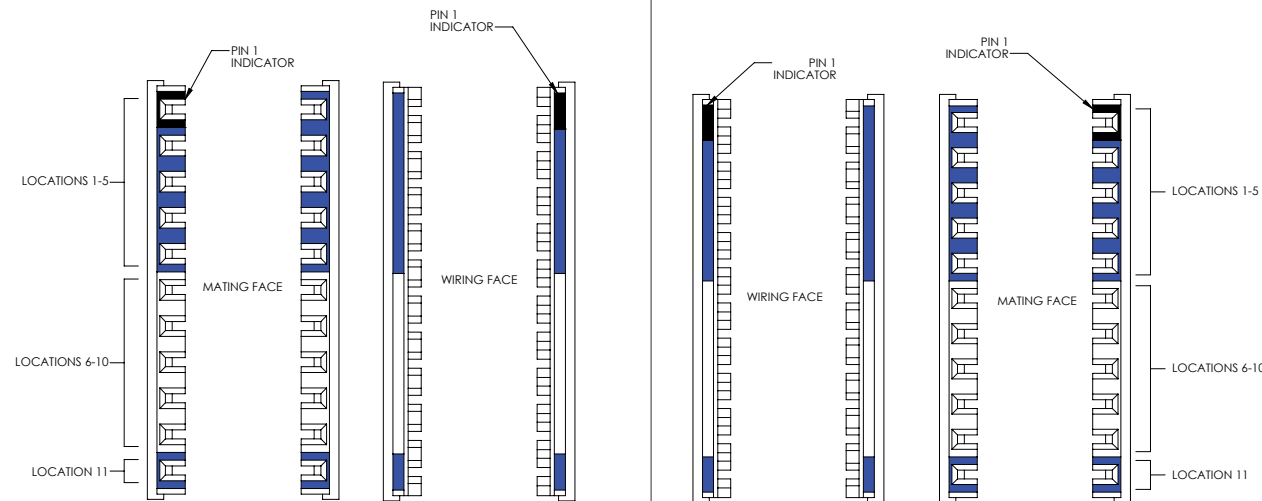
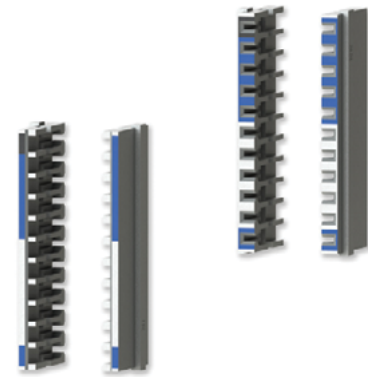
This i2 MX ITA includes two SIM module inserts which allows the connector to be configured with 22 SIM QuadraPaddle inserts or 22 SIM VTAC HSD inserts.



## 11 Position SIM Module Inserts

### Specifications

|                            |                    |
|----------------------------|--------------------|
| Material                   | Nickel plated zinc |
| Operating Temperature      | -40°C to 125°C     |
| Available Insert Positions | 11                 |
| Module Positions Needed    | 1                  |



Receiver **Part # 510 143 001**

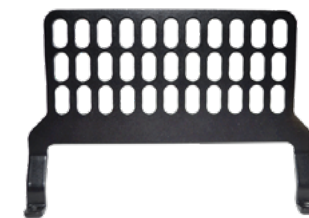
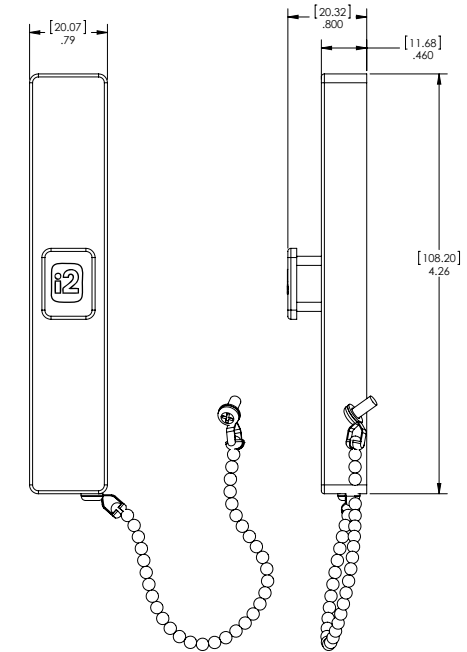
ITA **Part # 510 144 001**

| Part #   | Description                                     | Contacts Used                             |
|--|---|---|
| <b>12 MX RECEIVER SIM MODULE INSERT</b><br>510 143 001 | SIM Module Insert, Receiver, i2 MX, 11 Position | 610 151 101<br>610 151 103<br>510 180 101 |
| <b>12 MX ITA SIM MODULE INSERT</b><br>510 144 001      | SIM Module Insert, ITA, i2 MX, 11 Position      | 610 151 101<br>610 151 103<br>510 181 101 |

## i2 MX • Accessories



The EMI-shielded receiver protective cover for the i2 MX is available with a beaded chain lanyard.



The strain relief plate is made of aluminum and is black powder coated. It includes four wire ties and stainless steel hardware.

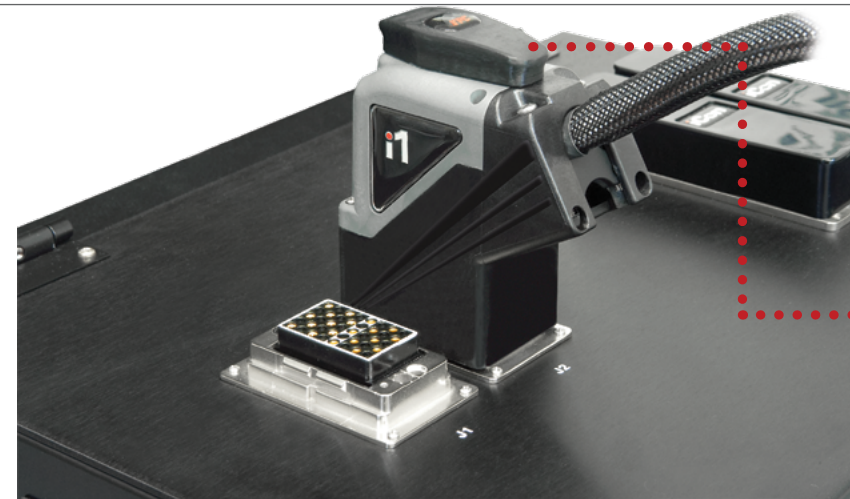
Strain Relief Plate, i2 MX Receiver **Part # 310 113 681**

# Infinite Connections

## Rugged Connector

i1

- Engagement mechanism engineered for over 10,000 cycles
- Durable and will withstand drop and vibration test conditions
- Functional in thermal testing environments from -55°C to 105°C



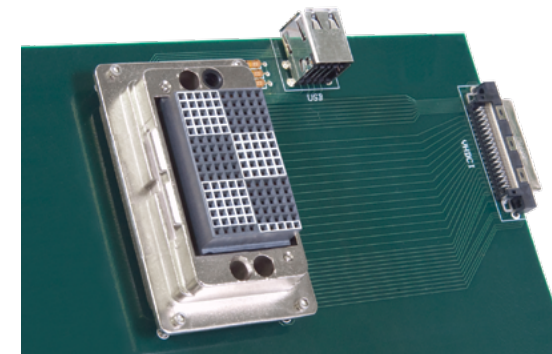
Quick Connect half-turn engagement handle

## Unique Engagement

- Half-turn quick cam mechanism
- Spring-locking tabs with polarizing feature ensure even engagement
- Keying and guide pins maintain proper alignment when engaging

## Exceptional Design Features

- Polarizing feature with optional keying for proper alignment
- 30° U-shaped cable clamp for strain relief
- Optional EMI-shielding to protect signal integrity with metallized plastic shielding in the backshell
- Removable backshell and engaging mechanism enable easy wire access



## Variety of Options

- Accepts all iCon modules; hybrid modules allow multiple I/O options, including: signal, power, coax, fiber optic, pneumatic, and high power
- PCB-mountable with QuadraPaddle technology
- Standard double-ended and flying lead cable configurations available

## i1 • 1 Module Solution

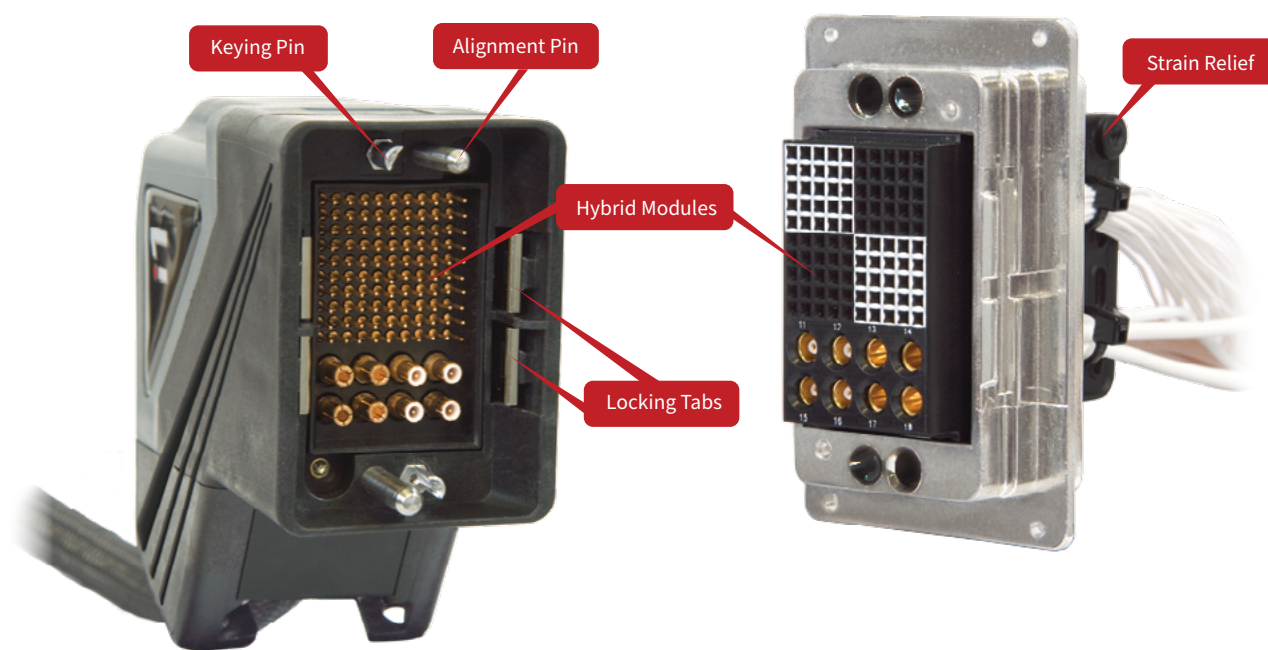
The i1 is ideal for small connector needs. Following the success of VPC's popular rack and panel connector, iCon, the i1 was developed to satisfy the need for an even smaller connector. Each i1 connector holds a single iCon module, making it the perfect solution for low I/O, hybrid applications.

### Features and Benefits

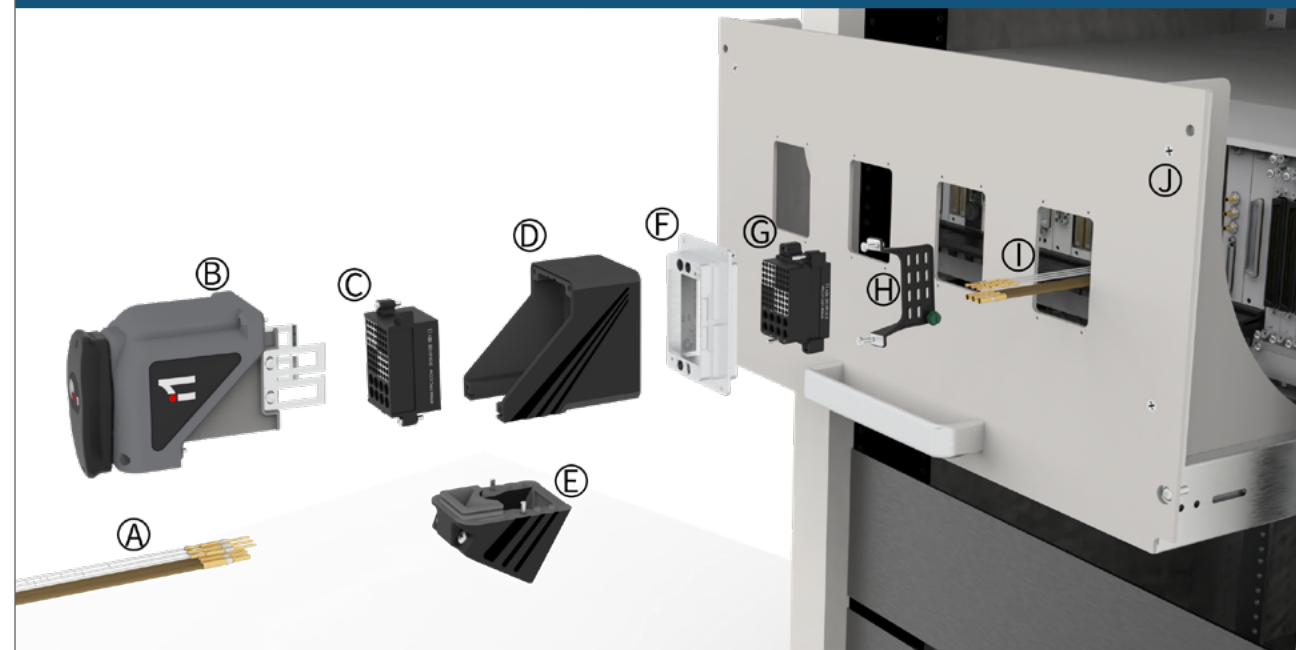
- Accepts all iCon modules, enabling mixing of I/O with hybrid modules
- PCB-mountable
- Spring-locking tabs ensure even engagement
- Keying and guide pins ensure proper alignment and prevent incorrect mating
- Recessed ITA contacts protect your investment
- Removable backshell and engaging mechanism allow easy access to wire
- Engineered for over 10,000 cycles



i1 ITA and Receiver



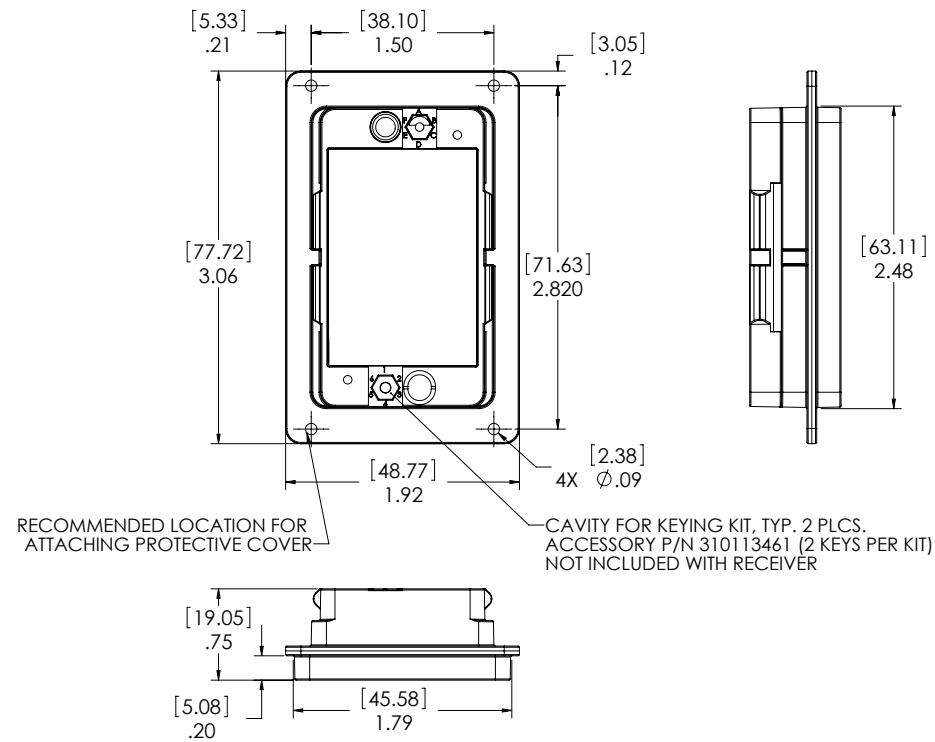
## i1 Slide Mount Configuration



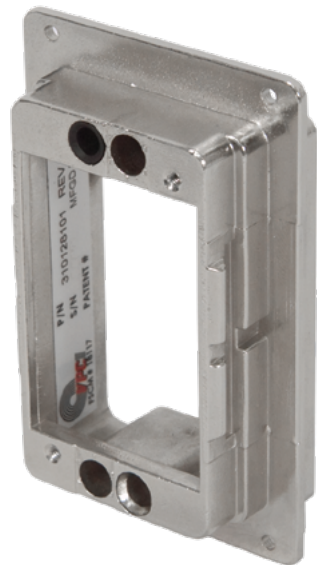
- A. ITA Patchcords
- B. ITA Backshell and Engaging Mechanism
- C. ITA Module
- D. i1 ITA Frame
- E. U-shaped Cable Clamp
- F. i1 Receiver Frame
- G. Receiver Module
- H. Strain Relief
- I. Receiver Patchcords
- J. Mounting Panel

| Part #                  | Description   |
|-------------------------|---|
| <b>RECEIVER</b>         |   |
| 310 128 101             | Receiver, i1, with Protective Cover   |
| <b>ITAS</b>             |   |
| 410 128 101             | ITA, i1, with Protective Cover  |
| 410 128 102             | ITA, i1, EMI-Shielded, with Threaded Coupling Adapter and Protective Cover    |
| 410 128 103             | ITA, i1, with Large Cable Clamp and Protective Cover                          |
| <b>Cable Assemblies</b> |   |
| 410 128 461             | Cable Assembly, ITA, i1, QuadraPaddle, 36", Flying Leads                      |
| 410 128 539             | Cable Assembly, ITA, i1, QuadraPaddle, 72", Double Ended                      |
| <b>MOUNTING OPTIONS</b> |   |
| 310 113 517             | Fixed Mounting Panel, i1, 2U, 8 Positions                                     |
| 310 113 546             | Cover Plate, i1, for Mounting Panel Cutouts, Painted Gray                     |
| 310 113 547             | Mounting Panel, i1, 6U, 4 Positions, with Slide Mounting (slide kit required) |
| <b>SLIDE KITS</b>       |   |
| 310 113 451             | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180 lbs.                     |
| 310 113 411             | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180 lbs.                     |
| 310 113 500             | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180 lbs.                     |
| <b>ACCESSORIES</b>      |   |
| 310 113 461             | Keying Pin Kit, iSeries, Receiver and ITA                                     |
| 310 113 531             | Strain Relief Plate, i1, Receiver   |
| 310 113 582             | Strain Relief Stand-off Kit, iCon, Receiver                                   |
| 310 113 524             | Replacement Protective Cover, i1, Receiver                                    |
| 410 112 864             | Replacement Protective Cover, i1, ITA   |

## i1 Receiver



Receiver, i1, with Protective Cover • Part # 310 128 101

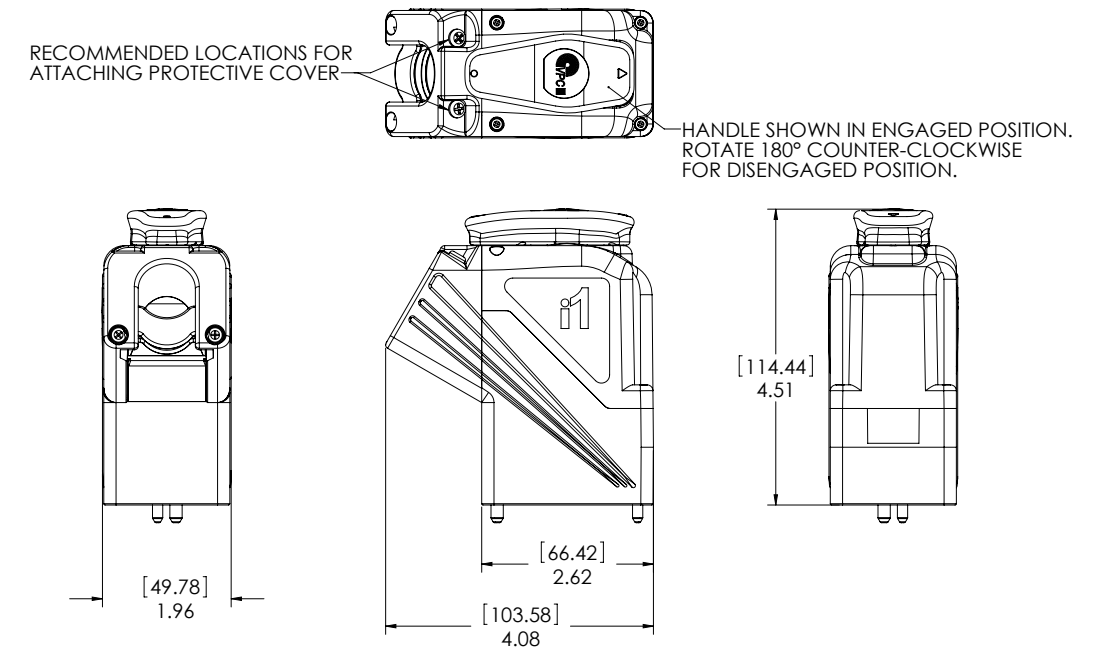


### Receiver Specifications

|                            |   |
|----------------------------|---|
| Weight                     | .10 lbs [.05 kg] without protective cover |
| Frame Material             | Nickel plated aluminum alloy              |
| Hardware Material          | Stainless steel alloy                     |
| Protective Cover Material  | ABS, black                                |
| Available Module Positions | 1 position                                |
| Cycle Life                 | 10,000 cycles                             |
| Temperature                | -55° C to 105° C                          |

The i1 receiver accepts a single iCon module and allows a variety of signal, power, coaxial, thermocouple, and fiber optic connections. A protective cover is included with the receiver. Other accessories are available, such as keying pin kits and strain relief.

## i1 ITA



ITA, i1, with Protective Cover • Part # 410 128 101



### ITA Specifications

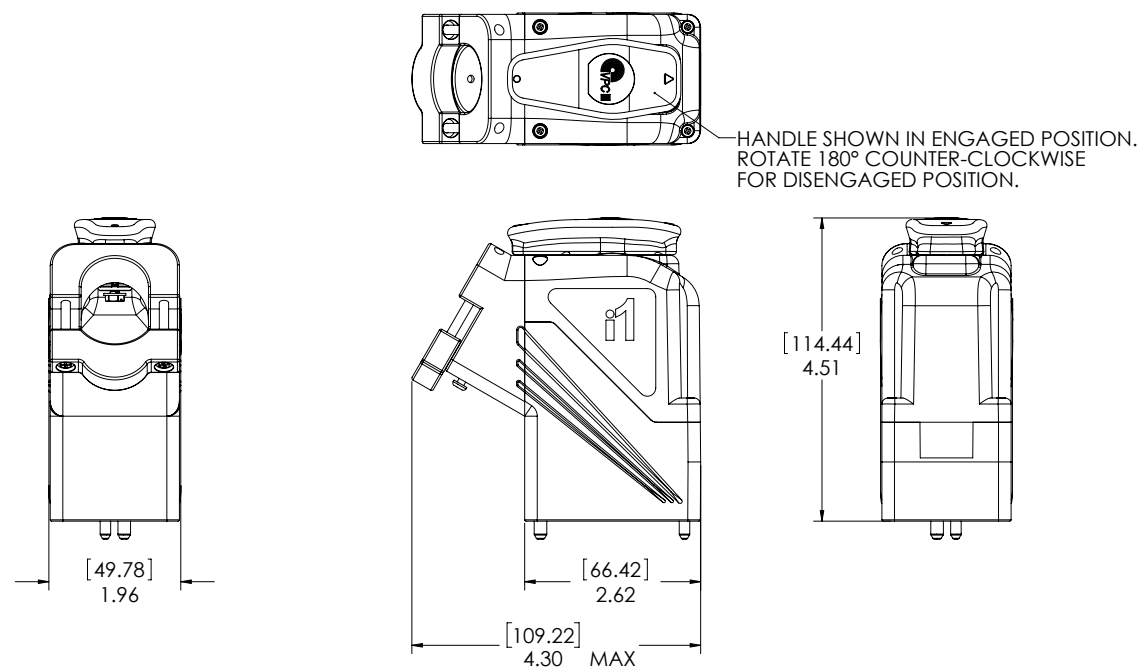
|                                  |   |
|----------------------------------|---|
| Weight                           | .55 lbs [.25 kg] without protective cover |
| Frame Material and Clamp Housing | Glass reinforced thermoplastic            |
| Hardware Material                | Stainless steel                           |
| Latch Material                   | Nickel plated beryllium copper            |
| Backshell Material               | Glass reinforced thermoplastic            |
| Protective Cover Material        | ABS, black                                |
| Available Module Positions       | 1 position                                |
| Cycle Life                       | 10,000 cycles                             |
| Temperature                      | -55° C to 105° C                          |



The U-shaped cable clamp is adjustable to accommodate the amount of wires in your cable bundle.

The i1 ITA's small width and inboard handle increase side-to-side stackability. The U-shaped cable clamp allows modules to be pre-wired before assembly and can hold cable bundles up to 1.07" diameter. The removable backshell allows easy access to wiring for maintenance and probing. A protective cover is included with the ITA.

## i1 ITA with Large Cable Clamp



ITA, i1, with Large Cable Clamp and Protective Cover • **Part # 410 128 103**



### ITA Specifications

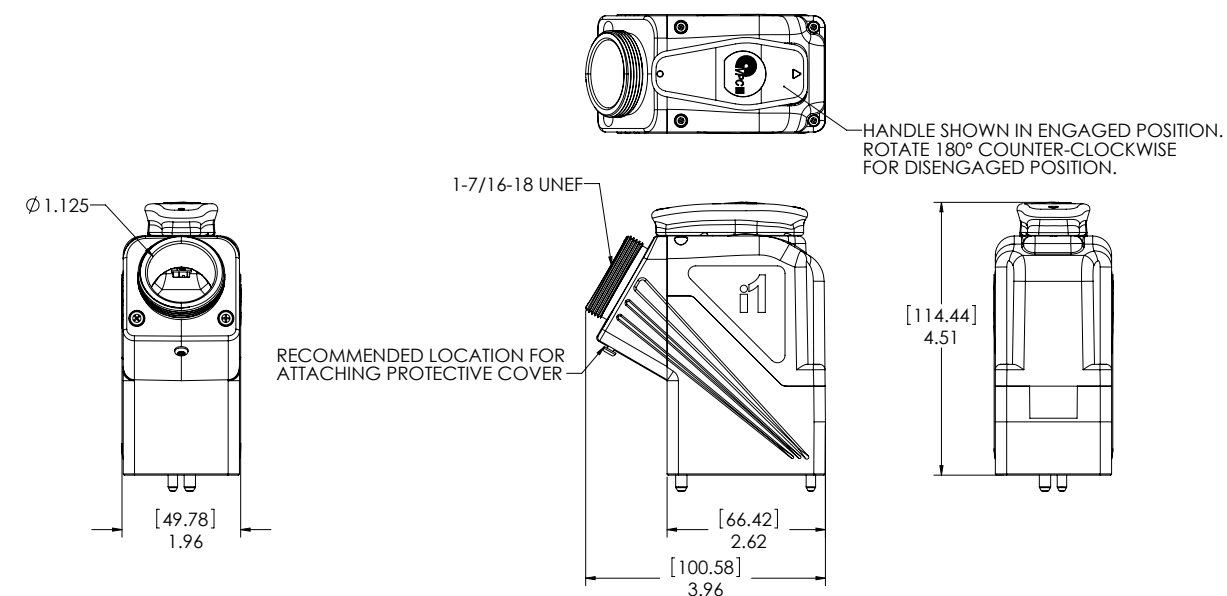
|                                  |   |
|----------------------------------|---|
| Weight                           | .55 lbs [.25 kg] without protective cover |
| Frame Material and Clamp Housing | Glass reinforced thermoplastic            |
| Hardware Material                | Stainless steel                           |
| Latch Material                   | Nickel plated beryllium copper            |
| Backshell Material               | Glass reinforced thermoplastic            |
| Protective Cover Material        | ABS, black                                |
| Available Module Positions       | 1 position                                |
| Cycle Life                       | 10,000 cycles                             |
| Temperature                      | -55° C to 105° C                          |



The U-shaped cable clamp is adjustable to accommodate the amount of wires in your cable bundle.

This i1 ITA option provides a larger cable clamp that allows modules to be pre-wired before assembly and can hold cable bundles up to 1.26" diameter. The removable backshell allows easy access to wiring for maintenance and probing. A protective cover is included with the ITA.

## i1EMI ITA



ITA, i1, EMI Shielded, with Protective Cover • **Part # 410 128 102**

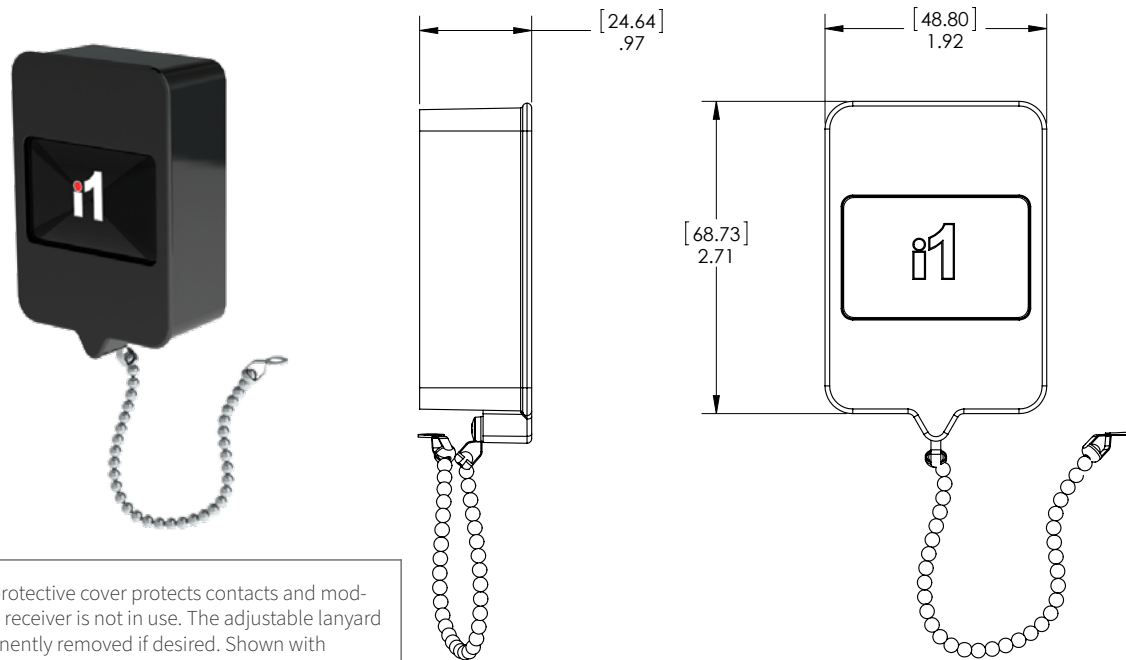


### ITA Specifications

|                                  |   |
|----------------------------------|---|
| Weight                           | .55 lbs [.25 kg] without protective cover |
| Frame Material and Clamp Housing | Stainless steel filled thermoplastic      |
| Hardware Material                | Stainless steel                           |
| Latch Material                   | Nickel plated beryllium copper            |
| Backshell Material               | Stainless steel filled thermoplastic      |
| Protective Cover Material        | ABS, black                                |
| Available Module Positions       | 1 position                                |
| Cycle Life                       | 10,000 cycles                             |
| Temperature                      | -55° C to 105° C                          |

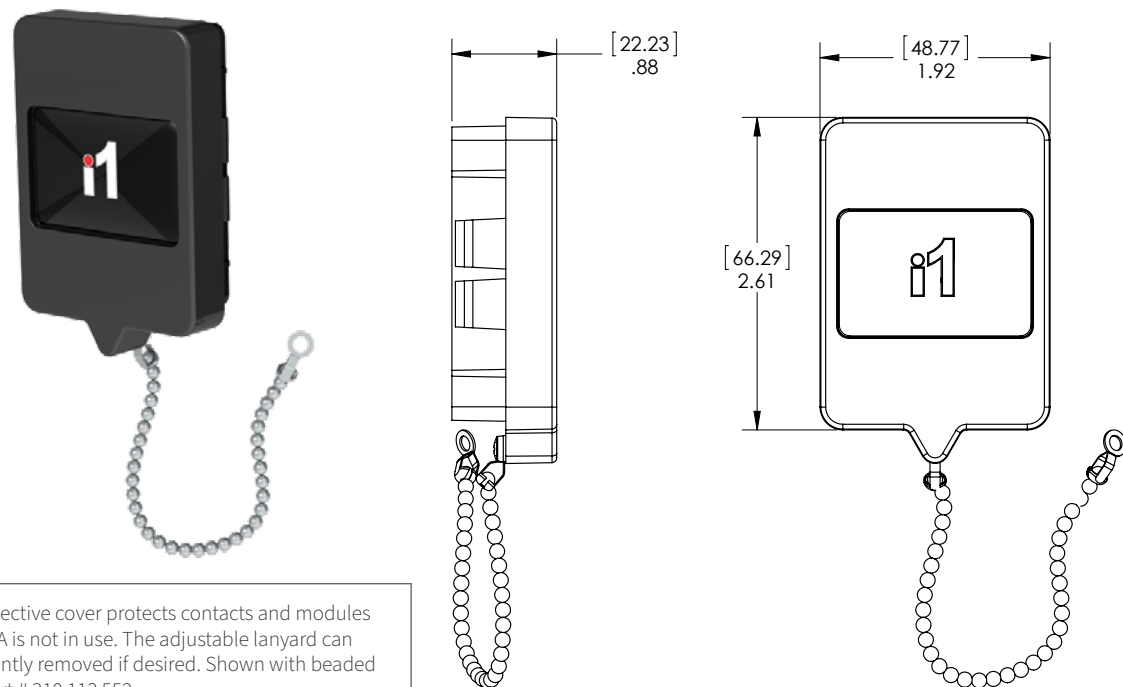
The i1EMI ITA has many of the standard features of the i1, in addition to EMI protection. The EMI-shielding effect on the i1EMI ITA is provided by the stainless steel fibers in the plastic shell and threaded metal coupling adapter. A protective cover is included with the ITA.

## i1 Accessories



The receiver protective cover protects contacts and modules when the receiver is not in use. The adjustable lanyard can be permanently removed if desired. Shown with beaded chain kit, Part # 310 113 552.

Replacement Protective Cover, i1, Receiver • Part # 310 113 524



The ITA protective cover protects contacts and modules when the ITA is not in use. The adjustable lanyard can be permanently removed if desired. Shown with beaded chain kit, Part # 310 113 552.

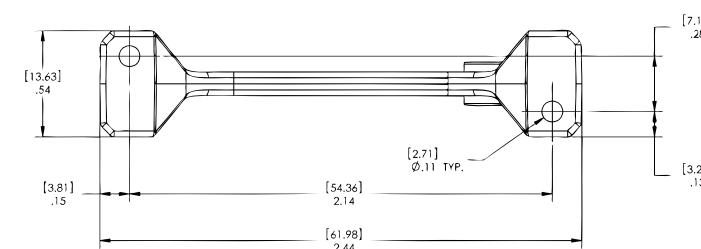
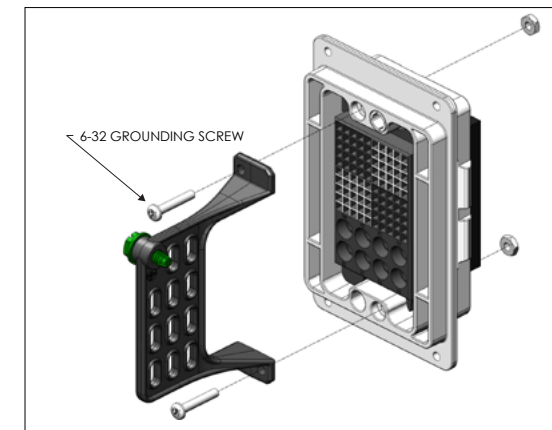
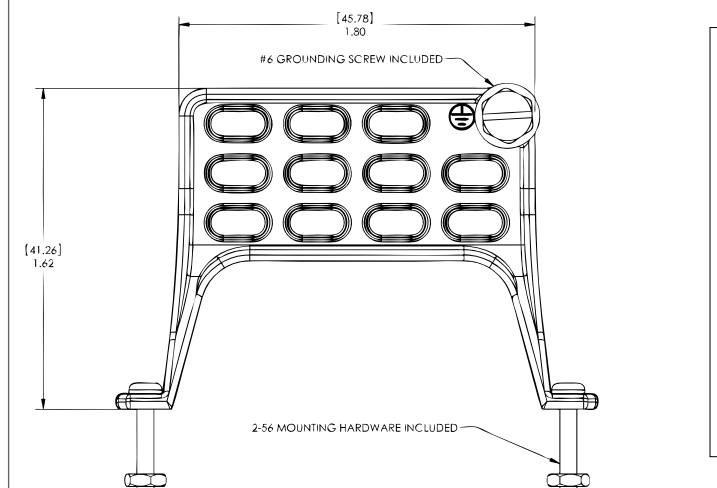
Replacement Protective Cover, i1, ITA • Part # 410 112 864

## i1 Accessories

The iSeries keying pin kit includes a set of two hex keys. One hex key will allow six different options and two can provide 36 different keying options. The keying kit provides a way to isolate your connectors to prevent operational mismatch.



Keying Pin Kit, iSeries, Receiver and ITA • Part # 310 113 461

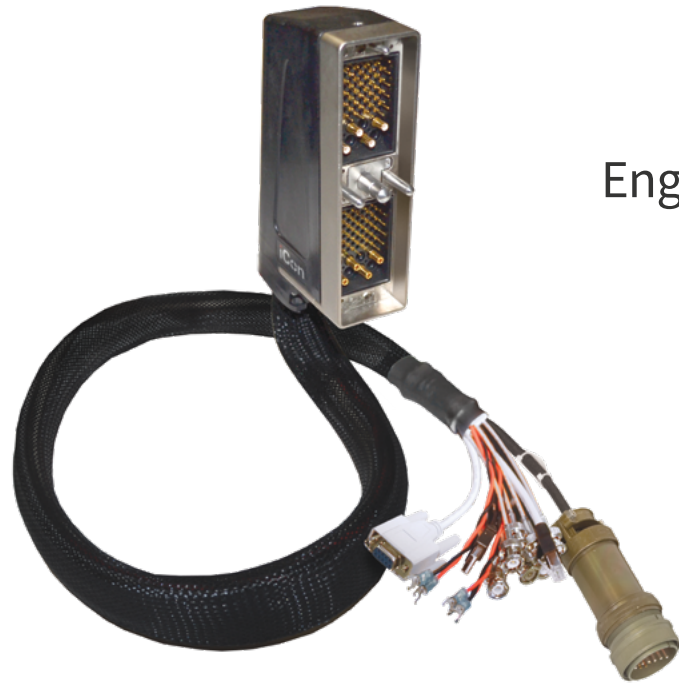


The strain relief plate attaches to the wiring side of the i1 receiver and can be secured before receiver installation. It includes four wire ties and an earth grounding screw.

Strain Relief Plate, i1, Receiver • Part # 310 113 531

# Discover Versatility & High Performance

## iCon & iConEMI



### Engineered for Test & Measurement

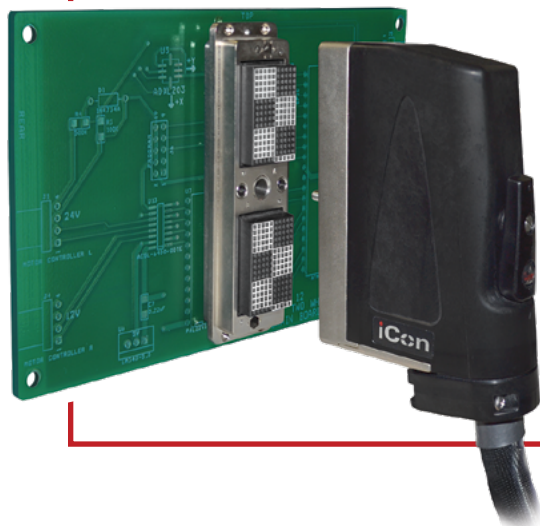
- Rugged engagement mechanism designed for over 10,000 cycles
- Mate up to 320 signal contacts using QuadraPaddle technology
- Small width and inboard handle increase side-to-side stackability

### Convenient Rack & Panel

- Slide-off backshell allows access to probe points while engaged
- Removable U-shaped cable clamp makes it easy to reconfigure wired modules
- Fail-safe features include offset guide pins, recessed ITA contacts, and keying pins

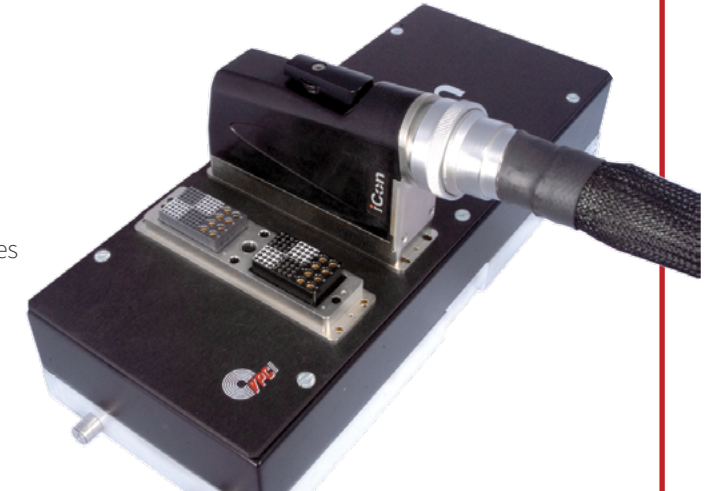
### Innovative & Practical Module Features

- PCB-mountable receiver
- Standard modules allow a mix of I/O
- Captive hardware in modules guarantees screws will not be lost
- Rear-mount modules allow for easy installation of pre-wired cable assemblies
- Modules available in coax, power, signal, thermocouple, pneumatic, and fiber optic, including hybrid combinations



### EMI Protection Maximizes Shielding Effectiveness

- “Mate first, break last” feature completes the earth ground circuit
- Earth-ground terminal prevents shock and injury
- EMI-shielding with metallized plastic shielding in the backshell minimizes EMI leaks to and from other sources



## iCon • 2 Module Solution

iCon is a fail-safe rack and panel connector specifically designed for the test and measurement industry. The unique engagement mechanism contains built-in lubrication and spring-loaded locking tabs that guarantee a reliable connection test after test. The iCon receiver is designed to be PCB-compatible.

### Features and Benefits

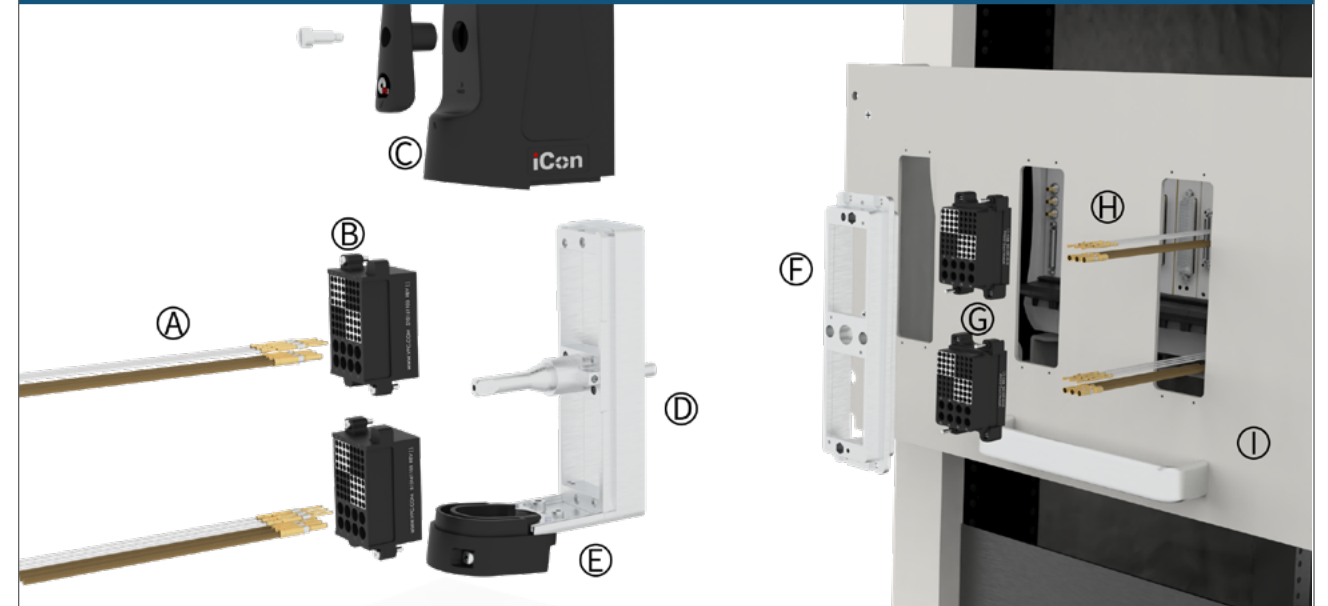
- Hybrid modules enable mix of I/O, including signal, power, coaxial, thermocouple, pneumatic, and fiber optic
- Mate up to 320 signal points with QuadraPaddle technology
- PCB-mountable
- Spring-locking tabs ensure even engagement
- Keying and guide pins ensure proper alignment and prevent incorrect mating
- Removable backshell enables easy access to wire
- Engineered for over 10,000 cycles



iCon Receiver and ITA



## iCon Slide Mount Configuration

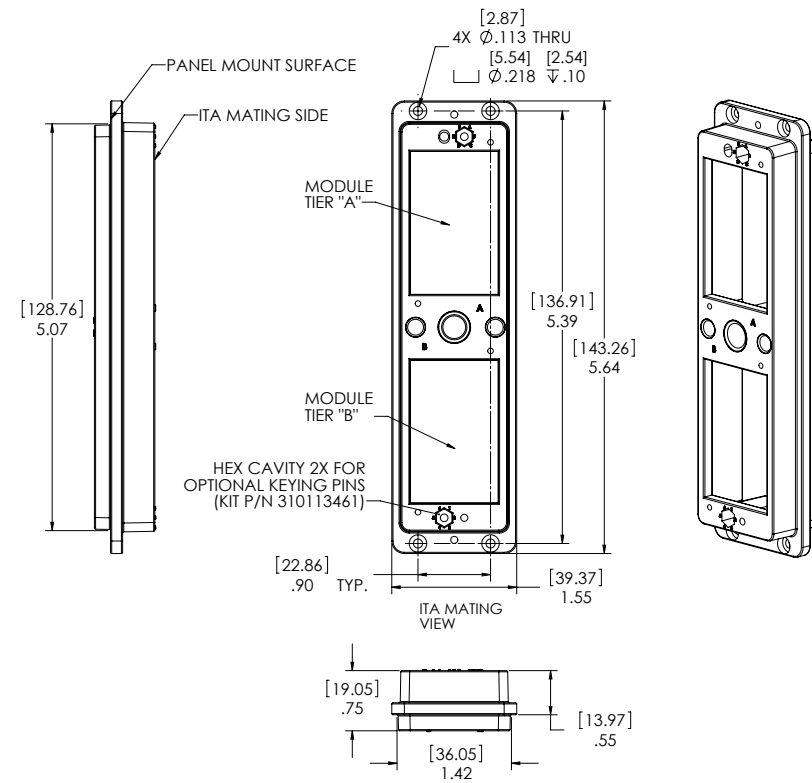


- A. ITA Patchcords
- B. iCon ITA Module
- C. Removable Backshell
- D. iCon ITA Frame
- E. U-shaped Cable Clamp
- F. iCon Receiver
- G. iCon Receiver Module
- H. Receiver Patchcords
- I. Mounting Panel

| Part #                  | Description  |
|-------------------------|--|
| <b>RECEIVERS</b>        |  |
| 310 123 101             | Receiver, iCon, with Protective Cover  |
| 310 123 102             | Receiver, iCon, EMI-Shielded, with Protective Cover and Strain Relief                    |
| 310 123 103             | Receiver, iCon, Reverse Module Configuration for iCon ITA Modules, with Protective Cover |
| <b>ITAS</b>             |  |
| 410 123 101             | ITA, iCon, with Protective Cover   |
| 410 123 102             | ITA, iCon, EMI-Shielded, with Threaded Coupling Adapter and Protective Cover             |
| 410 123 106             | ITA, iCon, with Large Cable Clamp and Protective Cover                                   |
| 410 123 122             | ITA, iCon with Oversized Backshell   |
| <b>CABLE ASSEMBLIES</b> |  |
| 410 123 593             | Cable Assembly, ITA, iCon, QuadraPaddle, 36", Flying Leads                               |
| <b>MOUNTING OPTIONS</b> |  |
| 310 113 463             | Vertical Hinged Mounting Frame, iCon, 5U, 3 Positions                                    |
| 310 113 467             | Cover Plate, iCon, for Mounting Panel Cutouts, Painted Gray                              |
| 310 113 490             | Cover Plate, iCon, for Mounting Panel Cutouts, Painted Black                             |
| 310 113 301             | Fixed Mounting Panel, iCon, 4U, 8 Positions, Painted Gray                                |
| 310 113 302             | Fixed Mounting Panel, iCon, 4U, 8 Positions, Black Anodized                              |
| 310 113 491             | Fixed Mounting Panel, iCon, 1U, 2 Positions, Painted Gray                                |
| 310 113 488             | Fixed Mounting Panel, iCon, 1U, 2 Positions, Black Anodized                              |
| 310 113 540             | Mounting Panel, iCon, 6U, 4 Positions, with Slide Mounting (slide kit required)          |
| <b>SLIDE KITS</b>       |  |
| 310 113 451             | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180 lbs.                                |
| 310 113 411             | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180 lbs.                                |
| 310 113 500             | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180 lbs.                                |
| <b>ACCESSORIES</b>      |  |
| 310 113 461             | Keying Pin Kit, iSeries, Receiver and ITA  |
| 310 113 456             | Strain Relief Plate, iCon, Receiver  |
| 310 113 582             | Strain Relief Stand-off Kit, iCon, Receiver  |
| 410 112 750             | Replacement Protective Cover, iCon, ITA  |
| 510 109 572             | Strain Relief Plate, iCon High Power, Receiver   |



## iCon Receiver



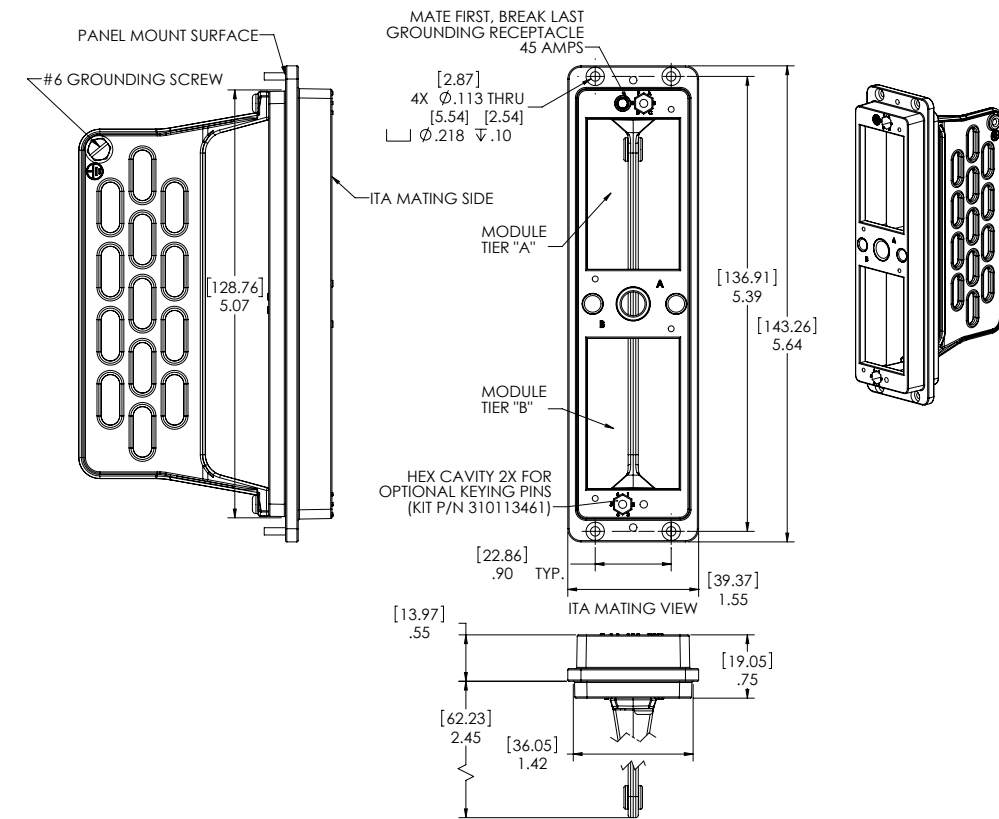
Receiver, iCon, with Protective Cover • Part # 310 123 101

| Receiver Specifications    |   |
|----------------------------|---|
| Weight                     | .20 lbs [.09 kg] without protective cover |
| Frame Material             | Nickel plated aluminum alloy              |
| Hardware Material          | Stainless steel alloy                     |
| Protective Cover Material  | ABS, black                                |
| Available Module Positions | 2 positions                               |
| Cycle Life                 | 10,000 cycles                             |
| Temperature                | -55° C to 125° C                          |



The iCon receiver accepts two modules and allows a variety of signal, power, coaxial, thermocouple, and fiber optic connections. A protective cover is included with the receiver. Other accessories, such as keying pin kits and strain relief, are available.

## iConEMI Receiver



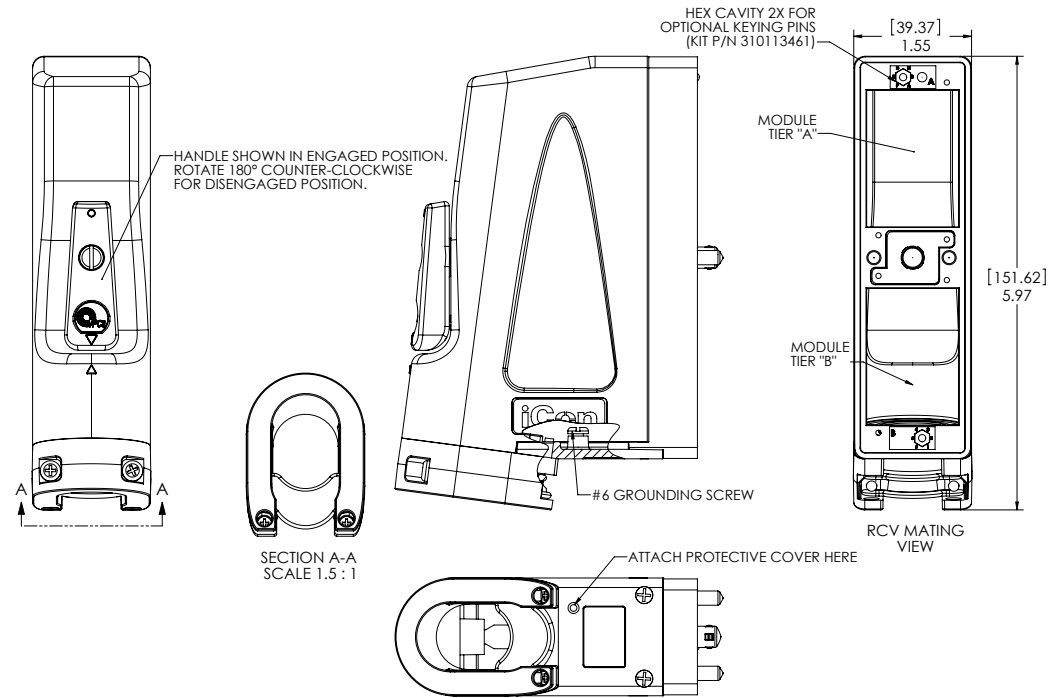
Receiver, iCon, EMI Shielded, with Protective Cover and Strain Relief • Part # 310 123 102

| Receiver Specifications    |   |
|----------------------------|---|
| Weight                     | .20 lbs [.09 kg] without protective cover |
| Frame Material             | Nickel plated aluminum alloy              |
| Hardware Material          | Stainless steel alloy                     |
| Protective Cover Material  | ABS, black                                |
| Available Module Positions | 2 positions                               |
| Cycle Life                 | 10,000 cycles                             |
| Temperature                | -55° C to 125° C                          |



The iConEMI receiver has many of the standard features of the iCon, in addition to EMI protection. A ground terminal is included on the iConEMI receiver. The “mate first, break last” feature connects the earth ground circuit. The ground terminal on the strain relief prevents user shock and injury.

## iCon ITA



ITA, iCon, with Protective Cover • Part # 410 123 101



### ITA Specifications

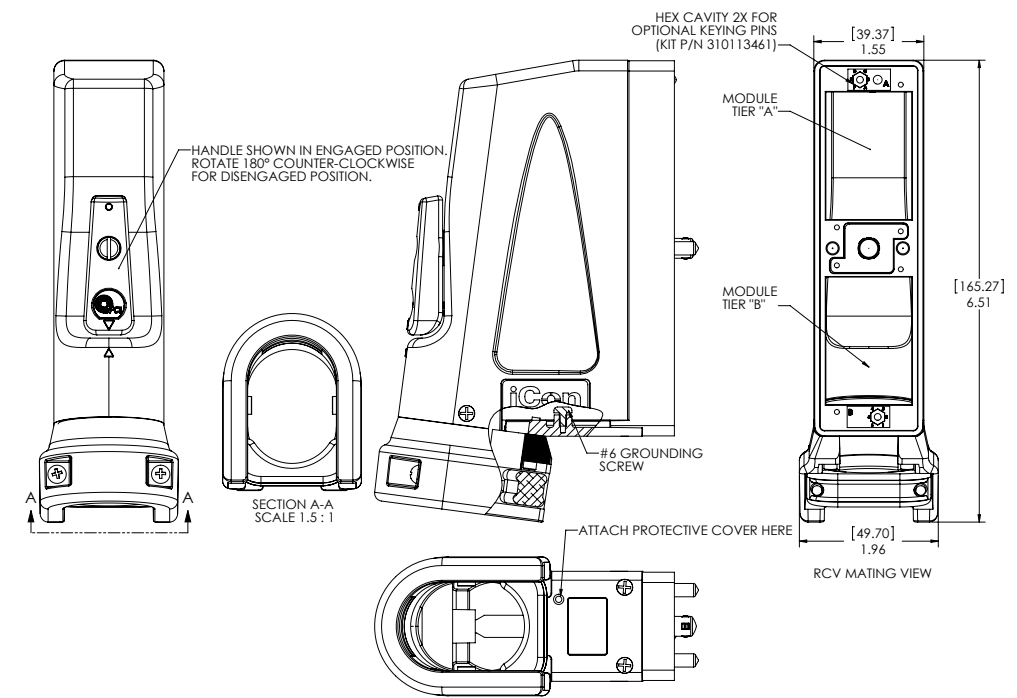
|  |   |
|--|---|
| Weight   | .65 lbs [.29 kg] without protective cover |
| Frame Material                                   | Nickel plated aluminum alloy              |
| Hardware Material                                | Stainless steel alloy                     |
| Drive Unit Material                              | Bronze and stainless steel                |
| Plastic Components and Protective Cover Material | ABS, black                                |
| Cable Clamp Material                             | Powder coated aluminum                    |
| Available Module Positions                       | 2 positions                               |
| Cycle Life                                       | 10,000 cycles                             |
| Temperature                                      | -55° C to 125° C                          |



The U-shaped cable clamp is adjustable to accommodate the amount of wires in your cable bundle.

The iCon ITA's small width and inboard handle increase the side-to-side stackability. The U-shaped cable clamp allows modules to be pre-wired before assembly and can hold cable bundles up to 1.21" diameter. The slide-off backshell allows easy access to wiring for maintenance and probing. A protective cover is included with the ITA.

## iCon ITA with Large Cable Clamp



ITA, iCon, with Large Cable Clamp, with Protective Cover • Part # 410 123 106



### ITA Specifications

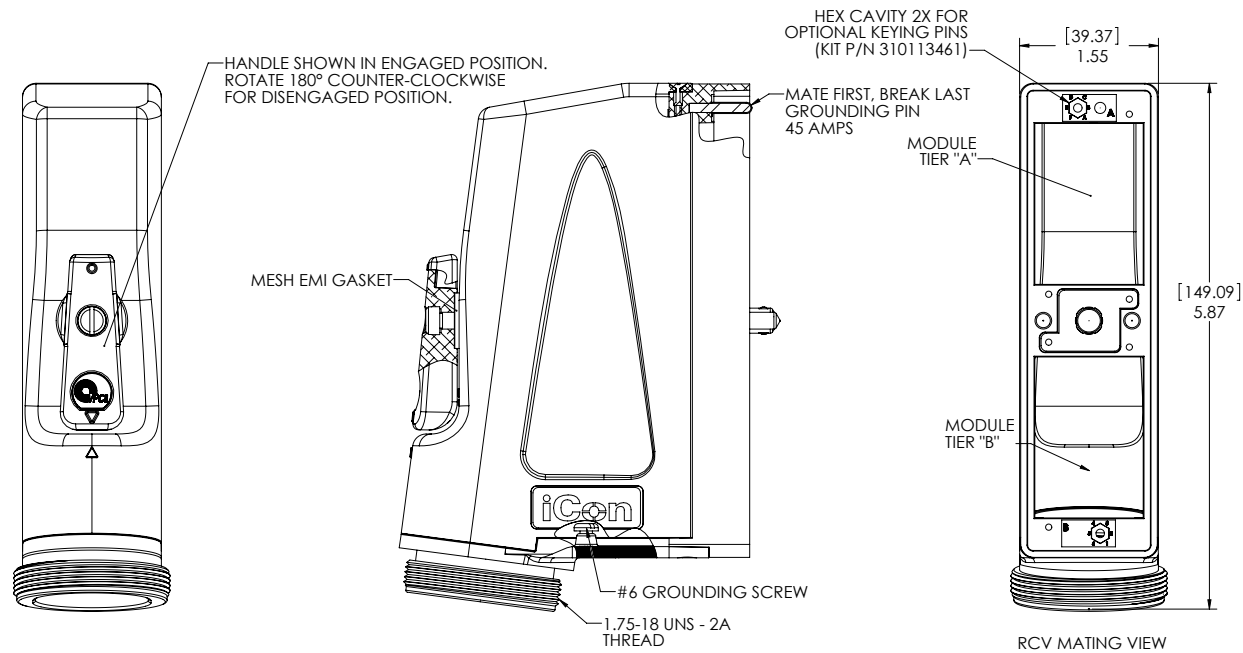
|  |   |
|--|---|
| Weight   | .65 lbs [.29 kg] without protective cover |
| Frame Material                                   | Nickel plated aluminum alloy              |
| Hardware Material                                | Stainless steel alloy                     |
| Drive Unit Material                              | Bronze and stainless steel                |
| Plastic Components and Protective Cover Material | ABS, black                                |
| Cable Clamp Material                             | Powder coated aluminum                    |
| Available Module Positions                       | 2 positions                               |
| Cycle Life                                       | 10,000 cycles                             |
| Temperature                                      | -55° C to 125° C                          |



The U-shaped cable clamp is adjustable to accommodate the amount of wires in your cable bundle.

This iCon ITA has a large cable clamp that will accommodate cable bundles up to 1.55" diameter. The slide-off backshell allows easy access to wiring for maintenance and probing. A protective cover is included with the ITA.

## iCon EMI ITA



ITA, iCon, EMI Shielded, with Threaded Coupling Adapter and Protective Cover • **Part # 410 123 102**



### ITA Specifications

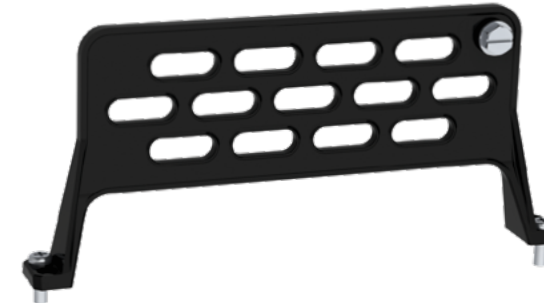
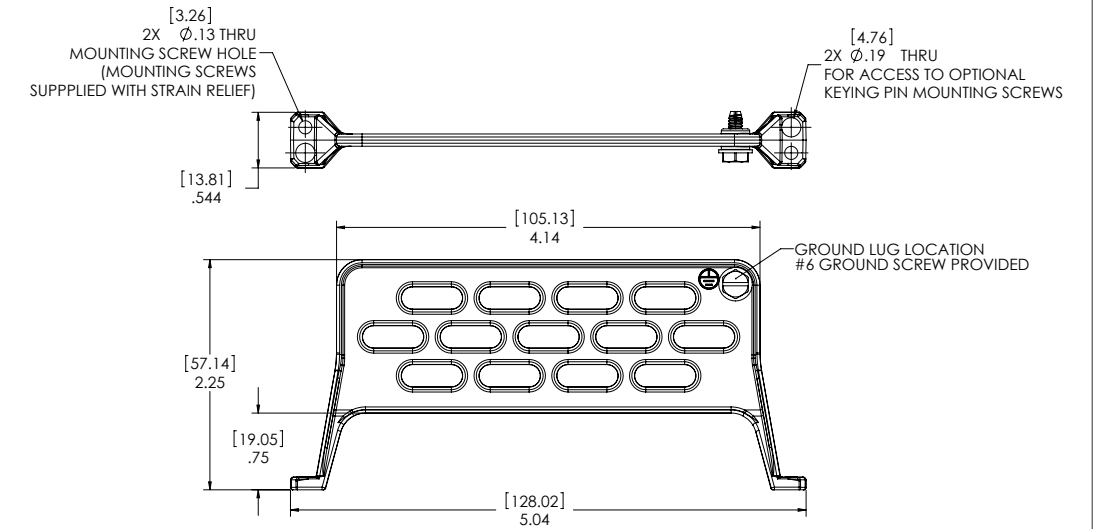
|  |  |
|--|--|
| Weight   | .65 lbs [.29 kg] without protective cover    |
| Frame Material                                   | Nickel plated aluminum alloy                 |
| Hardware Material                                | Stainless steel                              |
| Drive Unit Material                              | Bronze and stainless steel                   |
| Cable Clamp Material                             | Stainless steel                              |
| Plastic Components and Protective Cover Material | Stainless steel filled impact modified nylon |
| Available Module Positions                       | 2 positions                                  |
| Cycle Life                                       | 10,000 cycles                                |
| Temperature                                      | -55° C to 125° C                             |



For more information about coupling adapters, backshells, and conduits, visit [vpc.com](http://vpc.com)

The EMI-shielding effect on the iConEMI ITA is provided by the stainless steel fibers in the removable plastic backshell and threaded metal coupling adapter. The opening in the threaded coupling adapter provides clearance for a maximum cable bundle of 1.37" diameter. A protective cover is included with the ITA.

## iCon Accessories



The strain relief plate attaches to the wiring side of the iCon receiver and can be secured before receiver installation. The strain relief is made of black powder coated aluminum. Six wire ties and mounting hardware are included.

Strain Relief Plate, iCon, Receiver • **Part # 310 113 456**



The receiver protective cover protects contacts and modules when the receiver is not in use.

Replacement Protective Cover, iCon, Receiver  
**Part # 310 113 678**



The ITA protective cover protects contacts and modules when the ITA is not in use.

Replacement Protective Cover, iCon, ITA  
**Part # 410 112 750**

# Reveal the Possibilities

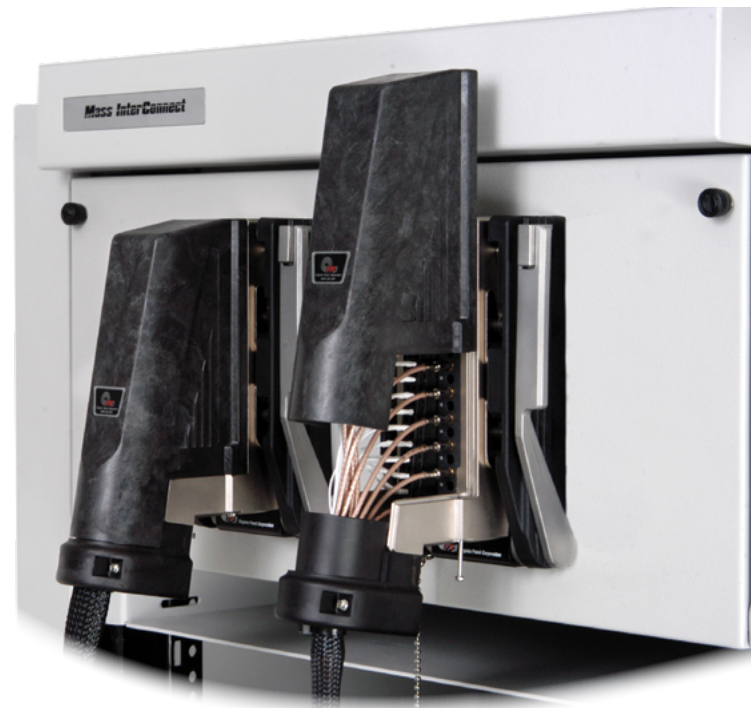
## G2, G6 & G10 Solutions



### Variety of Uses

- Easy to use in rack or chassis mount applications
- Designed for use with VPC's Vertical Hinged Mounting Frame, fixed panels or slide mount
- Optional keying pin kit distinguishes between multiple ITAs to avoid operational mismatch

## G2



### Compact, High Density Solution

- Ideal for applications requiring a mix of I/O, with various module configurations available
- Mate over 400 (G2), 1,400 (G6), or 2,400 (G10) signal contacts in one application
- Provide outstanding performance in various applications

## G10



### Standard QuadraTrack™

- Engaging mechanism in the form of a pair of precision machined slides located in the receiver
- Distributes uniform pressure to four points on the ITA during engagement and disengagement
- Precise signal integrity between the receiver and ITA is maintained by QuadraTrack™ engagement system

### Slide-off Backshell

- Slide off the backshell for easy wiring access
- Built-in cable clamps for securing all types of wiring

## G6



### Multiple Mounting Options

- Vertical Hinged Mounting Frames enable hinge down access to instrumentation and wiring
- Slide mount option for the G10 allows the receiver and instrumentation to slide out for easy access to the instrument chassis
- Reduce cable length and time spent troubleshooting test system (applies to slide mount option)



## G2 • 2 Module Solution

The G2 offers the reliability of VPC InterConnect technology in a high-density, compact package. Simultaneously engaging a wide range of InterConnect options in multiple configurations, the G2 provides a rapid alternative to repeated connect and disconnect of individual leads and connectors in a rugged, reliable system.

### Features and Benefits

- Precision engagement mechanism engineered to mate over 400 contacts
- Cable mount ITA includes EMI-shielded backshell that slides off to allow easy access to wiring
- Standard ITA frames accommodate multiple enclosure types for a variety of fixture options
- Available keying kit distinguishes between multiple G2s used in the same application
- Modular and reconfigurable for evolving tests requirements
- Reliable connectivity beyond 20,000 cycles
- Quick and easy integration and maintenance
- Wide range of I/O options including signal, coaxial, power, pneumatic, vacuum, thermocouple, fiber optic, and PCB solutions



G2 Receiver and ITA



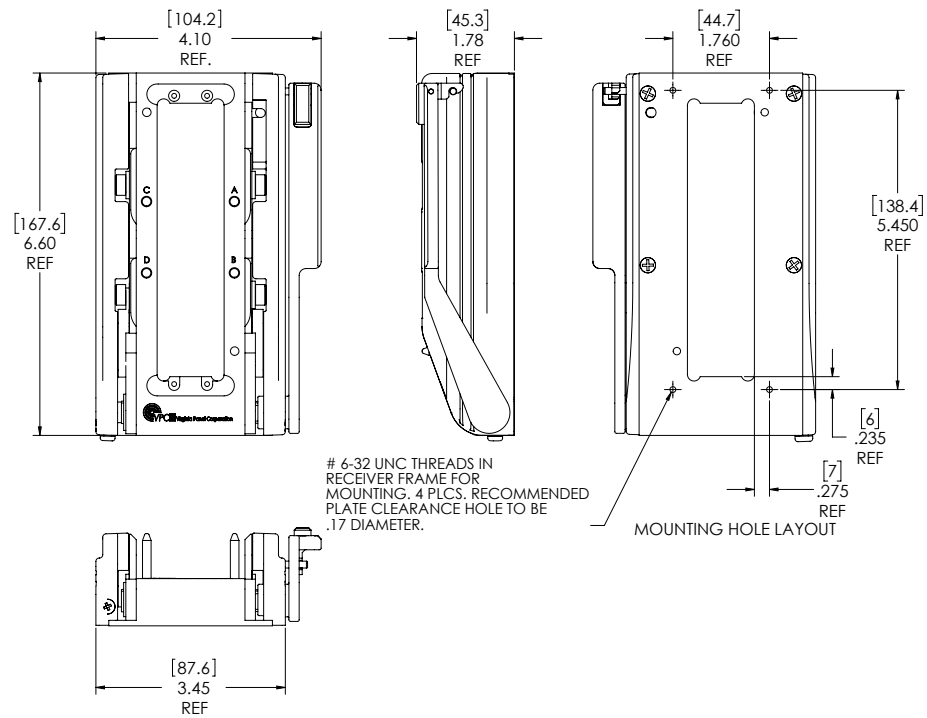
## G2 Panel Mount Configuration



- |                         |                        |                                   |
|-------------------------|------------------------|-----------------------------------|
| A. ITA Patchcords       | D. ITA Removable Cover | G. G2 Receiver                    |
| B. ITA Module           | E. G2 ITA              | H. Vertical Hinged Mounting Frame |
| C. U-shaped Cable Clamp | F. Receiver Module     | I. Receiver Patchcords            |

| Part #                  | Description  |
|-------------------------|--|
| <b>RECEIVER</b>         |  |
| 310 120 110             | Receiver, G2, 2 Module, Keying Feature, with Protective Cover                              |
| 310 120 112             | Receiver, G2, 2 Module, Keying Feature, with Protective Cover, with Microswitch            |
| <b>ITAS</b>             |  |
| 410 120 110             | ITA with Removable Cover, G2, 2 Module, Keying Feature, with Protective Cover              |
| 410 120 112             | ITA, G2, 2 Module  |
| 410 120 120             | ITA, G2, 2 Module with 10 Module Enclosure and Adapter Plate, with Protective Cover        |
| <b>ENCLOSURE</b>        |  |
| 410 112 686             | Enclosure, 2 Module (for ITA Part # 410 120 112)   |
| <b>MOUNTING OPTIONS</b> |  |
| 310 113 391             | Vertical Hinged Mounting Frame, G2, 5U, 3 Position (2 Blank Plates Included)               |
| 310 113 358             | Vertical Hinged Mounting Frame, 5U, Blank  |
| 310 113 395             | Fixed Mounting Panel, G2, 5U, 3 Position (2 Blank Plates Included)                         |
| <b>ACCESSORIES</b>      |  |
| 310 113 394             | Replacement Protective Cover, G2, Receiver   |
| 410 112 680             | Replacement Protective Cover, G2, ITA  |
| 310 113 371             | Chassis Mount Kit for Pickering 40-908, 40-914, 40-918                                     |
| 310 113 417             | Chassis Mount Kit for National Instruments Chassis (PXI-1044/1045/1065 and PXIe-1065/1075) |
| 310 113 589             | Chassis Mount Kit for Keysight M9018A Chassis  |
| 310 118 112             | Keying Pin Kit, Receiver/ITA   |
| 410 112 599             | Threaded Coupling Adapter, G2, G6, G10, ITA, for Conduit Harnessing Assemblies/Clamps      |

## G2 Receiver • 2 Module Solution



Receiver, G2, 2 Module, Keying Feature, with Protective Cover • Part # 310 120 110

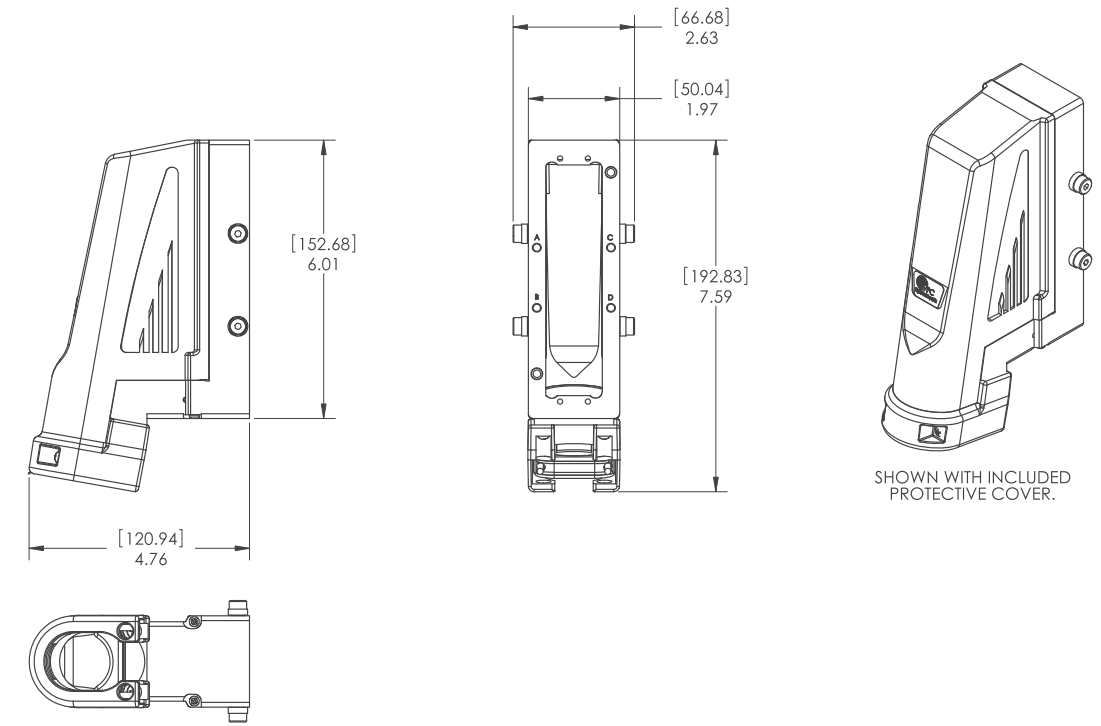
### Receiver Specifications

|                                 |                                |
|---------------------------------|--------------------------------|
| Weight                          | 1.82 lbs [.82 kg]              |
| Side Material                   | ABS-polycarbonate blend        |
| Frame Material                  | Anodized aluminum              |
| Slide Material                  | Nickel plated steel            |
| Linkage, Handle, Latch Material | Stainless steel                |
| Available Module Slots          | 2 positions                    |
| Cycle Life                      | 20,000 cycles                  |
| Temperature                     | -55° C to 85° C                |
| Max. Weight Support             | 25 lbs @ 6" [11 kg @ 15.24 cm] |



The G2 receiver is equipped with a locking handle and nickel plated steel slides that engage up to 400 contact points. It allows a high amount of I/O within a compact and rugged device. A protective cover is included with the receiver.

## G2 ITA with Removable Cover • 2 Module Solution



ITA with Removable Cover, G2, 2 Module, Keying Feature, with Protective Cover • Part # 410 120 110

### ITA Specifications

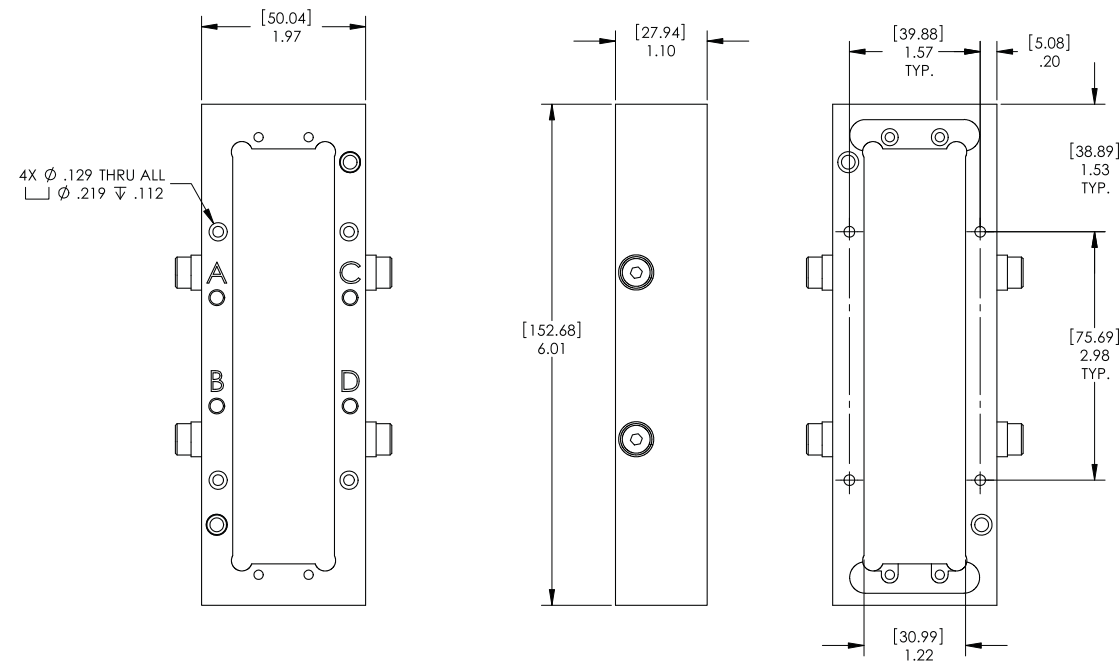
|                        |                          |
|------------------------|--------------------------|
| Weight                 | 1.65 lbs [.75 kg]        |
| Cover Material         | EMI-shielded nylon       |
| Frame Material         | Nickel plated zinc alloy |
| Available Module Slots | 2 positions              |
| Cycle Life             | 20,000 cycles            |
| Temperature            | -55° C to 85° C          |



The U-shaped cable clamp is adjustable to accommodate the amount of wires in your cable bundle.

The G2 ITA is equipped with a removable EMI-shielded backshell. The backshell slides up to provide access to wires and connectors and is secured by two screws. The removable and adjustable U-shaped cable clamp is attached by screws to the ITA frame. A protective cover is included with the ITA.

## G2 ITA • 2 Module Solution



### ITA, G2, 2 Module • Part # 410 120 112

#### ITA Specifications

|                        |                    |
|------------------------|--------------------|
| Weight                 | .61 lbs [.28 kg]   |
| Frame Material         | Chromated aluminum |
| Available Module Slots | 2 positions        |
| Cycle Life             | 20,000 cycles      |
| Temperature            | -55° C to 85° C    |



The performance and versatility of the two module ITA with keying feature present a convenient alternative to limited low I/O connectors. The aluminum frame has through-holes to mount an enclosure or other custom components to the wiring side of the ITA.

## G2 Accessories • 2 Module Solution



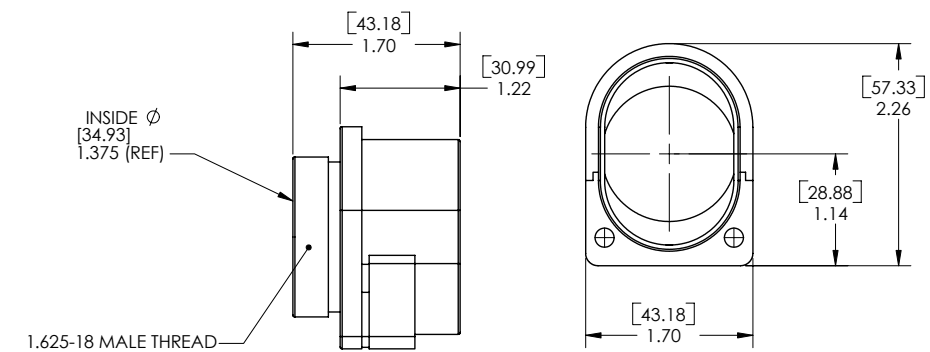
The receiver protective cover protects contacts and modules when the receiver is not in use.

Replacement Protective Cover, G2, Receiver  
Part # 310 113 394

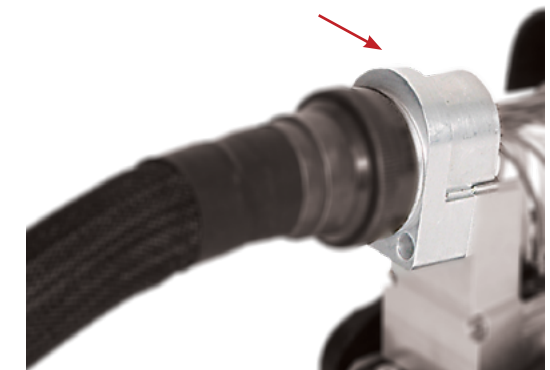


The vinyl ITA protective cover protects contacts and modules when the ITA is not in use.

Replacement Protective Cover, G2, ITA  
Part # 410 112 680



The threaded coupling adapter is designed to accommodate military and commercial circular backshells for conduit or strain relief when designing for general and heavy-duty applications. The male thread size is 1.625"-18".



Threaded Coupling Adapter, G2, G6, G10, ITA, for Conduit Harnessing Assemblies/Clamps  
Part # 410 112 599

## G6 • 6 Module Solution

The six module solution provides versatility on a small footprint. This small, high-density InterConnect can simultaneously engage over 1,400 signal contacts. The adaptable G6 integrates a wide variety of I/O options in various module configurations. The contacts are incorporated into cable assemblies for specific instruments. The Vertical Hinged Mounting Frame is suitable for rack or chassis mount applications and offers quick access to resources and cables. The ITA has a unique, removable, EMI-shielded backshell which allows easy access to the modules and contacts.

### Features and Benefits

- Precision engagement mechanism engineered to mate over 1,400 contacts
- Cable mount ITA includes EMI-shielded backshell that slides off to allow easy access to wiring
- Cable mount ITA accepts standard circular cable adapters
- Standard ITA frames accommodate multiple enclosure types for a variety of fixture options
- Optional keying kit distinguishes between multiple G6s used in the same application
- Modular and reconfigurable for evolving tests requirements
- Reliable connectivity beyond 20,000 cycles
- Quick and easy integration and maintenance
- Wide range of I/O options including signal, coaxial, power, pneumatic, vacuum, thermocouple, fiber optic, and PCB solutions

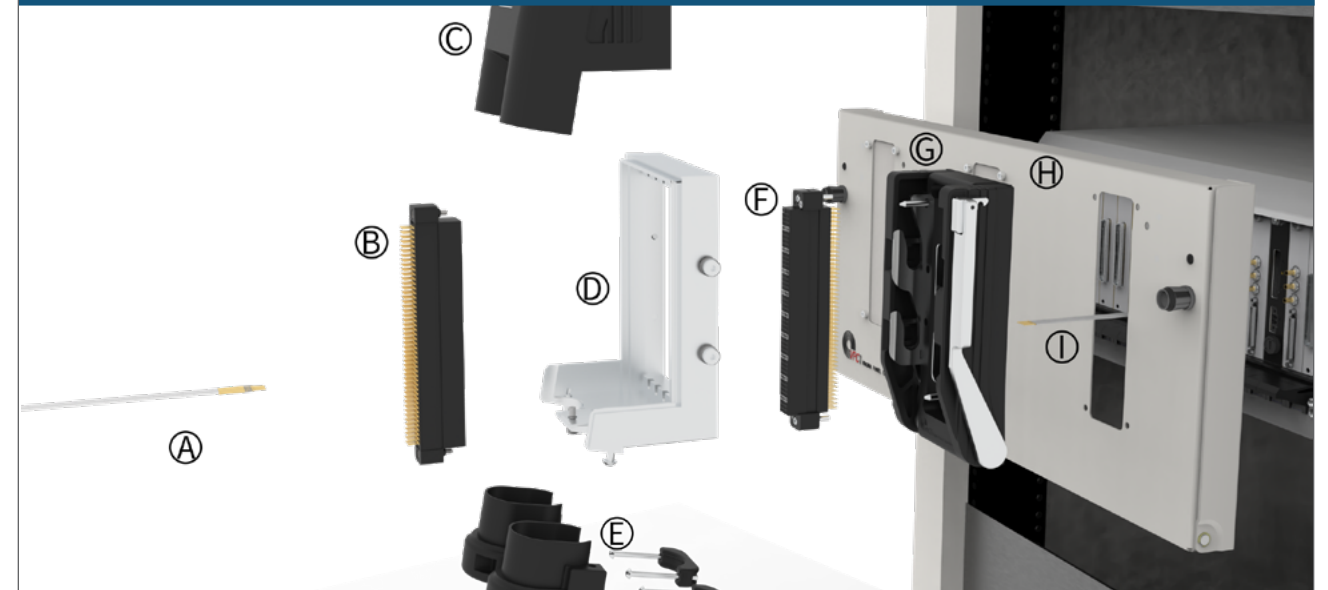


G6 Receiver and ITA



G6 Mounted to Vertical Hinged Mounting Frame

## G6 Panel Mount Configuration

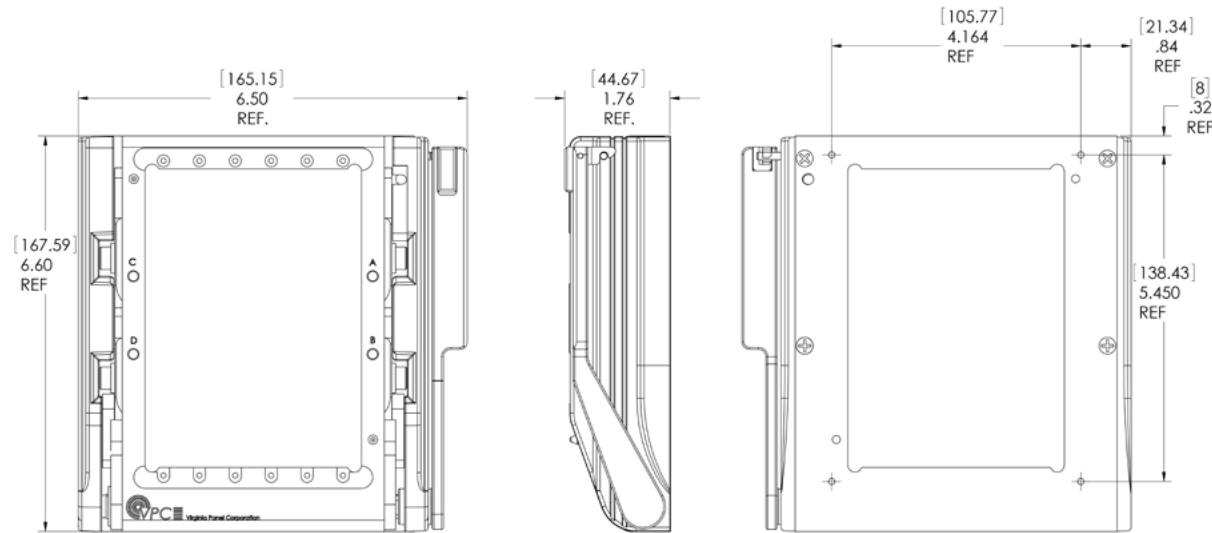


- |                         |                        |                                   |
|-------------------------|------------------------|-----------------------------------|
| A. ITA Patchcords       | D. ITA Removable Cover | G. G6 Receiver                    |
| B. ITA Module           | E. G6 ITA              | H. Vertical Hinged Mounting Frame |
| C. U-shaped Cable Clamp | F. Receiver Module     | I. Receiver Patchcords            |

| Part #                  | Description  |
|-------------------------|--|
| <b>RECEIVERS</b>        |  |
| 310 104 318             | Receiver, G6, 6 Module with Keying Feature   |
| 310 104 344             | Receiver, G6, 6 Module with Keying Feature and EMI Gasket                                  |
| 310 104 419             | Receiver, Two G6, 6 Module, with Slide Mounting (slide kit required)                       |
| <b>ITAS</b>             |  |
| 410 104 273             | ITA, G6, 6 Module, Keying Feature, with Protective Cover                                   |
| 410 104 118             | ITA, 9006, 6 Module  |
| 410 104 331             | ITA, G6, 6 Module  |
| 410 104 288             | ITA, G6, 6 Module, for EMI   |
| <b>ENCLOSURE</b>        |  |
| 410 112 401             | Enclosure, 6 Module, 4" Deep with Hinge (for ITA Part # 410 104 331)                       |
| <b>MOUNTING OPTIONS</b> |  |
| 310 113 341             | Vertical Hinged Mounting Frame, G6, 5U, 1 Position   |
| 310 113 397             | Vertical Hinged Mounting Frame, G6, 5U, 2 Positions  |
| 310 113 358             | Vertical Hinged Mounting Frame, 5U, Blank  |
| <b>ACCESSORIES</b>      |  |
| 310 113 158             | Protective Cover, G6, Receiver   |
| 410 112 684             | Replacement Protective Cover, G6, ITA  |
| 310 104 450             | Handle Extension, G6, Receiver   |
| 310 113 371             | Chassis Mount Kit for Pickering 40-908, 40-914, 40-918                                     |
| 310 113 417             | Chassis Mount Kit for National Instruments Chassis (PXI-1044/1045/1065 and PXIe-1065/1075) |
| 310 113 589             | Chassis Mount Kit for Keysight M9018A Chassis  |
| 310 118 112             | Keying Pin Kit, Receiver/ITA   |
| 410 112 599             | Threaded Coupling Adapter, G2, G6, G10, ITA, for Conduit Harnessing Assemblies/Clamps      |



## G6 Receiver • 6 Module Solution



### Receiver, G6, 6 Module, Keying Feature • Part # 310 104 318

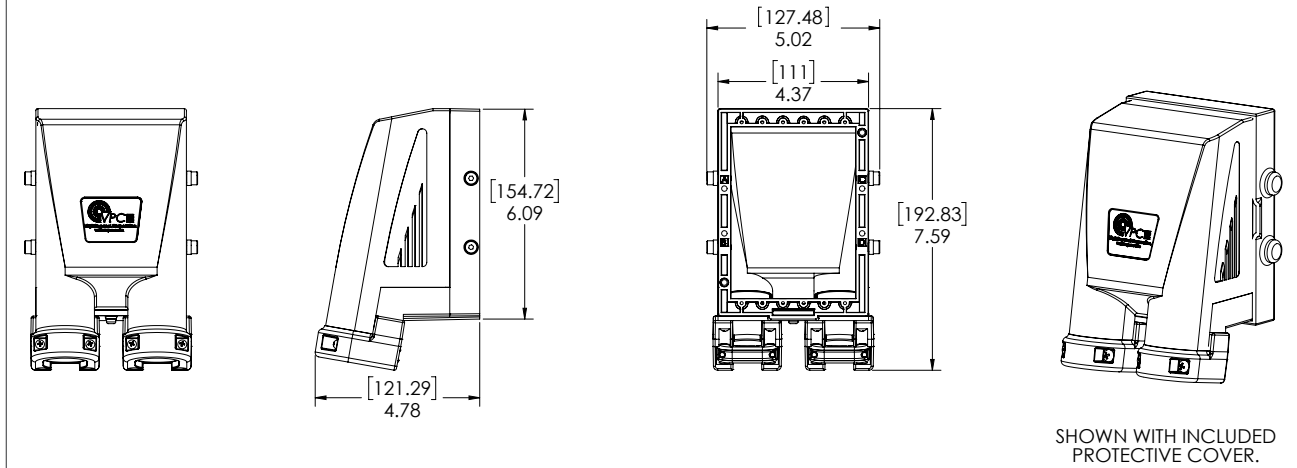
#### Receiver Specifications

|                                 |                                |
|---------------------------------|--------------------------------|
| Weight                          | 1.94 lbs [.88 kg]              |
| Side Material                   | ABS-polycarbonate blend        |
| Frame Material                  | Anodized aluminum              |
| Slide Material                  | Nickel plated steel            |
| Linkage, Handle, Latch Material | Stainless steel                |
| Available Module Slots          | 6 positions                    |
| Cycle Life                      | 20,000 cycles                  |
| Temperature                     | -55° C to 85° C                |
| Max. Weight Support             | 25 lbs @ 6" [11 kg @ 15.24 cm] |
| Max. Mating Force               | 630 lbs [285.8 kg]             |



The G6 receiver is equipped with a locking handle and nickel plated steel slides that engage up to 1,440 signal contact points. It allows a high amount of I/O within a compact and rugged device.

## G6 ITA with Removable Cover • 6 Module Solution



### ITA, G6, 6 Module, Removable Cover, Keying Feature, with Protective Cover • Part # 410 104 273



#### ITA Specifications

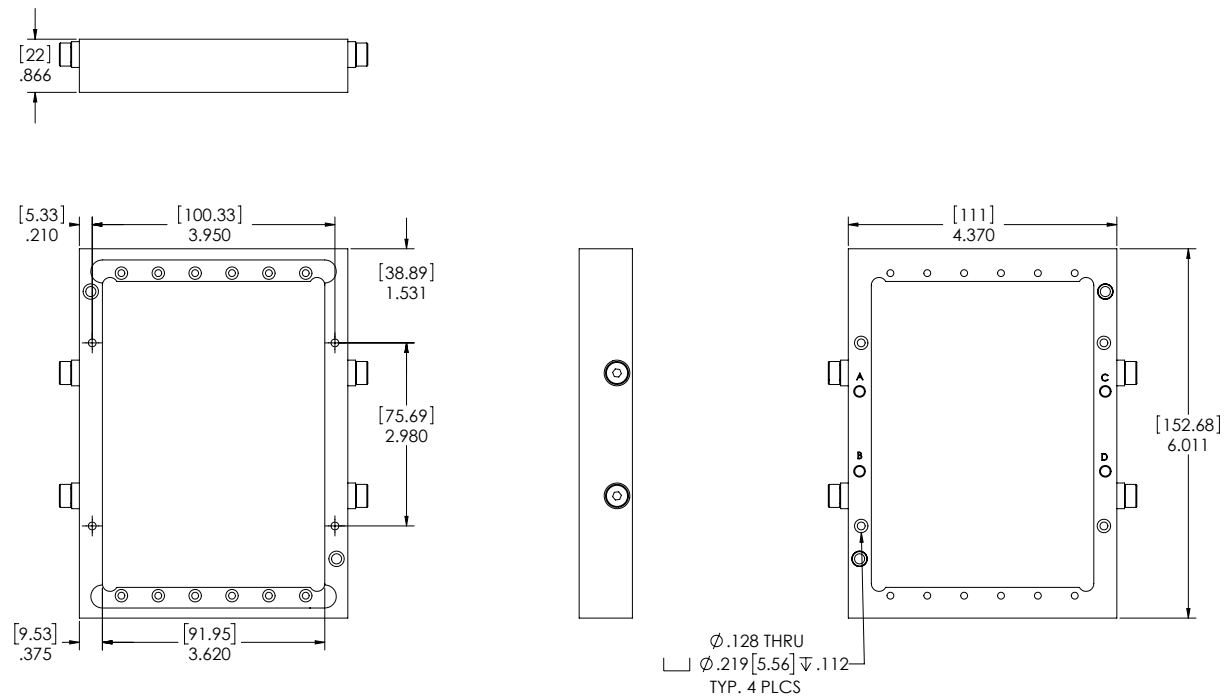
|                        |                    |
|------------------------|--------------------|
| Weight                 | 1.4 lbs [.63 kg]   |
| Cover Material         | EMI-shielded nylon |
| Frame Material         | Chromated aluminum |
| Available Module Slots | 6 positions        |
| Cycle Life             | 20,000 cycles      |
| Temperature            | -55° C to 85° C    |
| Max. Mating Force      | 630 lbs [285.8 kg] |



The U-shaped cable clamp is adjustable to accommodate the amount of wires in your cable bundle.

The G6 ITA is equipped with a removable EMI-shielded backshell. The backshell slides up to provide access to wires and connectors and is secured by one screw. The removable and adjustable U-shaped cable clamp is attached by screws to the ITA frame. A protective cover is included with the ITA.

## G6 ITA • 6 Module Solution



ITA, G6, 6 Module • Part # 410 104 331



### ITA Specifications

|                        |                    |
|------------------------|--------------------|
| Weight                 | .75 lbs [.34 kg]   |
| Frame Material         | Chromated aluminum |
| Available Module Slots | 6 positions        |
| Cycle Life             | 20,000 cycles      |
| Temperature            | -55° C to 85° C    |
| Max. Mating Force      | 630 lbs [285.8 kg] |

The six module ITA allows you to use an existing enclosure or create your own enclosure for your specific application. For EMI protection see Part # 410 104 288.

## G6 Accessories • 6 Module Solution



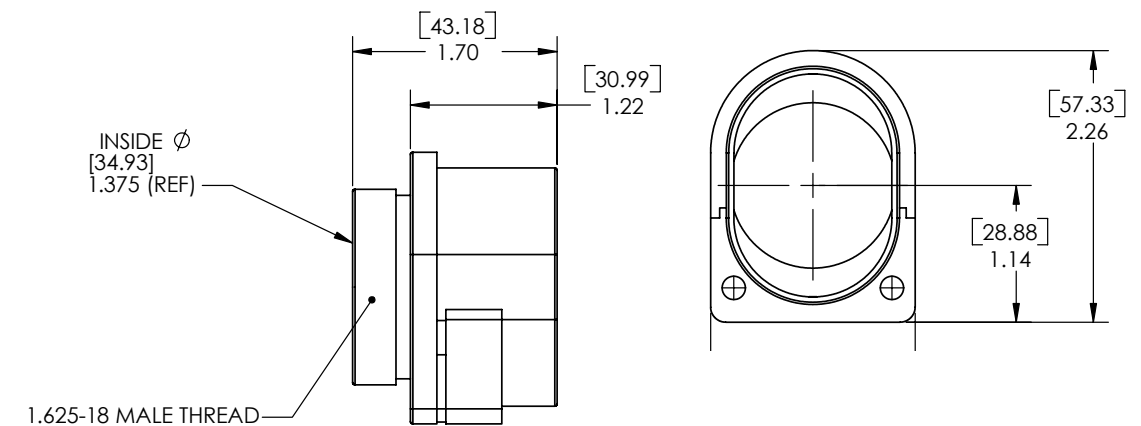
The receiver protective cover protects contacts and modules when the receiver is not in use.

Protective Cover, G6, Receiver  
Part # 310 113 158

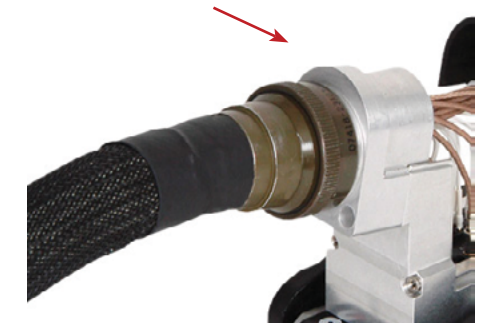


The vinyl ITA protective cover protects contacts and modules when the ITA is not in use.

Replacement Protective Cover, G6, ITA  
Part # 410 112 684



The threaded coupling adapter is designed to accommodate military and commercial circular backshells for conduit or strain relief when designing for general and heavy-duty applications. The male thread size is 1.625"-18" for this application.



Threaded Coupling Adapter, G2, G6, G10, ITA, for Conduit Harnessing Assemblies/Clamps  
Part # 410 112 599

## G10 • 10 Module Solution

The 10 module solution provides great reliability while simultaneously engaging up to 2,400 signal contacts. The adaptable G10 integrates a wide variety of I/O options in various module configurations. The contacts are incorporated into cable assemblies for specific instruments. The Vertical Hinged Mounting Frame and slide mount option are suitable for rack or chassis mount applications and offer quick access to resources and cables. The ITA has a unique, removable, EMI-shielded backshell which allows easy access to the modules and contacts.

### Features and Benefits

- Precision engagement mechanism engineered to mate up to 2,400 contacts
- Cable mount ITA includes EMI-shielded backshell that slides off to allow easy access to wiring
- Cable mount ITA accepts standard circular cable adapters
- Standard ITA frames accommodate multiple enclosure types for a variety of fixture options
- Modular and reconfigurable for evolving tests requirements
- Reliable connectivity beyond 20,000 cycles
- Quick and easy integration and maintenance
- Wide range of I/O options including signal, coaxial, power, pneumatic, vacuum, thermocouple, fiber optic, and PCB solutions



G10 Receiver and ITA



G10 Mounted to Vertical Hinged Mounting Frame

## G10 Panel Mount Configuration



- |                        |                                   |                        |
|------------------------|-----------------------------------|------------------------|
| A. ITA Patchcords      | E. U-shaped Cable Clamp           | I. Receiver Patchcords |
| B. ITA Module          | F. Receiver Module                |                        |
| C. ITA Removable Cover | G. G10 Receiver                   |                        |
| D. G10 ITA             | H. Vertical Hinged Mounting Frame |                        |

| Part #                  | Description  |
|-------------------------|--|
| <b>RECEIVERS</b>        |  |
| 310 104 317             | Receiver, G10, 10 Module   |
| 310 104 360             | Receiver, G10, 10 Module with 4.34" [110.24 mm] Extended Handle                            |
| 310 104 366             | Receiver, G10, 10 Module, EMI Gasket   |
| <b>ITAS</b>             |  |
| 410 104 272             | ITA with Removable Cover, G10, 10 Module, with Protective Cover                            |
| 410 104 375             | ITA, G10, 10 Module  |
| 410 104 123             | ITA, 9010, 10 Module   |
| <b>ENCLOSURES</b>       |  |
| 410 112 291             | Enclosure, 10 Module, Hinged Cover Plate   |
| 410 112 198             | Enclosure, 25 Module, Hinged Cover Plate, 4" Deep  |
| 410 112 252             | Enclosure, 10 Module, 3 Cable Clamps   |
| 410 112 424             | Adapter Plate, allows 10 Module ITA to accept 25 Module Enclosures                         |
| 410 114 138             | Enclosure, 10 Module, 4" Deep, 3 Cable Clamps  |
| <b>MOUNTING OPTIONS</b> |  |
| 310 113 342             | Vertical Hinged Mounting Frame, G10, 5U  |
| 310 113 408             | Vertical Hinged Mounting Frame, G10, 5U, Cutout on Right                                   |
| 310 113 358             | Vertical Hinged Mounting Frame, 5U, Blank  |
| <b>ACCESSORIES</b>      |  |
| 310 113 154             | Protective Cover, G10, Receiver  |
| 410 112 685             | Replacement Protective Cover, G10, ITA   |
| 310 113 417             | Chassis Mount Kit for National Instruments Chassis (PXI-1044/1045/1065 and PXIe-1065/1075) |
| 310 113 371             | Chassis Mount Kit for Pickering 40-908, 40-914, 40-918                                     |
| 310 113 589             | Chassis Mount Kit for Keysight M9018A Chassis  |
| 410 112 599             | Threaded Coupling Adapter, G2, G6, G10, ITA, for Conduit Harnessing Assemblies/Clamps      |
| 410 114 133             | Enclosure Accessory Kit, Gas Spring for Sloped Enclosure                                   |

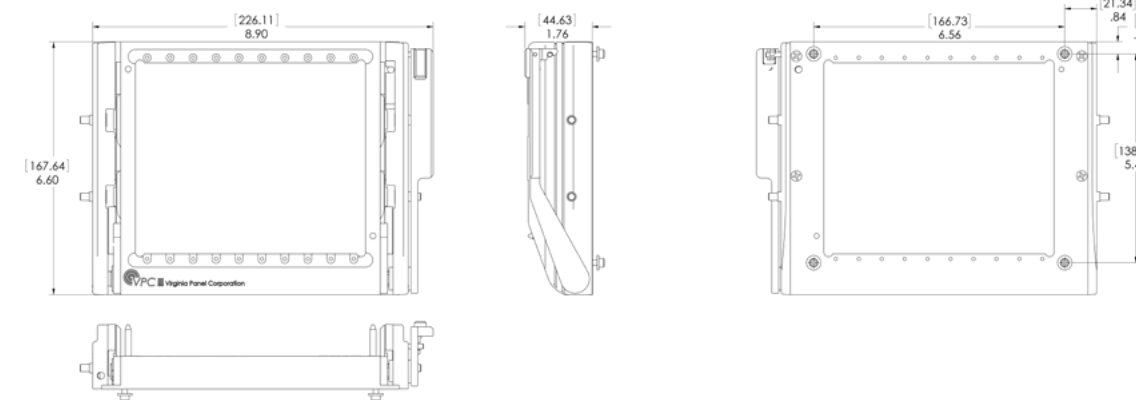
### G10 Slide Mount Configuration



- A. ITA Patchcords
- B. ITA Module
- C. ITA Removable Cover
- D. G10 ITA
- E. U-shaped Cable Clamp
- F. Receiver Module
- G. G10 Receiver
- H. Mounting Panel
- I. Receiver Patchcords
- J. Mounting Flange
- K. Slide Kit

| Part #             | Description  |
|--------------------|--|
| <b>RECEIVER</b>    |  |
| 310 120 146        | Receiver, G10, 10 Module, with Slide Mounting Kit (slide kit required) |
| <b>ITAS</b>        |  |
| 410 104 272        | ITA with Removable Cover, G10, 10 Module, with Protective Cover        |
| 410 104 375        | ITA, G10, 10 Module  |
| <b>ENCLOSURES</b>  |  |
| 410 112 252        | Enclosure, 10 Module, 3 Cable Clamps                                   |
| 410 112 291        | Enclosure, 10 Module, Hinged Cover Plate                               |
| 410 112 198        | Enclosure, 25 Module, Hinged Cover Plate, 4" Deep                      |
| 410 112 424        | Adapter Plate, allows 10 Module ITA to accept 25 Module Enclosures     |
| 410 114 138        | Enclosure, 10 Module, 4" Deep, 3 Cable Clamps                          |
| <b>SLIDE KITS</b>  |  |
| 310 113 451        | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180 lbs.              |
| 310 113 411        | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180 lbs.              |
| 310 113 500        | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180 lbs.              |
| <b>ACCESSORIES</b> |  |
| 310 113 154        | Protective Cover, G10, Receiver  |
| 410 112 685        | Replacement Protective Cover, G10, ITA                                 |

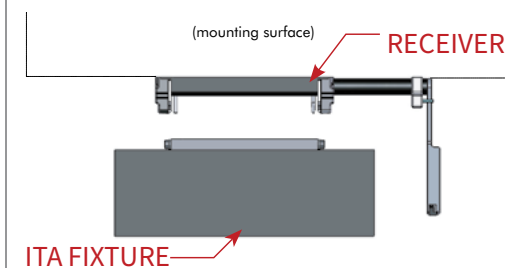
### G10 Receiver • 10 Module Solution



Receiver, G10, 10 Module • Part # 310 104 317

#### Receiver Specifications

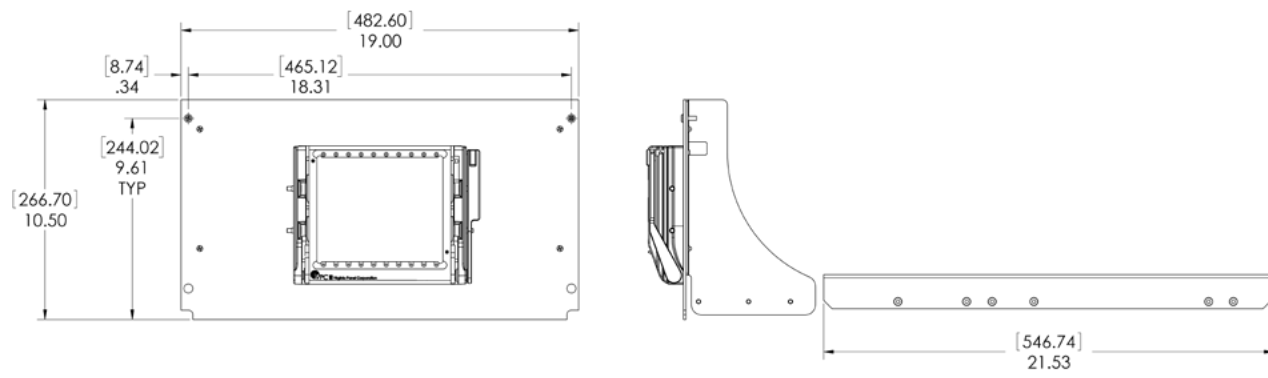
|                                 |                                |
|---------------------------------|--------------------------------|
| Weight                          | 2.20 lbs [1.0 kg]              |
| Side Material                   | ABS-polycarbonate blend        |
| Frame Material                  | Anodized aluminum              |
| Slide Material                  | Nickel plated steel            |
| Linkage, Handle, Latch Material | Stainless steel                |
| Available Module Slots          | 10 positions                   |
| Cycle Life                      | 20,000 cycles                  |
| Temperature                     | -55° C to 85° C                |
| Max. Weight Support             | 25 lbs @ 6" [11 kg @ 15.25 cm] |
| Max. Mating Force               | 630 lbs [285.8 kg]             |



This receiver is also available with a 4.34" [110.24 mm] extended handle, Part # 310 104 360, to accommodate wide fixtures.

The G10 receiver is equipped with a locking handle and nickel plated steel slides that engage up to 2,400 contact points. It allows a high number of I/O within a compact and rugged device.

## G10 Receiver with Slide Mounting Kit • 10 Module Solution



Receiver, G10, 10 Module, with Slide Mounting Kit (slide kit required) • **Part # 310 120 146**

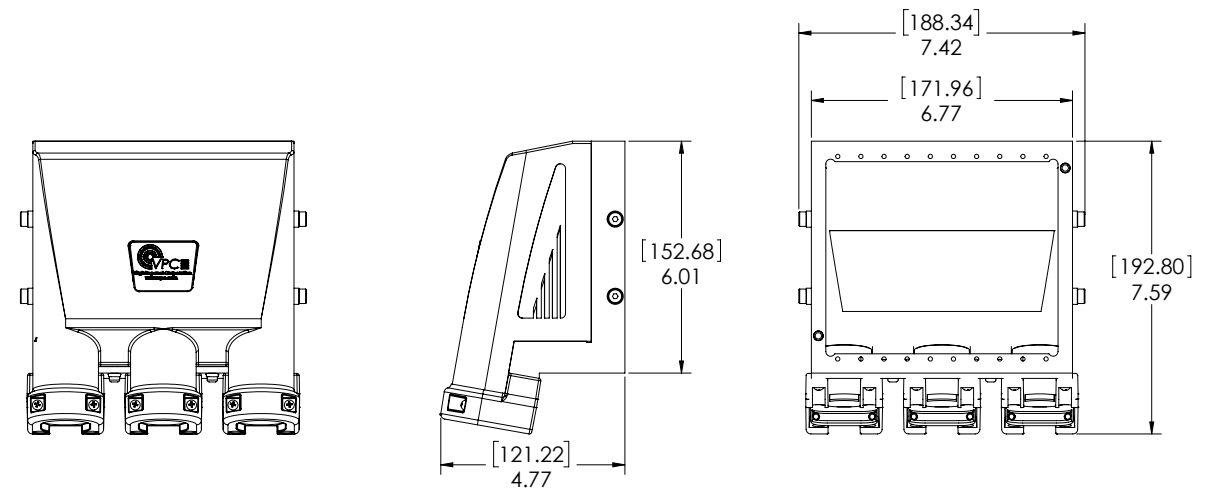
### Receiver Specifications

|  |                                |
|--|--------------------------------|
| Weight   | 11.5 lbs [5.22 kg]             |
| Side Material  | ABS-polycarbonate blend        |
| Frame Material   | Anodized aluminum              |
| Slide Material   | Nickel plated steel            |
| Linkage, Handle, Latch Material                              | Stainless steel                |
| Mounting Plate, Mounting Flange, Instrument Bracket Material | Aluminum                       |
| Available Module Slots                                       | 10 positions                   |
| Cycle Life   | 20,000 cycles                  |
| Temperature  | -55° C to 85° C                |
| Max. Weight Support  | 25 lbs @ 6" [11 kg @ 15.25 cm] |
| Max. Mating Force  | 630 lbs [285.8 kg]             |



The G10 receiver is equipped with a locking handle and nickel plated steel slides that engage up to 2,400 contact points. It allows a high number of I/O within a compact and rugged device. This receiver is designed to work with a slide kit and includes a mounting bracket, flanges, and instrument bracket. A slide kit is required for use.

## G10 ITA with Removable Cover • 10 Module Solution



ITA with Removable Cover, G10, 10 Module, with Protective Cover • **Part # 410 104 272**

### ITA Specifications

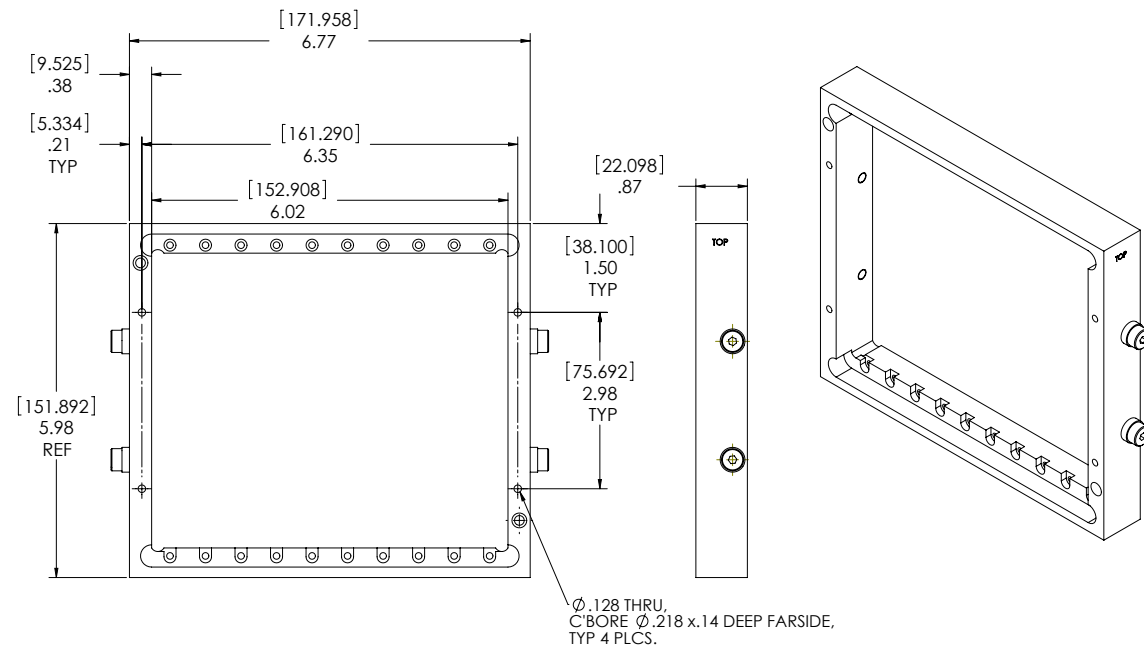
|                        |                    |
|------------------------|--------------------|
| Weight                 | 2.1 lbs [.95 kg]   |
| Cover Material         | EMI-shielded nylon |
| Frame Material         | Chromated aluminum |
| Available Module Slots | 10 positions       |
| Cycle Life             | 20,000 cycles      |
| Temperature            | -55° C to 85° C    |
| Max. Mating Force      | 630 lbs [285.8 kg] |



The U-shaped cable clamp is adjustable to accommodate the amount of wires in your cable bundle.

The G10 ITA is equipped with a removable EMI-shielded backshell. The backshell slides up to provide access to wires and connectors and is secured by two screws. The removable and adjustable U-shaped cable clamp is attached by screws to the EMI-shielded backshell. A protective cover is included with the ITA.

## G10 ITA • 10 Module Solution



ITA, G10, 10 Module • Part # 410 104 375

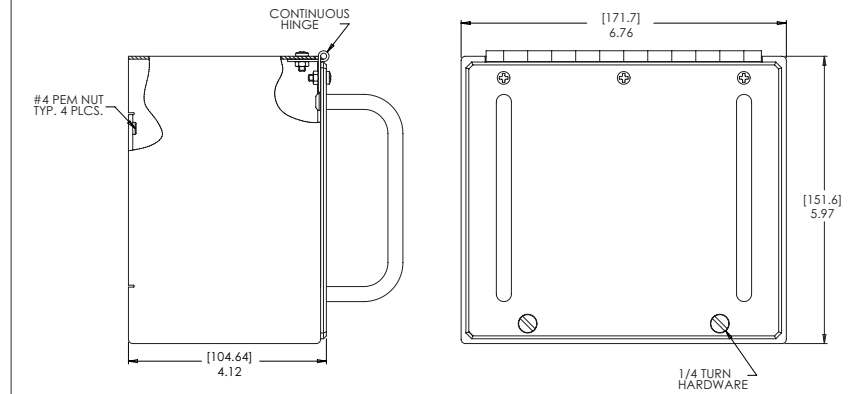


### ITA Specifications

|                        |                    |
|------------------------|--------------------|
| Weight                 | .55 lbs [.24 kg]   |
| Frame Material         | Chromated aluminum |
| Available Module Slots | 10 positions       |
| Cycle Life             | 20,000 cycles      |
| Temperature            | -55° C to 85° C    |
| Max. Mating Force      | 630 lbs [285.8 kg] |

This 10 module ITA uses VPC enclosures or gives you the option to create your own enclosure or fixture needed for your application.

## G10 Accessories • 10 Module Solution



This aluminum enclosure for a 10 module ITA Part # 410 104 375. The enclosure has handles and includes a hinged cover secured with two 1/4 turn fasteners.

Enclosure, 10 Module, with Hinged Cover Plate • Part # 410 112 291



The receiver protective cover protects contacts and modules when the receiver is not in use.

Protective Cover, G10, Receiver  
Part # 310 113 154



The vinyl ITA protective cover protects contacts and modules when the ITA is not in use.

Replacement Protective Cover, G10, ITA  
Part # 410 112 685

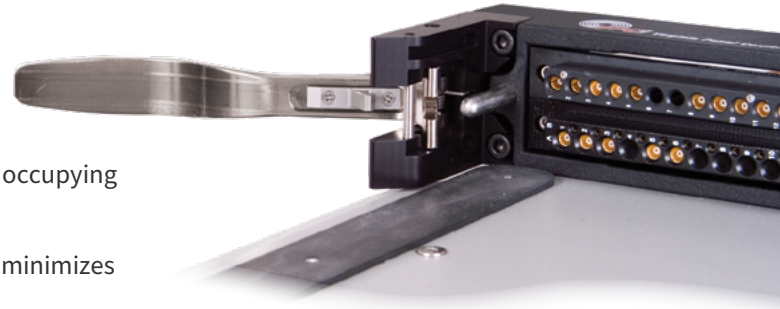
# Go Horizontal

S6, G12 & G12x

## Low Profile 1- 3U Height

The S6's low profile allows over 1,400 points while only occupying 1-3U of rack space

Horizontal layout maximizes the module positions and minimizes the required rack space



## Tabletop Configuration

The tabletop configurations allow the S6, G12 and G12x to be mounted to any horizontal surface  
Four removable rubber feet to enable permanent tabletop mounting configurations  
Rear covers are available to protect wiring from the receiver to the test equipment

## Slide Configuration

The slide kits for the S6, G12 and G12x allow access to test instrumentation and wiring  
Multiple accessories are available for this configuration such as the cable tray, the keyboard tray kit, and adjustable leg kit  
Slide mounts can support fixture weights up to 180 lbs [81.65 kg] and up to 350 lbs [158.76 kg] with leg kit

G12



## Easy Glide Docking

Provides an easy way of guiding a fixture into position prior to engagement  
Runners along the platform provide smooth-sliding action  
Ideal feature when using large scale fixtures  
Alignment pins provide accurate engagement

## Positive-Lock Latching Mechanisms - S6

Locking latches enable secure engagement  
Guide pins guarantee consistent lead-in with every connection  
Each lever provides two points of contact for even engagement distribution

G12x



## S6 • 6 Module Solution

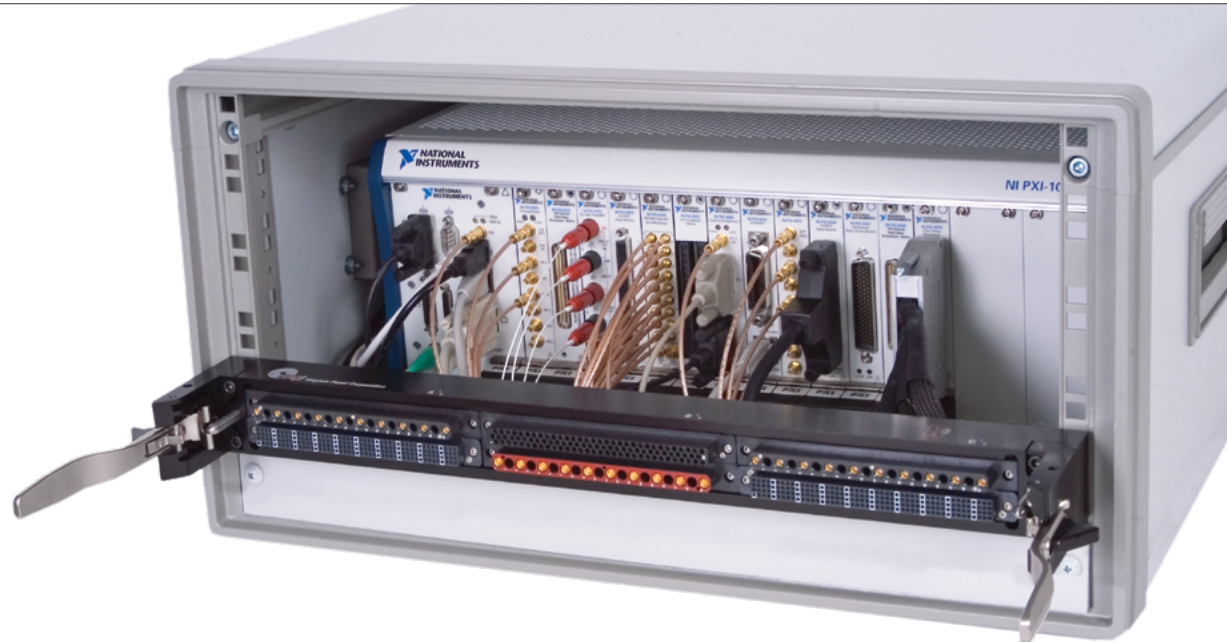
The S6 provides robust, reliable and repeatable testing capabilities for small and intermediate size test applications. With easy glide docking created by the smooth motion of the engagement handles, it is fixture ready with over 1,400 contact points within a 1U height. The S6 has many configuration possibilities with a wide range of I/O options. Its low profile solution is also designed to accept a variety of PCB solutions.



S6 Receiver and ITA

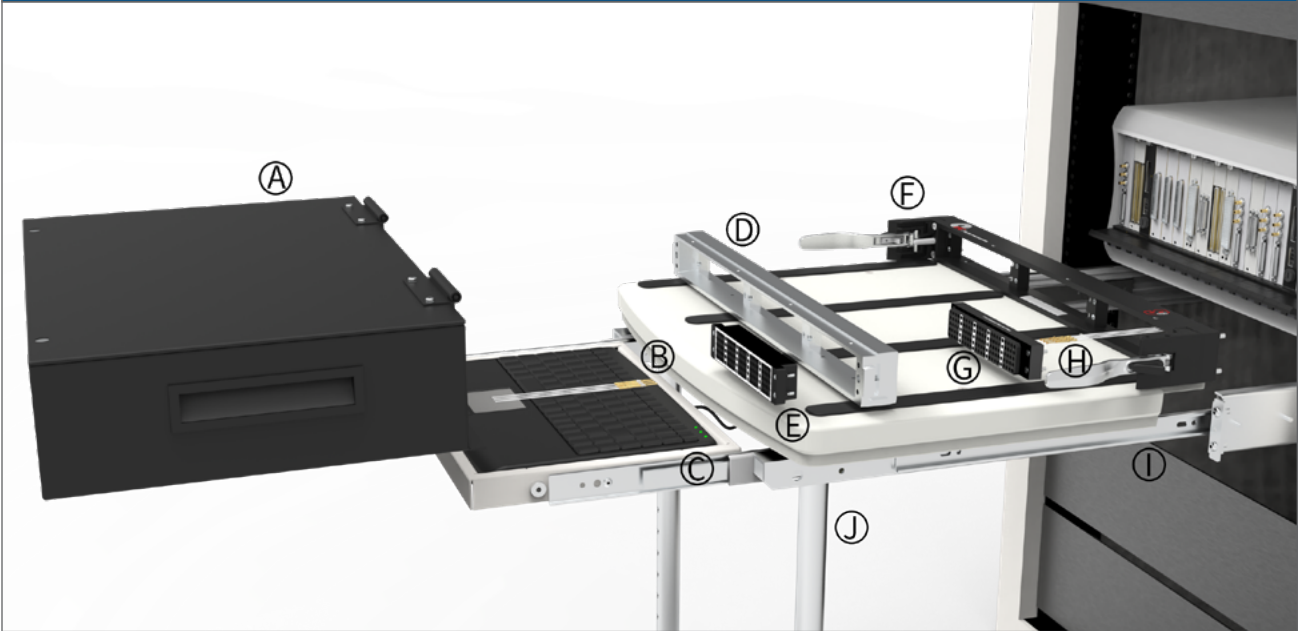
### Features and Benefits

- Precision engagement mechanism engineered to mate over 1,400 signal points in a 1U height
- Standard ITA frames accommodate multiple enclosure types for a variety of fixture options
- Modular and reconfigurable for evolving test requirements
- Reliable connectivity beyond 20,000 cycles
- Quick and easy integration and maintenance
- Wide range of I/O options including signal, coaxial, power, pneumatic, vacuum, thermocouple, fiber optic, and PCB solutions
- Versatile platform for fixture support
- Slide mounted S6 and associated accessories offer easy access to cables and test instrumentation



Rack Mounted S6

## S6 Slide Configuration

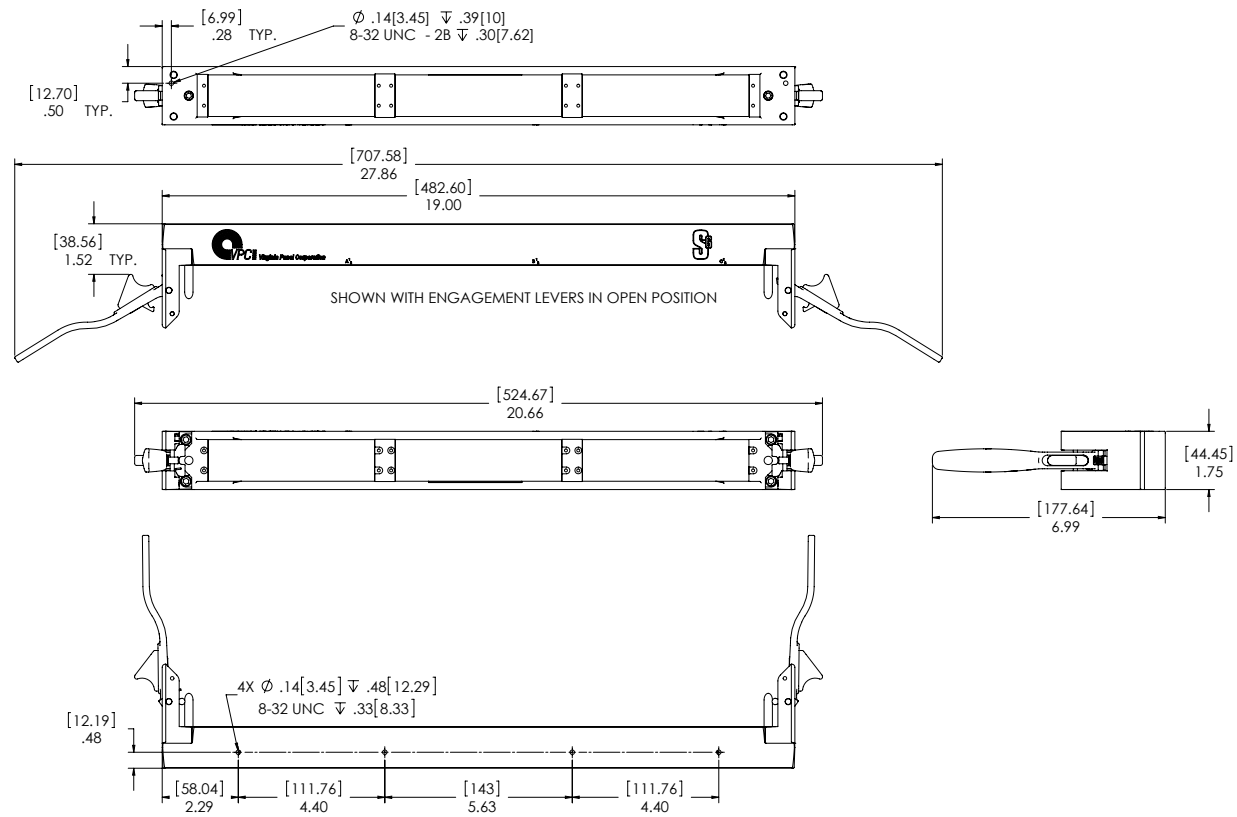


- |                      |                        |                       |
|----------------------|------------------------|-----------------------|
| A. ITA Enclosure     | E. ITA Module          | I. Slide Kit          |
| B. ITA Patchcords    | F. Receiver Frame      | J. Adjustable Leg Kit |
| C. Keyboard Tray Kit | G. Receiver Module     |                       |
| D. ITA Frame         | H. Receiver Patchcords |                       |

| Part #             | Description   |
|--------------------|---|
| <b>RECEIVERS</b>   |   |
| 310 122 100        | Receiver, S6, 6 Module  |
| 310 122 101        | Receiver, S6, 6 Module with 15" Platform, for Slide Mount (slide kit required)                          |
| 310 122 108        | Receiver, S6, 6 Module with 20" Platform, for Slide Mount (slide kit required)                          |
| 310 122 110        | Receiver, S6, 6 Module with 15" Platform for Tabletop   |
| 310 122 111        | Receiver, S6, 6 Module with 20" Platform for Tabletop   |
| <b>ITA</b>         |   |
| 410 122 100        | ITA, S6, 6 Module, with Protective Cover  |
| <b>ENCLOSURES</b>  |   |
| 410 112 701        | Enclosure, S6, 1.75" x 18" x 8"   |
| 410 112 703        | Enclosure, S6, 4" x 18" x 12"   |
| 410 112 702        | Enclosure, S6, 1.75" x 18" x 8" for Discrete Wiring   |
| 410 112 712        | Enclosure, S6, 4" x 18" x 12" for Discrete Wiring   |
| <b>SLIDE KITS</b>  |   |
| 310 113 409        | 20" Slide Kit, Fits 18"-22" Deep Racks, Supports 180 lbs.   |
| 310 113 410        | 24" Slide Kit, Fits 22"-26" Deep Racks, Supports 180 lbs.   |
| 310 113 451        | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180 lbs.   |
| 310 113 411        | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180 lbs.   |
| 310 113 500        | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180 lbs.   |
| <b>ACCESSORIES</b> |   |
| 310 113 432        | Protective Cover, S6, Receiver  |
| 410 112 700        | Replacement Protective Cover, S6, ITA   |
| 310 113 430        | Rack Extender Kit, S6, 4" Deep  |
| 310 113 424        | Cable Tray, Slide Configuration, for Strain Relief and Cable Management, for 28" and longer slides only |
| 310 113 439        | Keyboard Tray Kit, Slide Configuration, Keyboard with Touchpad Mouse Included                           |
| 310 113 453        | Instrument Bracket Kit with Strain Relief, Slide Configuration, for 28" and longer slides only          |
| 310 113 566        | Adjustable Leg Kit for the 20" Platform, 27"-36", Supports 350 lbs.                                     |



## S6 Receiver • 6 Module Solution



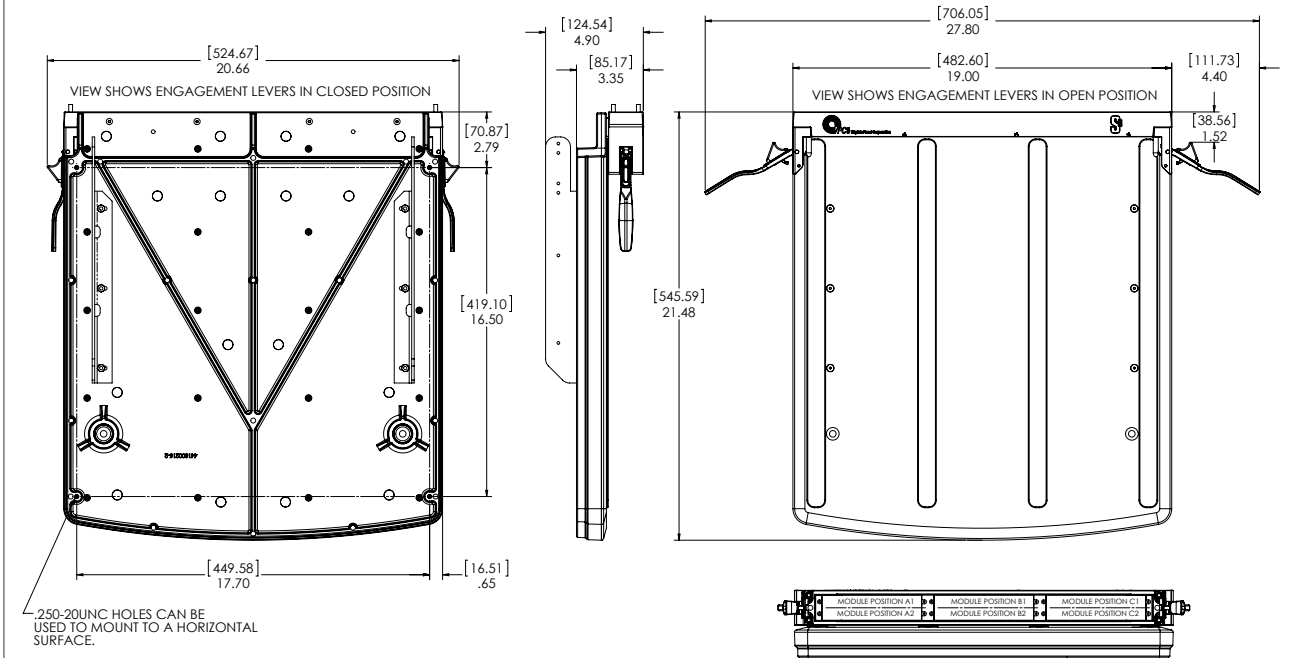
Receiver, S6, 6 Module • Part # 310 122 100



| Receiver Specifications |                                |
|-------------------------|--------------------------------|
| Weight                  | 3.80 lbs [1.72 kg]             |
| Rotation Block Material | Powder coated aluminum         |
| Frame Material          | Powder coated zinc alloy       |
| Alignment Pin Material  | Stainless steel                |
| Handle Material         | Nickel plated alloy steel      |
| Available Module Slots  | 6 positions                    |
| Cycle Life              | 20,000 cycles                  |
| Temperature             | -55° C to 85° C                |
| Max. Weight Support     | 50 lbs @ 6" [22 kg @ 15.24 cm] |

The S6 receiver is designed to mount to a rack or directly to a tabletop. The 1U high unit features positive-latching mechanisms and integrated guide pins to create a highly reliable engagement system. The S6 receiver is versatile and has module positions screened on the top for ease of module placement.

## S6 Receiver for Slide Mount • 6 Module Solution



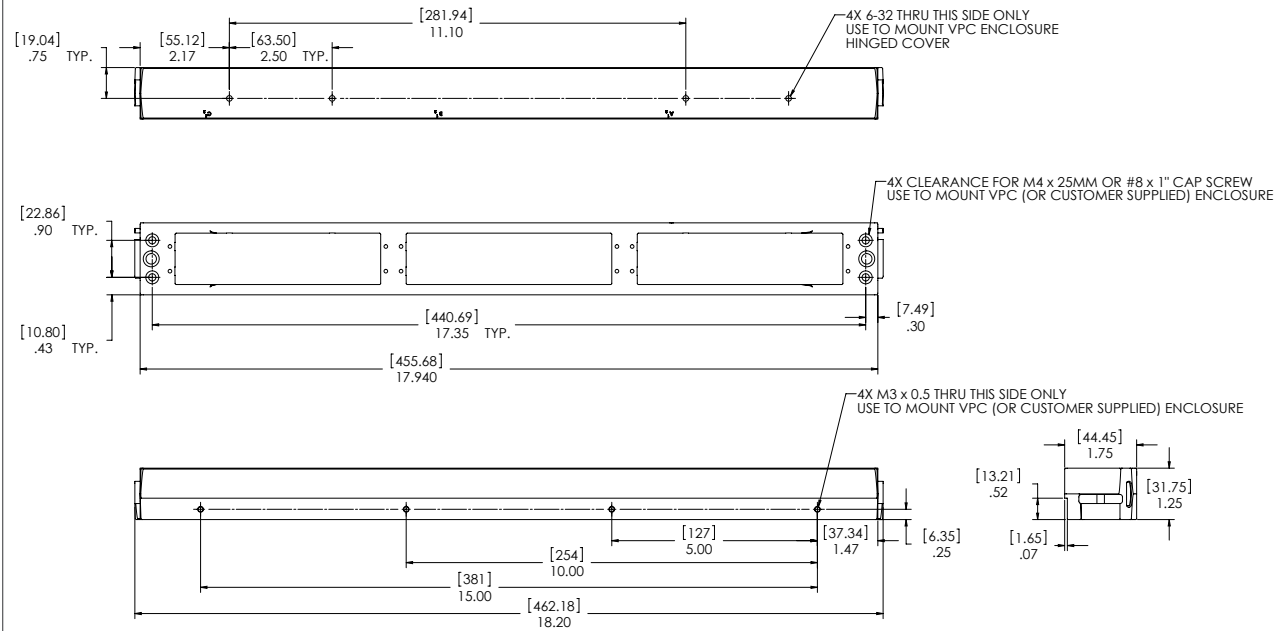
Receiver, S6, 6 Module with 20" Platform, for Slide Mount (slide kit required) • Part # 310 122 108

| Receiver Specifications |                           |
|-------------------------|---------------------------|
| Weight                  | 20.86 lbs [9.46 kg]       |
| Rotation Block Material | Powder coated aluminum    |
| Frame Material          | Powder coated zinc alloy  |
| Alignment Pin Material  | Stainless steel           |
| Handle Material         | Nickel plated alloy steel |
| Available Module Slots  | 6 positions               |
| Cycle Life              | 20,000 cycles             |
| Temperature             | -55° C to 85° C           |
| Max. Mating Force       | 280 lbs [127.0 kg]        |



This S6 receiver is designed to mount to slides in a rack application. The 1U height unit features positive-latching mechanisms and integrated guide pins to create a highly reliable engagement system. The S6 receiver is very versatile and has module positions screened on top for ease of module placement. This S6 is also available in a 15" platform, Part # 310 122 101.

## S6 ITA • 6 Module Solution



ITA, S6, 6 Module, with Protective Cover • **Part # 410 122 100**



### ITA Specifications

|                        |                          |
|------------------------|--------------------------|
| Weight                 | 2.6 lbs [1.18 kg]        |
| Frame Material         | Powder coated zinc alloy |
| Available Module Slots | 6 positions              |
| Cycle Life             | 20,000 cycles            |
| Temperature            | -55° C to 85° C          |
| Max. Mating Force      | 280 lbs [127.0 kg]       |

The S6 ITA has a powder coated finish adding an extra layer protection against the elements. Additionally, this ITA has module positions screened on top for ease of module placement. A protective cover is included with the ITA.

## S6 • Accessories



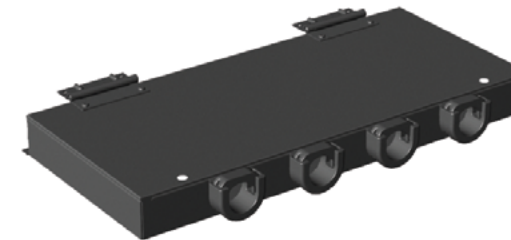
The 1U enclosure takes up little rack space and completes the S6's low profile solution.

Enclosure, S6, 1.75" x 18" x 8"  
**Part # 410 112 701**



The larger enclosure provides more space for wiring and other test system needs.

Enclosure, S6, 4" x 18" x 12"  
**Part # 410 112 703**



This enclosure gives you the ability to discrete wire to your UUT with secure strain relief provided by the cable clamps located on the back end. Once the cable clamps are open, you can remove the stiffener bar and install or remove cables without unplugging patchcords from the assembly.

Enclosure, S6, for Discrete Wiring, 1.75" x 18" x 8"  
**Part # 410 112 702**



The receiver protective cover protects your contacts and modules when the receiver is not in use.

Protective Cover, Receiver, S6  
**Part # 310 113 432**



The vinyl ITA protective cover protects contacts and modules when the ITA is not in use.

Replacement Protective Cover, ITA, S6  
**Part # 410 112 700**



The rack extender kit provide additional clearance for the engagement handles when using a rack that has mounting rails recessed more than 1" [25.4 mm] in a slide or rack mount configuration.

Rack Extender Kit, S6, 4" Deep  
**Part # 310 113 430**

## G12 • 12 Module Solution

Available in rack mount, slide mount, and tabletop configurations, the G12 features an aluminum platform to accommodate in-circuit test and other functional bed-of-nails testing requirements. Integrated guide pins and proven QuadraTrack™ engagement mechanisms provide precise lead-in, while pin and socket modules and contacts ensure reliable connections for over 20,000 mating cycles. With 12 module positions for signal, coaxial, power, vacuum, pneumatic, thermocouple, and fiber optic contacts in multiple configurations, the G12 offers I/O options to meet virtually any connectivity requirement.

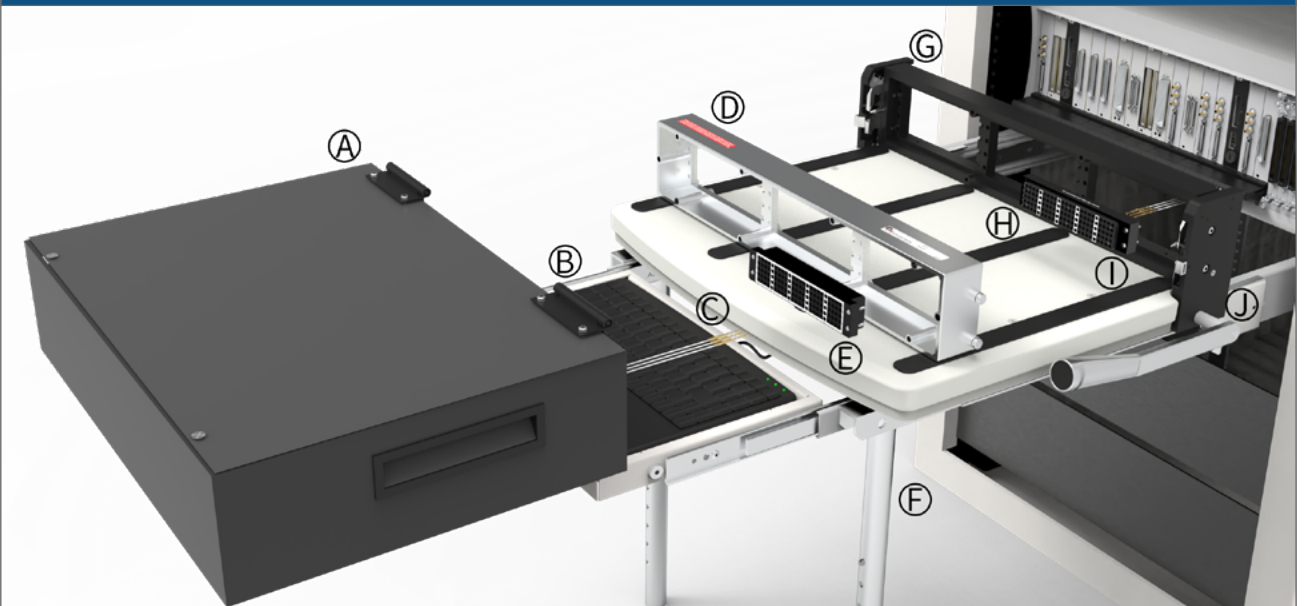
### Features and Benefits

- Precision engagement mechanism engineered to mate over 2,800 contacts in a 3U height
- Standard ITA frames accommodate multiple enclosure types for a variety of fixture options
- Modular and reconfigurable for evolving test requirements
- Reliable connectivity beyond 20,000 cycles
- Quick and easy integration and maintenance
- Versatile platform for fixture support
- Slide mounted G12 and associated accessories offer easy access to cables and test instrumentation



G12 Receiver

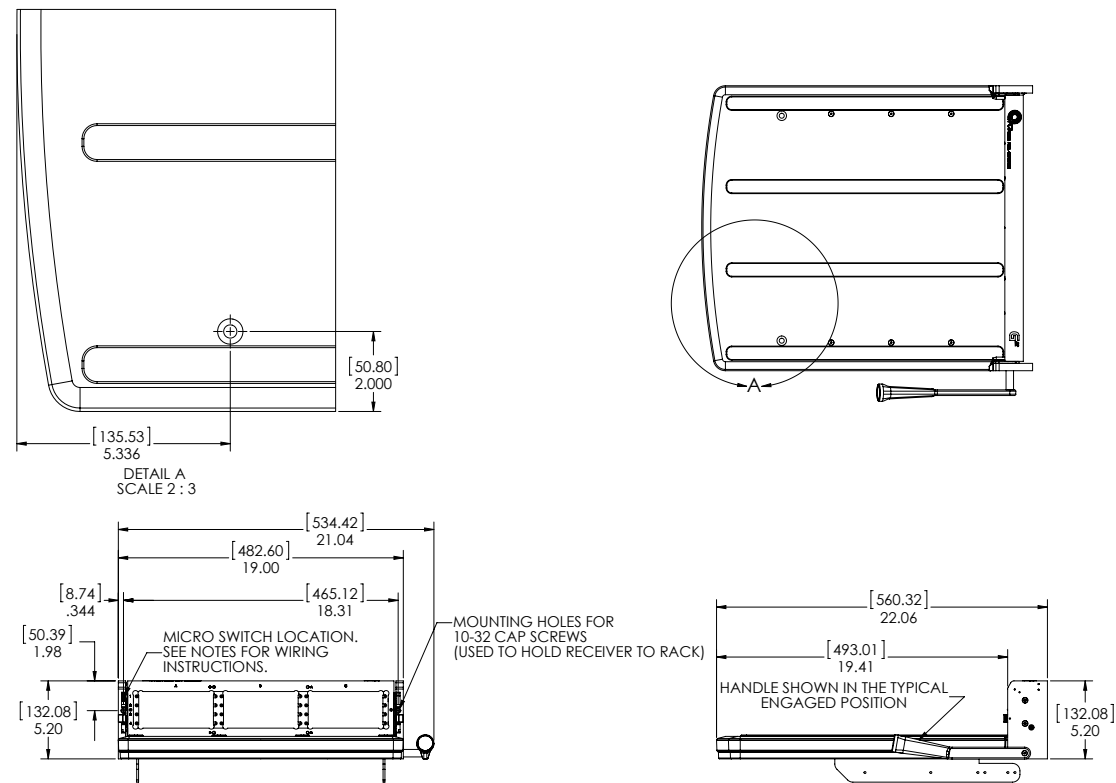
## G12 Slide Configuration



- |                      |                       |                        |
|----------------------|-----------------------|------------------------|
| A. ITA Enclosure     | E. ITA Module         | I. Receiver Patchcords |
| B. Keyboard Tray Kit | F. Adjustable Leg Kit | J. Slide Kit           |
| C. ITA Patchcords    | G. Receiver Frame     |                        |
| D. ITA Frame         | H. Receiver Module    |                        |

| Part #             | Description   |
|--------------------|---|
| <b>RECEIVERS</b>   |   |
| 310 104 325        | Receiver, G12, 12 Module with 15" Platform, for Slide Mount (slide kit required)                        |
| 310 104 334        | Receiver, G12, 12 Module with 20" Platform, for Slide Mount (slide kit required)                        |
| 310 104 408        | Receiver, G12, 12 Module with 15" Platform for Tabletop   |
| 310 104 409        | Receiver, G12, 12 Module with 20" Platform for Tabletop   |
| <b>ITA</b>         |   |
| 410 104 322        | ITA, G12, Front Mount, 12 Module, with Protective Cover   |
| <b>ENCLOSURES</b>  |   |
| 410 112 665        | Enclosure, G12, Front Mount, 4"x18"x12"   |
| 410 112 739        | Enclosure, G12, Front Mount, 4"x18"x12", for Discrete Wiring  |
| 410 112 757        | Enclosure, G12, Front Mount, 7"x18"x12"   |
| 410 114 002        | Enclosure, G12, Front Mount, Sloped   |
| 410 114 101        | Enclosure, G12, Front Mount, Sloped, G10 Cover  |
| <b>SLIDE KITS</b>  |   |
| 310 113 409        | 20" Slide Kit, Fits 18"-22" Deep Racks, Supports 180 lbs.   |
| 310 113 410        | 24" Slide Kit, Fits 22"-26" Deep Racks, Supports 180 lbs.   |
| 310 113 451        | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180 lbs.   |
| 310 113 411        | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180 lbs.   |
| 310 113 500        | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180 lbs.   |
| <b>ACCESSORIES</b> |   |
| 310 113 402        | Protective Cover, G12, Receiver   |
| 410 112 681        | Replacement Protective Cover, G12, ITA  |
| 410 114 010        | Protective Cover, G12, ITA, Aluminum  |
| 410 114 133        | Enclosure Accessory Kit, Gas Spring Loaded for Sloped Enclosures  |
| 310 113 406        | Rack Extender Kit, G12, 1.5" Deep   |
| 310 113 424        | Cable Tray, Slide Configuration, for Strain Relief and Cable Management, for 28" and longer slides only |
| 310 113 433        | Gap Cover, G12/G12x, Rack Mount   |
| 310 113 439        | Keyboard Tray Kit, Slide Configuration, Keyboard with Touchpad Mouse Included                           |
| 310 113 453        | Instrument Bracket Kit with Strain Relief, Slide Configuration, for 28" and longer slides only          |
| 310 113 566        | Adjustable Leg Kit for the 20" Platform, 27"-36", Supports 350 lbs.                                     |
| 310 118 112        | Keying Pin Kit, Receiver/ITA  |

## G12 Receiver for Slide Mount • 12 Module Solution



Receiver, G12, 12 Module with 20" Platform, for Slide Mount (slide kit required) • Part # 310 104 334

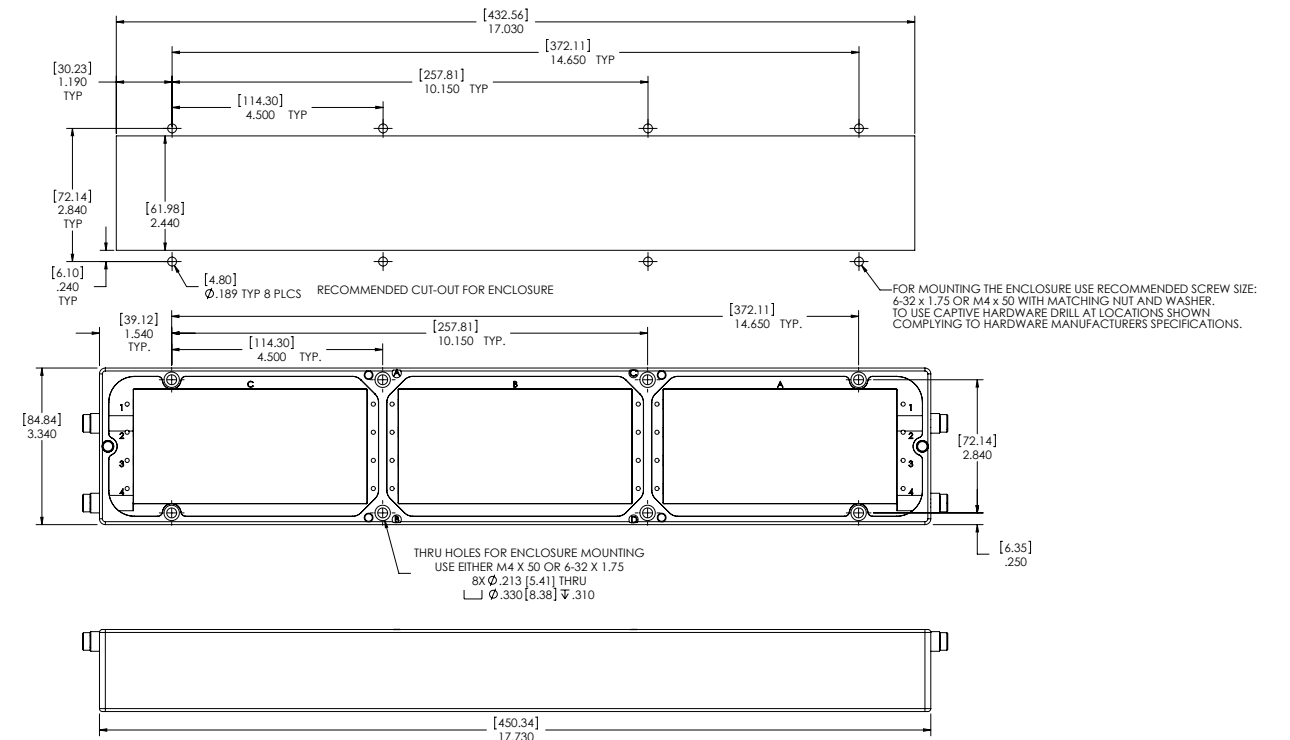
### Receiver Specifications

|                                 |  |
|---------------------------------|--|
| Weight                          | 26.21 lbs [11.88 kg]   |
| Frame Material                  | Anodized and powder coated aluminum                                      |
| Slide Material                  | Nickel plated steel  |
| Linkage, Handle, Latch Material | Stainless steel  |
| Available Module Slots          | 12 positions   |
| Cycle Life                      | 20,000 cycles  |
| Temperature                     | -55° C to 85° C  |
| Max. Weight Support             | Without Leg Kit: 180 lbs [81.65 kg]<br>With Leg Kit: 350 lbs [158.76 kg] |
| Max. Mating Force               | 620 lbs [281.2 kg]   |



The 20" G12 receiver provides a large platform for use with large fixtures. When used in conjunction with VPC slide mounts and support legs, the receiver can support 350 lbs. The G12 handle can be rotated in 90 degree increments. Also available in a 15" platform, Part # 310 104 325.

## G12 ITA Front Mount • 12 Module Solution



ITA, G12, Front Mount, 12 Module, with Protective Cover • Part # 410 104 322

### ITA Specifications

|                        |                    |
|------------------------|--------------------|
| Weight                 | 2.35 lbs [1.07 kg] |
| Frame Material         | Chromated aluminum |
| Available Module Slots | 12 positions       |
| Cycle Life             | 20,000 cycles      |
| Max. Mating Force      | 620 lbs [281.2 kg] |
| Temperature            | -55° C to 85° C    |

This 12 module enclosure is made of powder coated aluminum. The top of the enclosure has a hinged cover plate with ¼-turn hardware that provides easy access to the ITA wiring when required.



The G12 ITA can be used with all G12 and G12x receivers. The ITA can be used in a number of applications to accomplish the required connection to the unit under test (UUT). You can mount a VPC enclosure or customize your own fixture to be attached to the ITA. A wide range of ITA modules are available separately for user configuration. A protective cover is included with the ITA.

## G12x • 18 Module Solution

Available in slide mounted and tabletop configurations, the G12x features an aluminum platform to accommodate in-circuit test and other functional bed-of-nails testing requirements. Integrated guide pins and proven QuadraTrack™ engagement mechanisms provide precise lead-in, while pin and socket modules and contacts ensure reliable connections to over 20,000 mating cycles. With 18 module positions for signal, coaxial, power, vacuum, pneumatic, thermocouple, and fiber optic contacts in multiple configurations, the G12x offers I/O options to meet virtually any connectivity requirement.

### Features and Benefits

- Precision engagement mechanism engineered to mate over 4,300 signal points in a 5U height
- Standard ITA frames accommodate multiple enclosure types for a variety of fixture options
- Modular and reconfigurable for evolving test requirements
- Reliable connectivity beyond 20,000 cycles
- Quick and easy integration and maintenance
- Versatile platform for fixture support
- Slide mounted G12x and associated accessories offer easy access to cables and test instrumentation

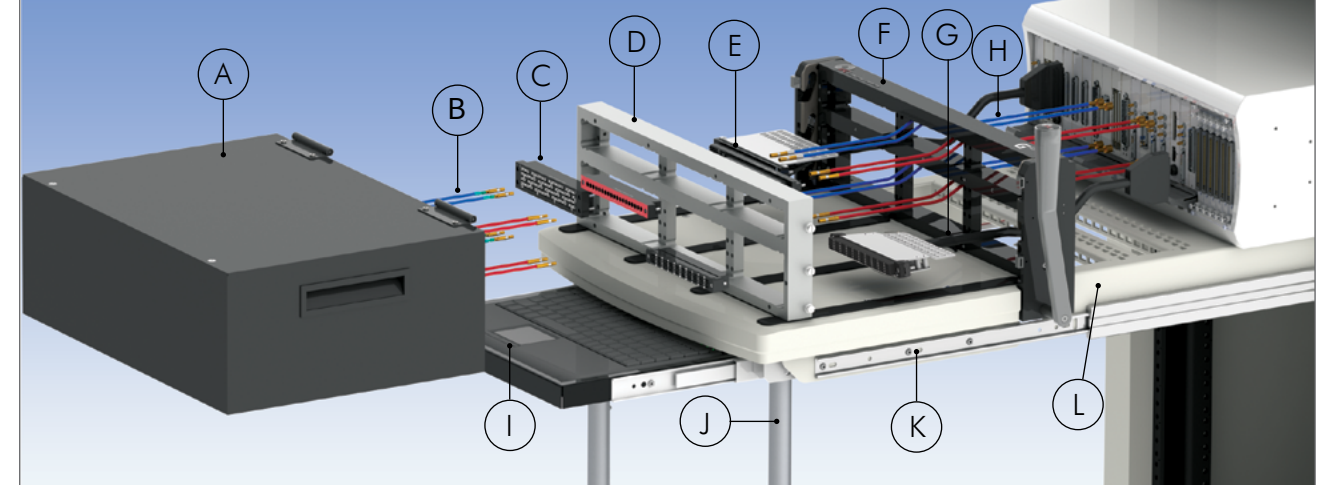


G12x Receiver



Slide Mounted G12x

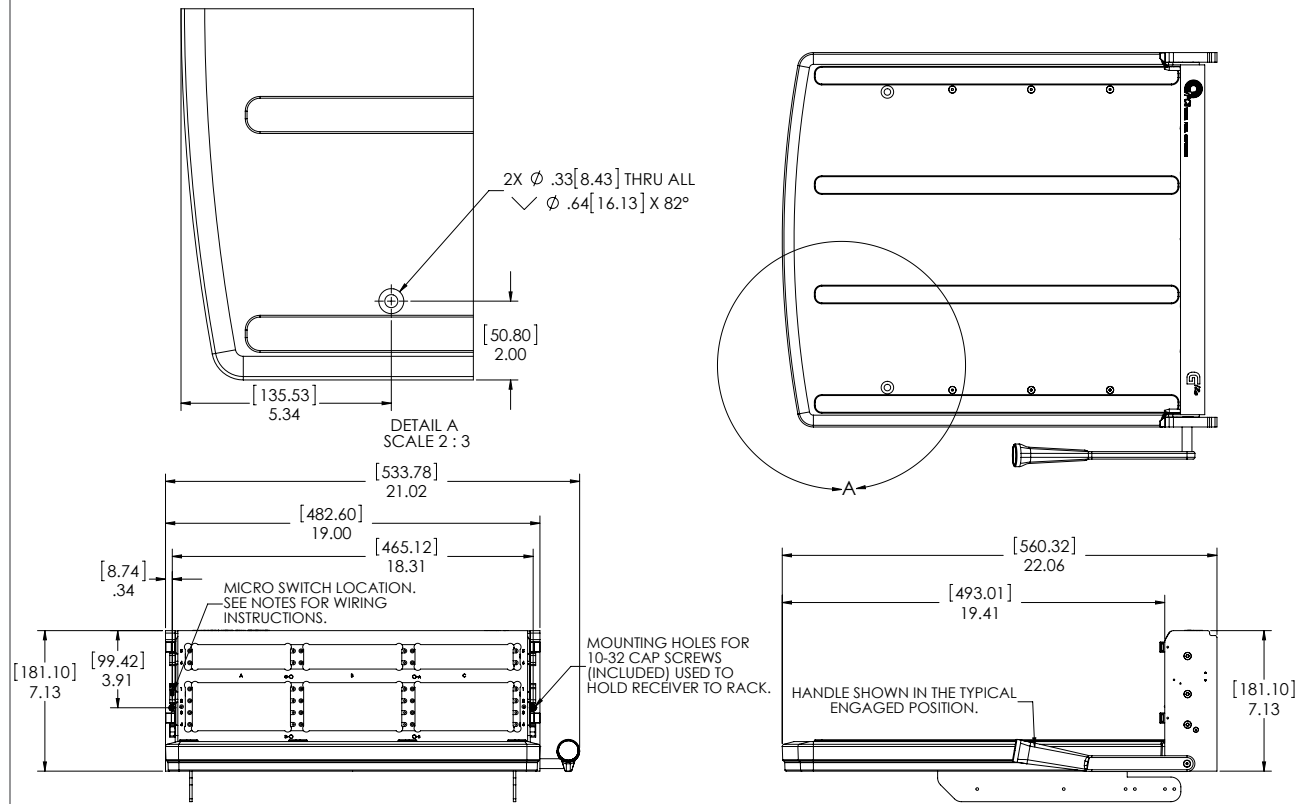
### G12x Slide Configuration



- |                   |                       |                        |
|-------------------|-----------------------|------------------------|
| A. ITA Enclosure  | E. ITA Frame          | I. Receiver Patchcords |
| B. Keyboard Tray  | F. Adjustable Leg Kit | J. Slide Kit           |
| C. ITA Patchcords | G. Receiver Frame     |                        |
| D. ITA Module     | H. Receiver Module    |                        |

| Part #             | Description   |
|--------------------|---|
| <b>RECEIVERS</b>   |   |
| 310 104 386        | Receiver, G12x, 18 Module with 15" Platform, for Slide Mount (slide kit required)                       |
| 310 104 385        | Receiver, G12x, 18 Module with 20" Platform, for Slide Mount (slide kit required)                       |
| 310 104 410        | Receiver, G12x, 18 Module with 15" Platform for Tabletop  |
| 310 104 411        | Receiver, G12x, 18 Module with 20" Platform for Tabletop  |
| <b>ITA</b>         |   |
| 410 104 474        | ITA, G12x, Front Mount, 18 Module   |
| 410 104 322        | ITA, G12, Front Mount, 12 Module, with Protective Cover   |
| <b>ENCLOSURES</b>  |   |
| 410 112 849        | Enclosure, G12x, Front Mount, 6"x18"x12"  |
| 410 112 856        | Enclosure, G12x, Front Mount, 6"x18"x12", for Discrete Wiring   |
| 410 112 665        | Enclosure, G12, Front Mount, 4"x18"x12"   |
| 410 112 739        | Enclosure, G12, Front Mount, 4"x18"x12", for Discrete Wiring  |
| 410 112 757        | Enclosure, G12, Front Mount, 7"x18"x12"   |
| 410 114 003        | Enclosure, G12x, Front Mount, Sloped  |
| 410 114 102        | Enclosure, G12x, Front Mount, Sloped, with G10 Cover  |
| <b>SLIDE KITS</b>  |   |
| 310 113 409        | 20" Slide Kit, Fits 18"-22" Deep Racks, Supports 180 lbs.   |
| 310 113 410        | 24" Slide Kit, Fits 22"-26" Deep Racks, Supports 180 lbs.   |
| 310 113 451        | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180 lbs.   |
| 310 113 411        | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180 lbs.   |
| 310 113 500        | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180 lbs.   |
| <b>ACCESSORIES</b> |   |
| 310 113 518        | Protective Cover, G12x, Receiver  |
| 410 112 857        | Protective Cover, G12x, ITA   |
| 410 114 133        | Enclosure Accessory Kit, Gas Spring for Sloped Enclosures   |
| 310 113 433        | Gap Cover, G12/G12x, Rack Mount   |
| 310 113 519        | Rack Extender Kit, G12x, 1.5" Deep  |
| 310 113 424        | Cable Tray, Slide Configuration, for Strain Relief and Cable Management, for 28" and longer slides only |
| 310 113 453        | Instrument Bracket Kit with Strain Relief, Slide Configuration, for 28" and longer slides only          |
| 310 113 566        | Adjustable Leg Kit for the 20" Platform, 27"-36", Supports 350 lbs.                                     |
| 310 113 439        | Keyboard Tray Kit, Slide Configuration, Keyboard with Touchpad Mouse Included                           |
| 310 118 112        | Keying Pin Kit, Receiver/ITA  |

## G12x Receiver • 18 Module Solution



Receiver, G12x, 18 Module with 20" Platform, for Slide Mount (slide kit required) • **Part # 310 104 385**

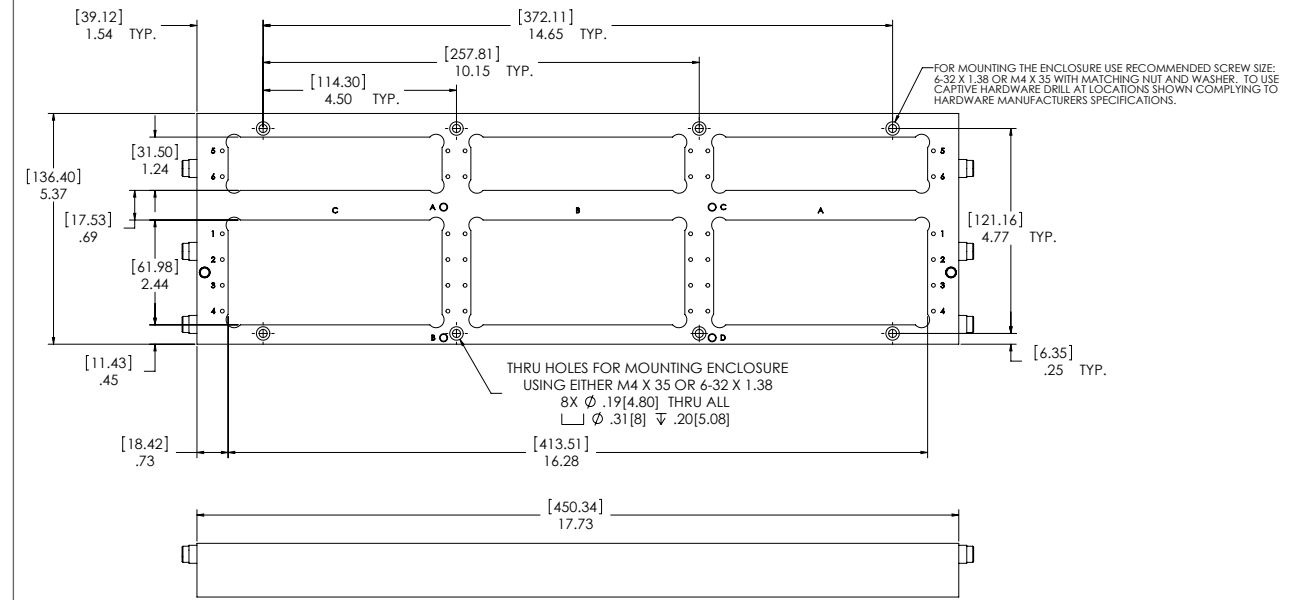
### Receiver Specifications

|                                 |  |
|---------------------------------|--|
| Weight                          | 27.98 lbs [12.69 kg]   |
| Frame Material                  | Anodized and powder coated aluminum                                      |
| Slide Material                  | Nickel plated steel  |
| Linkage, Handle, Latch Material | Stainless steel  |
| Available Module Slots          | 18 positions   |
| Cycle Life                      | 20,000 cycles  |
| Temperature                     | -55° C to 85° C  |
| Max. Weight Support             | Without Leg Kit: 180 lbs [81.65 kg]<br>With Leg Kit: 350 lbs [158.76 kg] |
| Max. Mating Force               | 890 lbs [403.7 kg]   |



The G12x receiver 20" platform will support 180 lbs when used in a slide mount configuration. The receiver is equipped with VPC's Quadratrack™ engagement system which provides four points of pull down for a reliable connection every time beyond 20,000 cycles. It can accept both the G12 and G12x ITAs. The G12x handle can be rotated in 90° increments. Also available in a 15" platform, Part # 310 104 386.

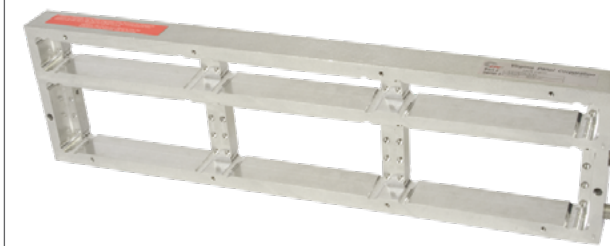
## G12x ITA • 18 Module Solution



ITA, G12x, Front Mount, 18 Module • **Part # 410 104 474**

### ITA Specifications

|                        |                    |
|------------------------|--------------------|
| Weight                 | 4.48 lbs [2.03 kg] |
| Frame Material         | Chromated aluminum |
| Available Module Slots | 18 positions       |
| Cycle Life             | 20,000 cycles      |
| Temperature            | -55° C to 85° C    |
| Max. Mating Force      | 890 lbs [403.7 kg] |



The G12x ITA can be used with all G12x receivers. The ITA can be used in a number of applications to accomplish the required connection to the unit under test (UUT). You can mount a VPC enclosure or customize your own fixture to be attached to the ITA. These are front mounted for ease of installation. A wide range of ITA modules are available separately for user configuration.

G12/G12x • Accessories



This G12 ITA aluminum enclosure (4" x 18" x 12") features a hinged cover plate with ¼ turn hardware and easy access to the ITA wiring.

Enclosure, G12, Front Mount  
**Part # 410 112 665**



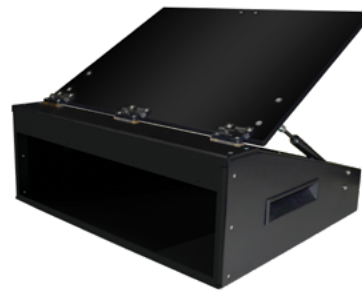
The gap cover is used to cover the open area between the G12 or G12x receiver and rack. The gap cover is not needed when using rack extender kit, G12, Part # 310 113 406, or G12x, Part # 310 113 519.

Enclosure, G12x, Front Mount, Sloped  
**Part # 410 114 003**



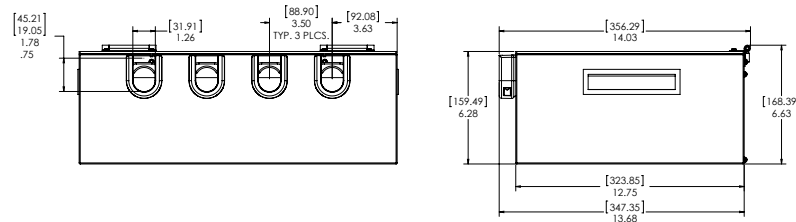
This aluminum enclosure (6" x 18" x 12") features a hinged cover plate with ¼ turn hardware and provides easy access to the ITA wiring.

Enclosure, G12x, Front Mount  
**Part # 410 112 849**



This 12 module enclosure is made of powder coated aluminum. The top of the enclosure has a hinged cover plate with ¼-turn hardware that provides easy access to the ITA wiring when required.

Enclosure, G12, Front Mount, Sloped  
**Part # 410 114 002**



This enclosure gives you the ability to discrete wire to your UUT with secure strain relief provided by the cable clamps located on the back end. Once the cable clamps are open, you can remove the stiffener bar and install or remove cables without unplugging patchcords from the assembly.

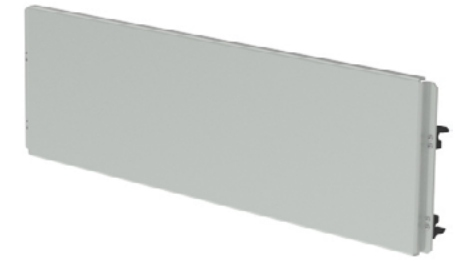
Enclosure, ITA, G12x, 6"x18"x12", for Discrete Wiring • **Part # 410 112 856**

G12/G12x • Accessories



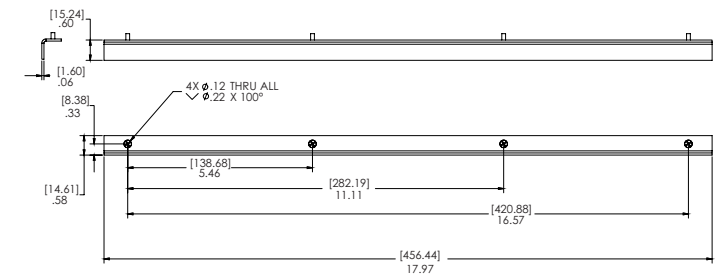
The receiver protective cover protects contacts and modules when the receiver is not in use.

Protective Cover, Receiver, G12x  
**Part # 310 113 518**



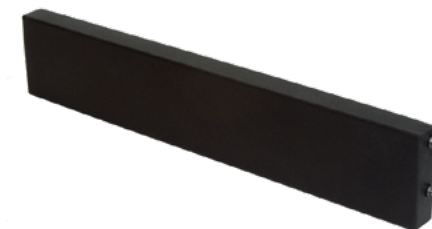
This aluminum ITA protective cover protects contacts and modules when the ITA is not in use.

Protective Cover, ITA, G12x  
**Part # 410 112 857**



The gap cover is used to cover the open area between the G12 or G12x receiver and rack. The gap cover is not needed when using rack extender kit, G12, Part # 310 113 406, or G12x, Part # 310 113 519.

Gap Cover, G12/G12x, Slide Configuration • **Part # 310 113 433**



This receiver protective cover protects contacts and modules when the receiver is not in use.

Protective Cover, Receiver, G12  
**Part # 310 113 402**

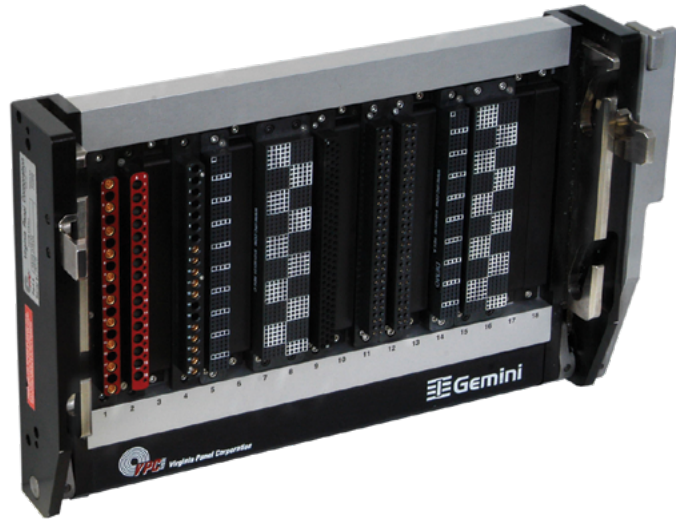


This ITA protective cover protects contacts and modules when the ITA is not in use.

Replacement Protective Cover, ITA, G12  
**Part # 410 112 681**

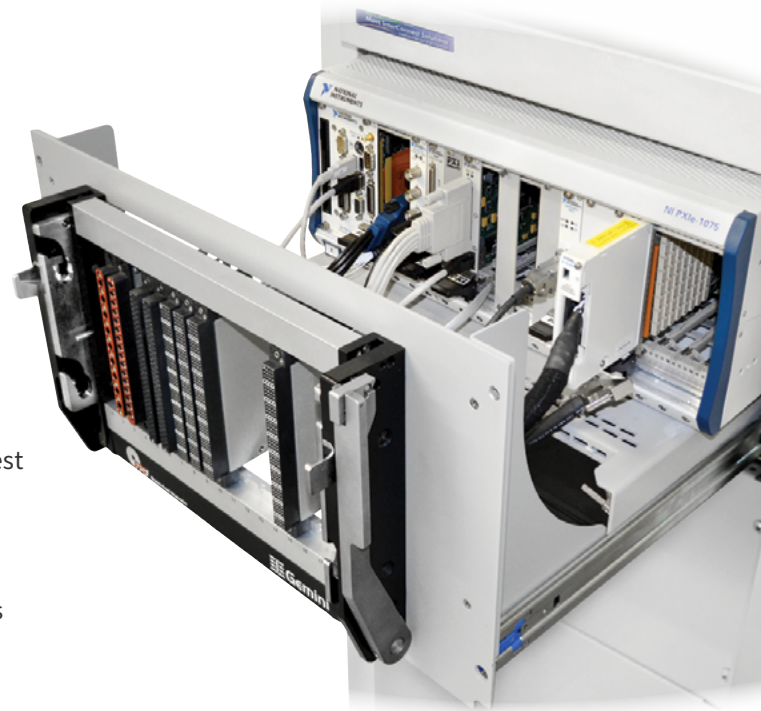
# Uncover the Unique

G18



## Versatile 18 Module Receiver

Ideal for PXI applications and can allow space for up to an 18 slot chassis  
Ability to engage over 4,300 contacts in one motion with the locking handle



## Slide Configuration

Flush rack mount to save valuable space in front of the test stand  
Slides support up to 180 lbs to accommodate large fixtures  
Easy access to instrumentation with shorter cable lengths  
Multiple slide length options available  
Kit contains G18 receiver, mounting plate, flanges, and instrument bracket

## Standard QuadraTrack™

Engaging mechanism in the form of a pair of precision machined slides located in the receiver  
Distributes uniform pressure to four points on the ITA during engagement and disengagement  
Precise signal integrity between the receiver and ITA is maintained by QuadraTrack™ engagement system



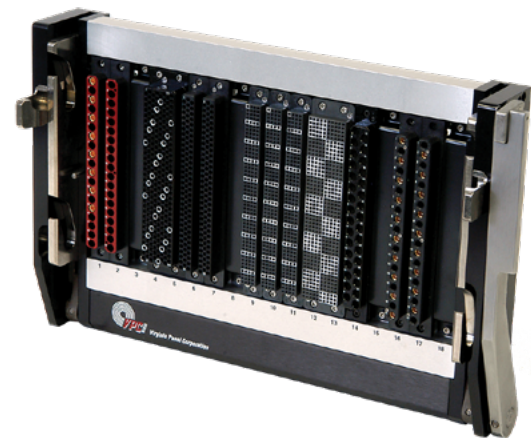


## G18 • 18 Module Solution

The 18 Module system is the ideal InterConnect solution for an 18 slot PXI chassis. This high-density InterConnect can simultaneously engage over 4,300 signal contacts. The adaptable G18 integrates a wide variety of I/O options in various module configurations. The contacts are incorporated into cable assemblies for specific instruments. The Vertical Hinged Mounting Frame or slide mount configuration are suitable for rack or chassis mount applications and offer quick access to resources and cables.

### Features and Benefits

- Precision engagement mechanism engineered to mate over 4,300 contacts
- Standard ITA frame accommodates multiple enclosure types for a variety of fixture options
- Modular and reconfigurable for evolving test requirements
- Reliable connectivity beyond 20,000 cycles
- Quick and easy integration and maintenance
- Wide range of I/O options including signal, coaxial, power, pneumatic, vacuum, thermocouple, fiber optic, and PCB solutions
- Mounting options include Vertical Hinged Mounting Frame and slide mount

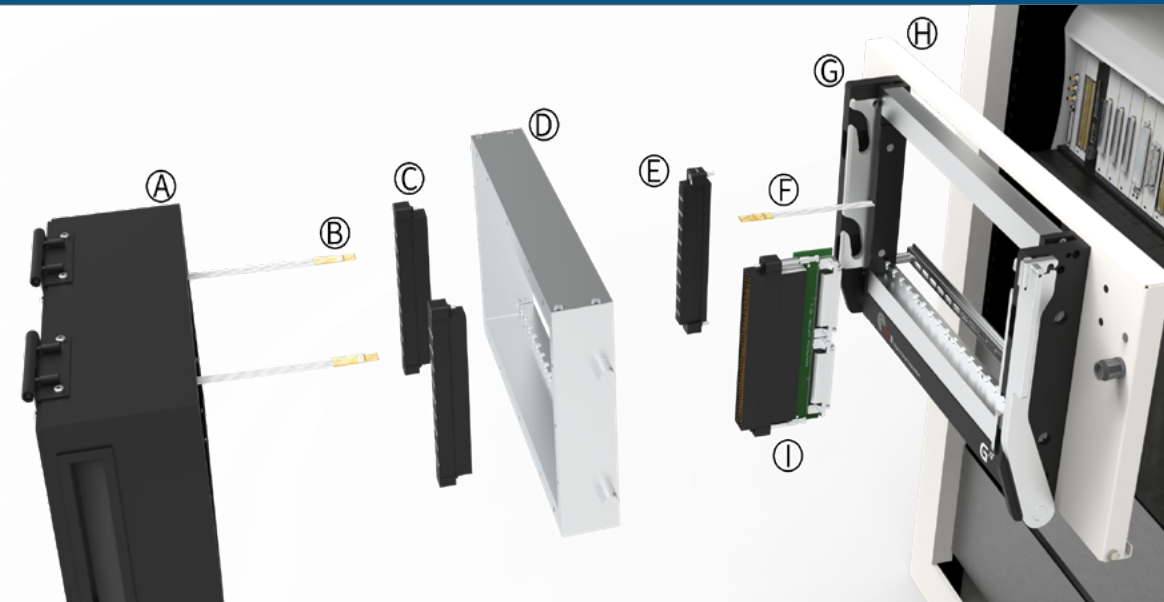


G18 Receiver



G18 Mounted to Vertical Hinged Mounting Frame

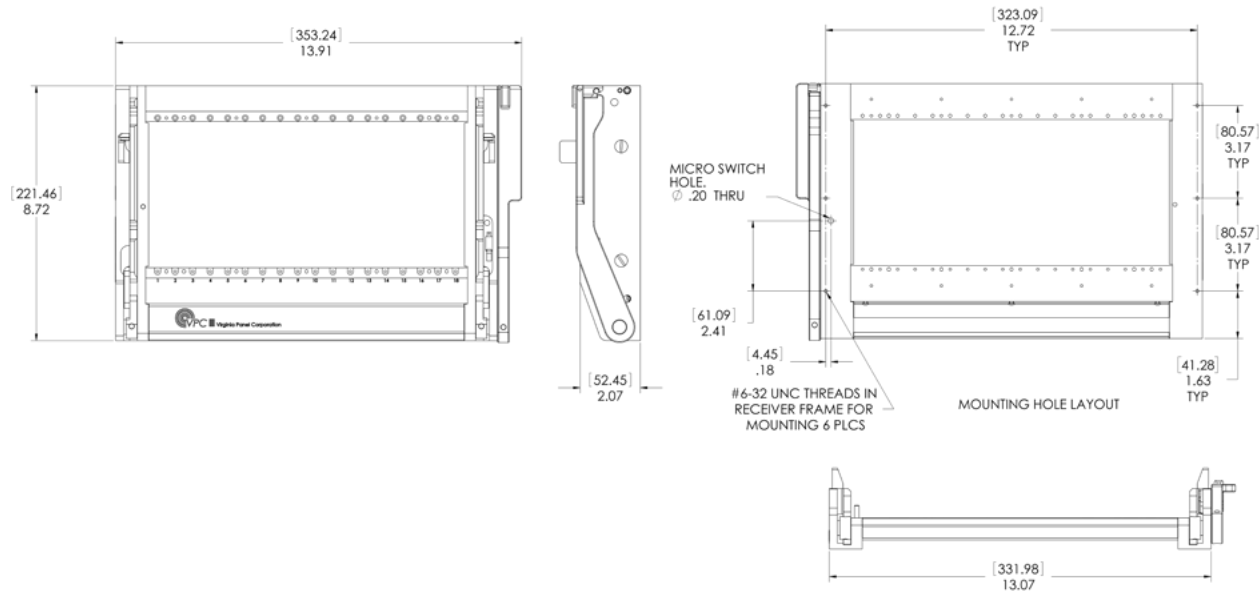
### G18 Rack Mount Configuration



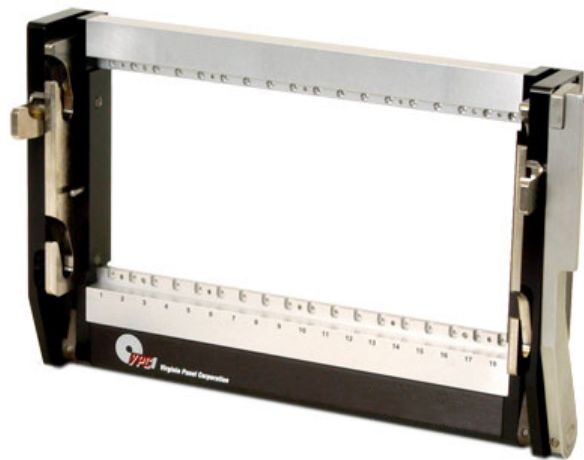
- A. ITA Enclosure
- B. ITA Patchcords
- C. ITA Module
- D. ITA Frame
- E. Receiver Module
- F. Receiver Patchcords
- G. Receiver Frame
- H. Vertical Hinged Mounting Frame
- I. PCB Adapter

| Part #                 | Description  |
|------------------------|--|
| <b>RECEIVERS</b>       |  |
| 310 120 101            | Receiver, G18, 18 Module for Discrete Wiring                                   |
| 310 120 102            | Receiver, G18, 18 Module with Flush Hangers                                    |
| 310 120 141            | Receiver, G18, 18 Module with Slide Mounting Kit (slide kit required)          |
| 310 120 161            | Receiver, G18, 18 Module, EMI Gasket, with Slide Mounting (slide kit required) |
| 310 120 168            | Receiver, G18, 18 Module, EMI Gasket   |
| <b>ITAS</b>            |  |
| 410 120 111            | ITA, G18, 18 Module  |
| 410 120 101            | ITA, G18, 18 Module for Discrete Wire and PCB Capability                       |
| <b>ENCLOSURES</b>      |  |
| 410 112 527            | Enclosure, 18 Module, Hinged Cover Plate, 4" Deep                              |
| 410 112 664            | Enclosure, 18 Module with 3 Cable Clamps                                       |
| <b>SLIDE KITS</b>      |  |
| 310 113 451            | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180 lbs.                      |
| 310 113 411            | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180 lbs.                      |
| 310 113 500            | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180 lbs.                      |
| <b>MOUNTING FRAMES</b> |  |
| 310 113 322            | Vertical Hinged Mounting Frame, G18, 5U  |
| 310 113 328            | Vertical Hinged Mounting Frame, G18, 9U  |
| <b>ACCESSORIES</b>     |  |
| 310 113 327            | Protective Cover, G18, Receiver  |
| 410 112 541            | Protective Cover, G18, ITA   |
| 310 113 542            | Instrument Bracket Mounting Block Kit, for use with Pickering PXI Chassis      |
| 310 113 371            | Chassis Mount Kit for Pickering 40-908, 40-914, 40-918                         |
| 310 113 417            | Chassis Mount Kit for National Instruments PXI-1044 and PXI-1045 Chassis       |
| 310 113 589            | Chassis Mount Kit for Keysight M9018A Chassis                                  |

## G18 Receiver for Discrete Wiring • 18 Module Solution



Receiver, G18, 18 Module for Discrete Wiring • Part # 310 120 101

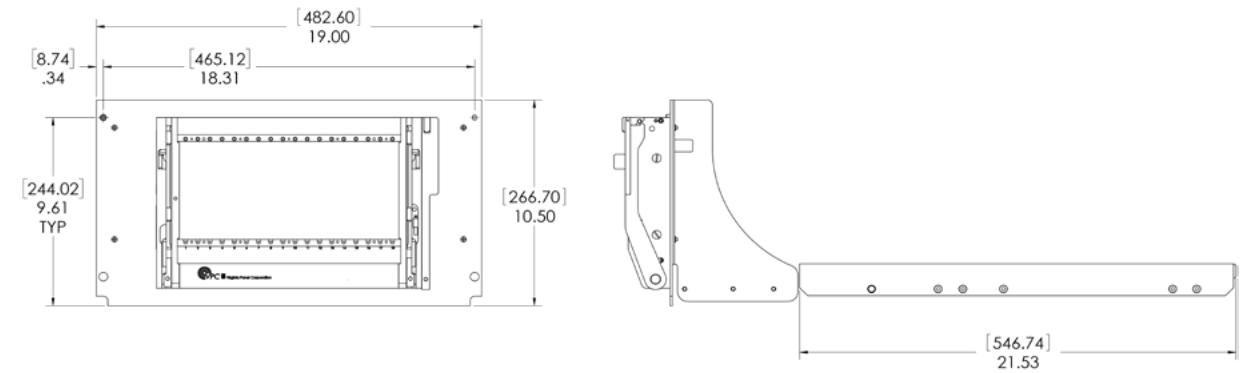


### Receiver Specifications

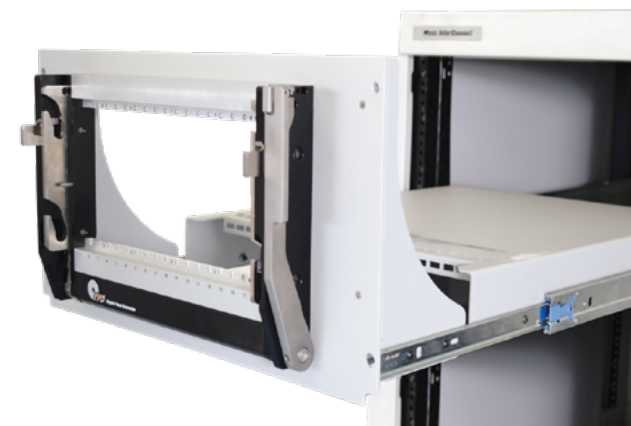
|                                 |                                |
|---------------------------------|--------------------------------|
| Weight                          | 6.9 lbs [3.130 kg]             |
| Frame Material                  | Anodized aluminum              |
| Slide Material                  | Nickel plated steel            |
| Linkage, Handle, Latch Material | Stainless steel                |
| Available Module Slots          | 18 positions                   |
| Cycle Life                      | 20,000 cycles                  |
| Temperature                     | -55° C to 85° C                |
| Max. Weight Support             | 25 lbs @ 6" [11 kg @ 15.24 cm] |
| Max. Mating Force               | 942 lbs [427.3 kg]             |

The lightweight and rugged 18 module receiver provides a solution that will accommodate larger ATE chassis' (PXI, VXI, SCXI). It allows immense versatility by affording space up to an 18 slot PXI chassis.

## G18 Receiver with Slide Mounting Kit • 18 Module Solution



Receiver, G18, 18 Module, with Slide Mounting (slide kit required) • Part # 310 120 141

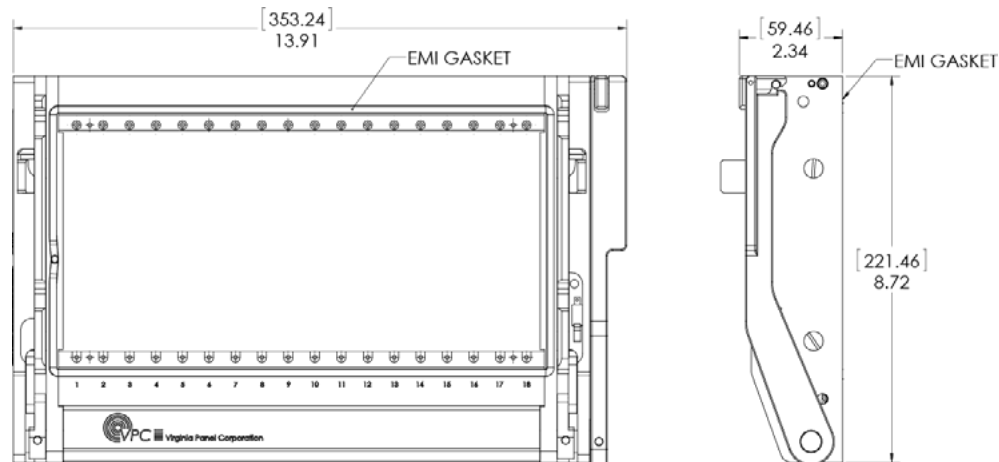


### Receiver Specifications

|  |                                |
|--|--------------------------------|
| Weight   | 16.2 lbs [7.35 kg]             |
| Frame Material   | Anodized aluminum              |
| Slide Material   | Nickel plated steel            |
| Linkage, Handle, Latch Material                              | Stainless steel                |
| Mounting Plate, Mounting Flange, Instrument Bracket Material | Aluminum                       |
| Available Module Slots                                       | 18 positions                   |
| Cycle Life   | 20,000 cycles                  |
| Temperature  | -55° C to 85° C                |
| Max. Weight Support  | 25 lbs @ 6" [11 kg @ 15.24 cm] |
| Max. Mating Force  | 942 lbs [427.3 kg]             |

This G18 receiver is designed to work with a slide kit and includes a mounting bracket, flanges, and instrument bracket. A slide kit is required for use.

## G18 Receiver with EMI Gasket • 18 Module Solution



Receiver, G18, 18 Module, EMI Gasket • Part # 310 120 168

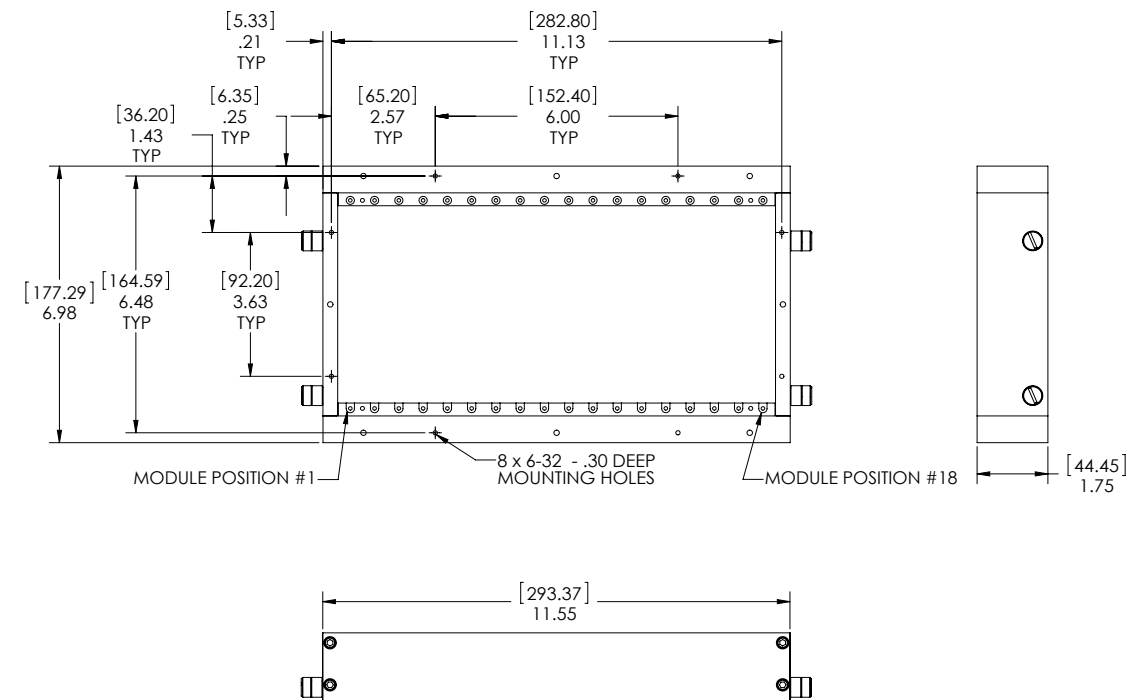


### Receiver Specifications

|                                 |                                       |
|---------------------------------|---------------------------------------|
| Weight                          | 6.9 lbs [3.130 kg]                    |
| Frame Material                  | Anodized and clear chromated aluminum |
| Slide Material                  | Nickel plated steel                   |
| Linkage, Handle, Latch Material | Stainless steel                       |
| Available Module Slots          | 18 positions                          |
| Cycle Life                      | 20,000 cycles                         |
| Temperature                     | -55° C to 85° C                       |
| Max. Weight Support             | 25 lbs @ 6" [11 kg @ 15.24 cm]        |
| Max. Mating Force               | 942 lbs [427.3 kg]                    |

This G18 receiver comes with a pre-installed gasket for EMI applications while maintaining all the features and benefits of the standard G18 receiver.

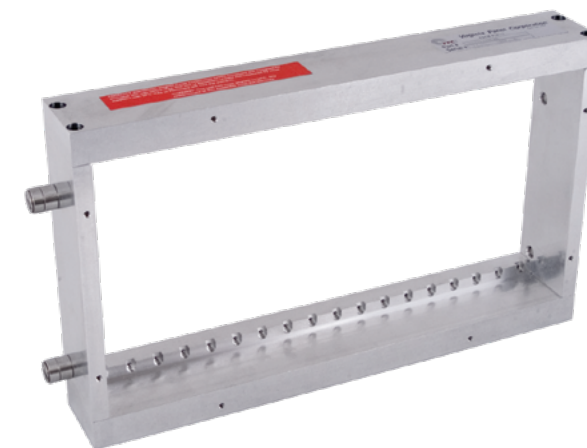
## G18 ITA • 18 Module Solution



ITA, G18, 18 Module • Part # 410 120 111

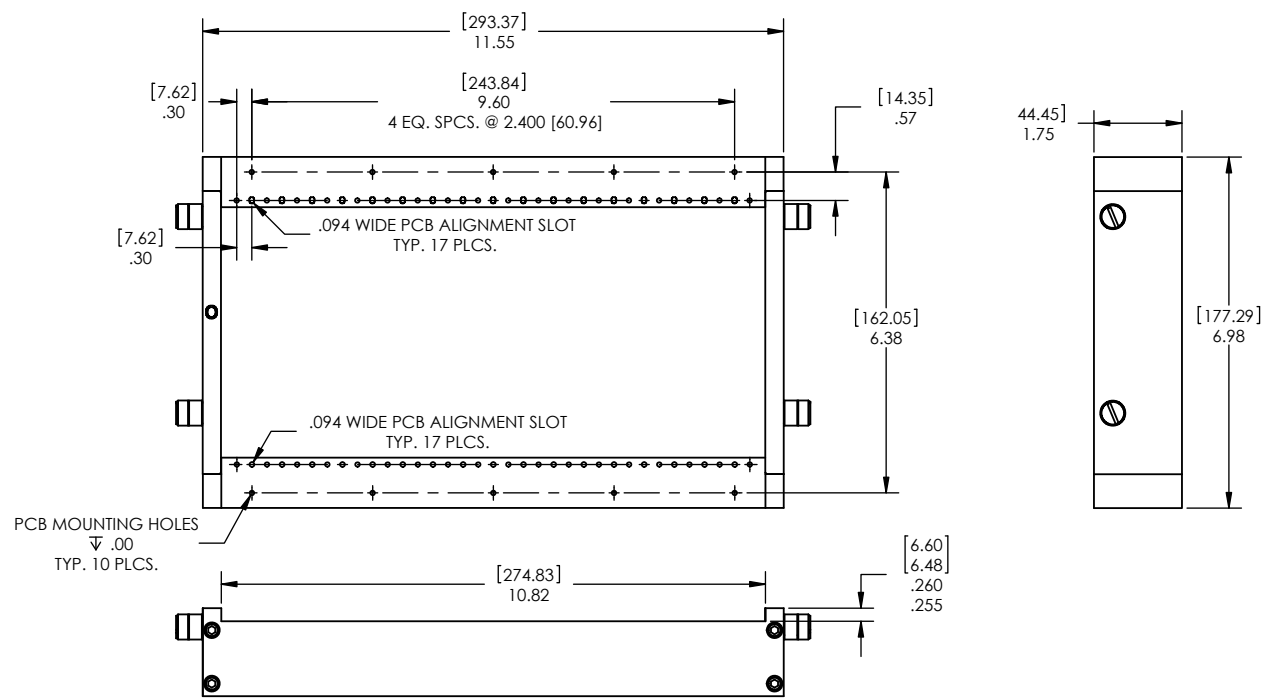
### ITA Specifications

|                        |                    |
|------------------------|--------------------|
| Weight                 | 3.28 lbs [1.49 kg] |
| Frame Material         | Chromated aluminum |
| Available Module Slots | 18 positions       |
| Cycle Life             | 20,000 cycles      |
| Max. Mating Force      | 942 lbs [427.3 kg] |
| Temperature            | -55° C to 85° C    |



You can mount a VPC enclosure or customize your own fixture to be attached to this ITA frame. A wide range of ITA modules are available separately for user configuration. This solution is perfect for any medium to high I/O application. The rugged aluminum frame provides secure mounting options for custom fixtures.

## G18 ITA with PCB Capability • 18 Module Solution



ITA, G18, 18 Module for Discrete Wire and PCB Capability • Part # 410 120 101

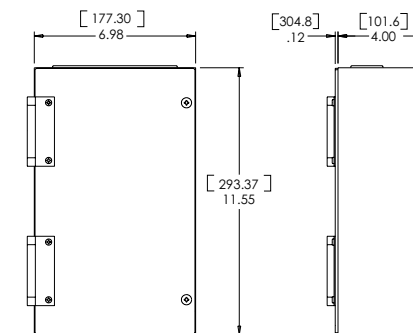
### ITA Specifications

|                        |                     |
|------------------------|---------------------|
| Weight                 | 3.35 lbs [1.497 kg] |
| Frame Material         | Aluminum            |
| Available Module Slots | 18 positions        |
| Cycle Life             | 20,000 cycles       |
| Temperature            | -55° C to 85° C     |



The G18 ITA with PCB capability has a recess on the wiring side of the ITA to provide a location for PCB cards to mount.

## G18 • Accessories



Made of aluminum, the enclosure body is painted gray and features a hinged cover plate with ¼ turn hardware that provides easy access to the ITA's wiring. The enclosure is secured to the ITA by eight socket head cap screws.

Enclosure, 18 Module, Hinged Cover Plate, 4" Deep • Part # 410 112 527



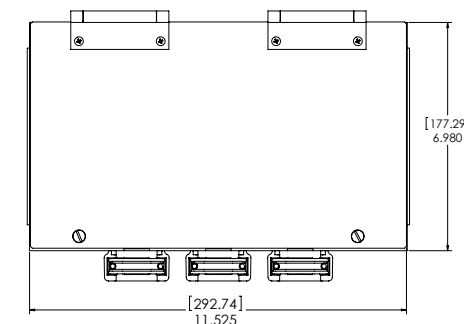
This receiver protective cover protects contacts and modules when the receiver is not in use.

Protective Cover, G18, Receiver  
Part # 310 113 327



This aluminum ITA protective cover protects contacts and modules when the ITA is not in use.

Protective Cover, G18, ITA  
Part # 410 112 541



This aluminum enclosure is for ITA Part # 410 120 111 and allows your 18 module solution to be customized to your needs. This enclosure has three U-shaped cable clamps that allow a maximum cable bundle of 1.59" square per clamp. ITA strain relief plates are not needed.

Enclosure, 18 Module with 3 Cable Clamps • Part # 410 112 664

# Pull-Thru Solutions

G20, G20x, & G40x

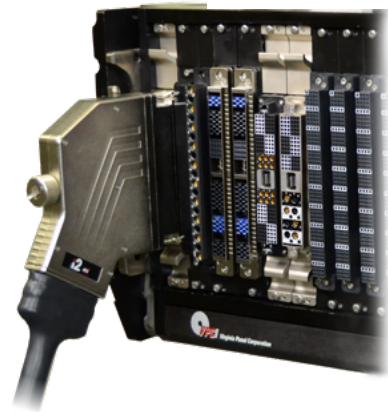


G20

## Modular and Configurable

- Direct connection to instrument modules
- Pull through removal of instrumentation from the chassis backplane
- Accepts all standard 90 Series modules and i2 MX
- Reversible handle for right or left mounting

## Scalability with i2 MX



- Connect directly to individual Pull-Thru Adapters with the i2 MX
- Convenient pull finger tabs allow easy removal of adapters
- Specially designed for EMI protection with nickel plated aluminium and an EMI gasket

## Large Scale Options

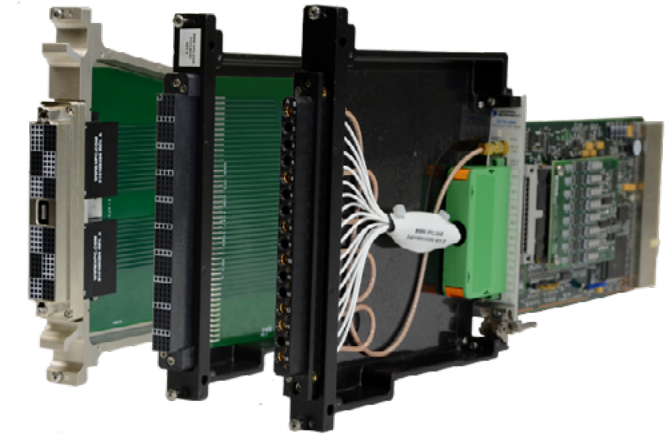
G40x is a two tier, 48 module system that enables pull through removal of 40 VPC modules, Pull-Thru Adapters and test instrumentation as one piece. It also offers eight additional 90 Series module slots, plus space for two iCon modules, as needed.

G40x

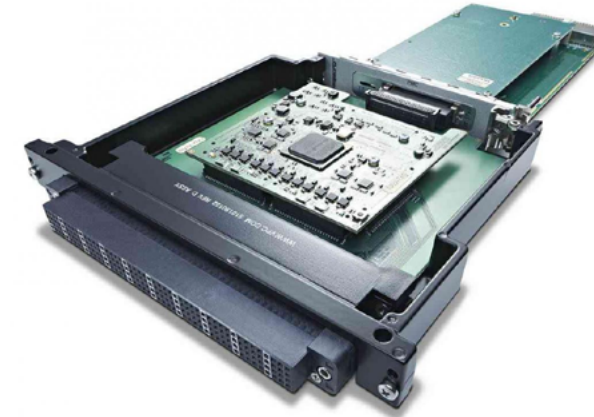


## Pull-Thru Adapters

- Variety of module configurations
- Multiple I/O options
- Instrument card protection
- i2 MX and high speed capability (VTAC)



## Features and Benefits



- Adapters correspond with .8" PXI system slot requirements
- PCB adapter and instrument cards can be removed simultaneously
- Multiple configurations and I/O options

## Platform Options

G20 and G20x are also available in a platform version. The platform provides support for your ITA and enclosure of up to 180 lbs [81.65 kg]. With the optional leg kit, up to 350 lbs [158.76 kg] can be supported.



## G20 • Pull-Thru • 20 Module Solution

The G20 Pull-Thru is a scalable solution that enables pull through capability for PCB applications. The G20 Pull-Thru integrates a wide variety of I/O in various module configurations. In addition to rack mounting, it is also available in a slide mount configuration.

### Features and Benefits

- Screw mount locations correspond to the .80" centers of a PXI chassis, providing a 1:1 interface system
- Accepts all standard 90 Series modules and i2 MX
- Allows direct connection to instrument modules
- Enables pull through removal of connector modules and instrumentation from chassis backplane
- Precision engagement mechanism engineered to mate over 2,000 signal points in 6U height
- Modular and configurable
- Reversible handle for right or left mounting

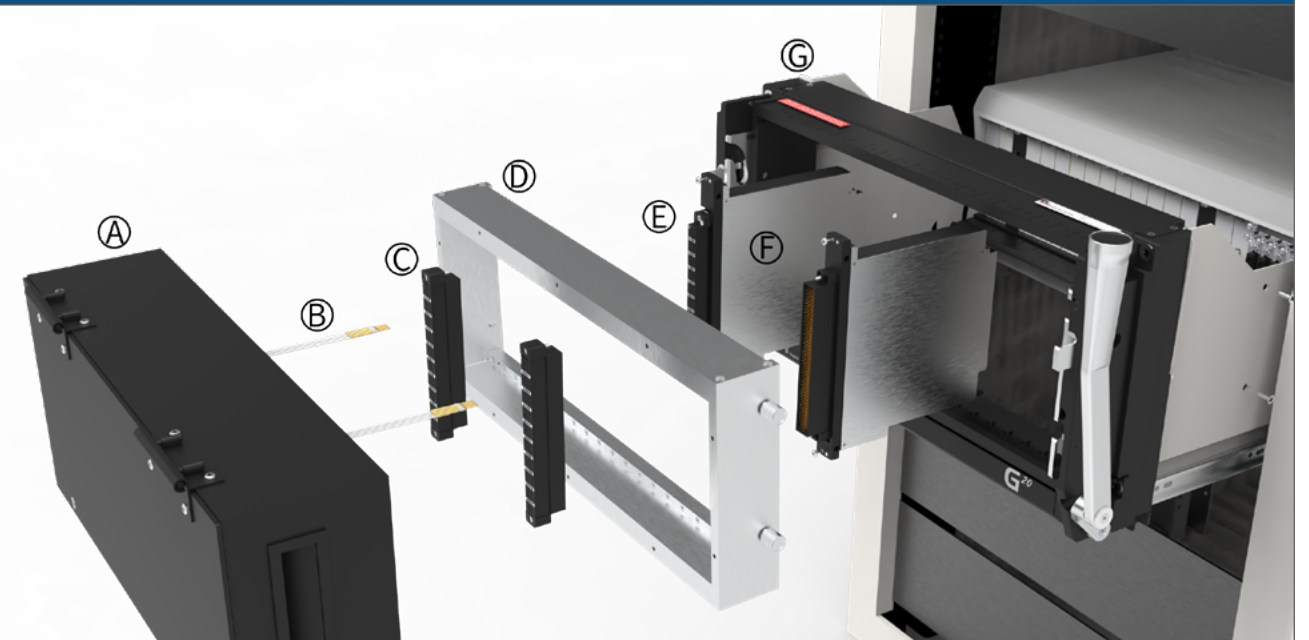


G20 Receiver



G20 Receiver Mounted to Chassis

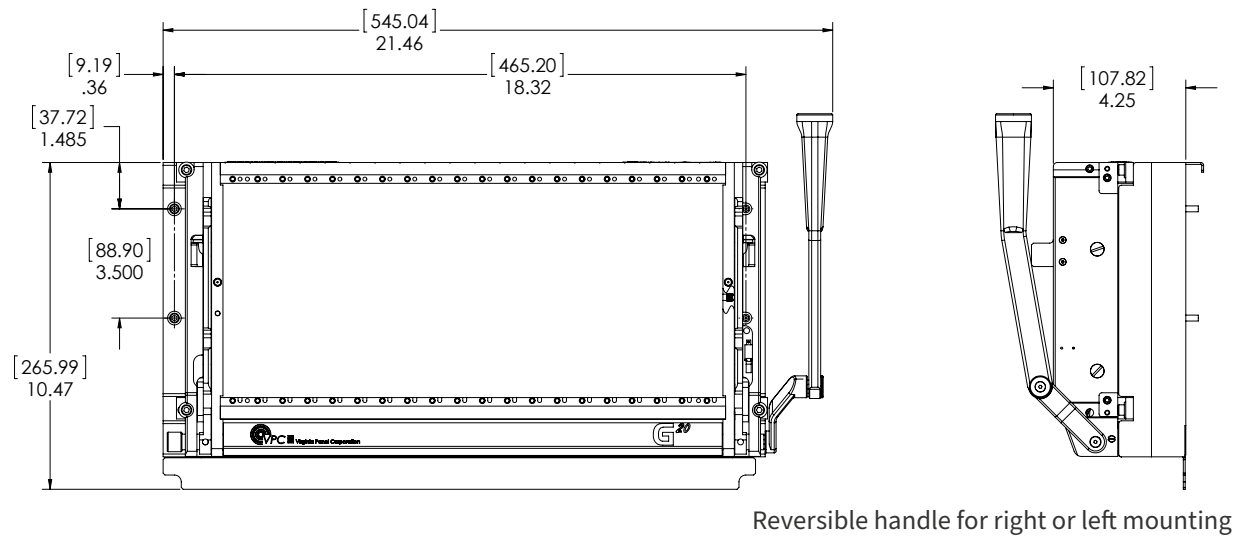
### G20 Pull-Thru Slide Mount Configuration



- |                   |                            |                 |
|-------------------|----------------------------|-----------------|
| A. ITA Enclosure  | D. ITA Frame               | G. G20 Receiver |
| B. ITA Patchcords | E. Receiver Module         |                 |
| C. ITA Module     | F. Receiver Module Carrier |                 |

| Part #                   | Description   |
|--------------------------|---|
| <b>RECEIVERS</b>         |   |
| 310 120 188              | Receiver, G20, 20 Module, Pull-Thru   |
| <b>ITAS</b>              |   |
| 410 120 199              | ITA, G20, 20 Module, Pull-Thru  |
| <b>MOUNTING FLANGES</b>  |   |
| 310 113 622              | Mounting Flange Kit, G20/G20x Slide Mount, Pull-Thru, for NI PXI-1045 & PXI-1085 Chassis                                    |
| 310 113 760              | Mounting Flange Kit, G20/G20x Slide Mount, 6.75" Series Adapters, for NI PXI-1095 Chassis and NI PXI-1084 Chassis Pull-Thru |
| 310113774                | Mounting Flange Kit, G20 Slidde Mount, for NI PXI-1088  |
| <b>ENCLOSURES</b>        |   |
| 410 112 790              | Enclosure, 20 Module, Hinged Cover Plate, 4" Deep   |
| 410 114 143              | Enclosure, 20 Module, Hinged Cover Plate, 12" Deep  |
| <b>SLIDE KITS</b>        |   |
| 310 113 409              | 20" Slide Kit, Fits 18"-22" Deep Racks, Supports 180lbs.  |
| 310 113 410              | 24" Slide Kit, Fits 22"-26" Deep Racks, Supports 180lbs.  |
| 310 113 451              | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180lbs.  |
| 310 113 411              | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180lbs.  |
| 310 113 500              | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180lbs.  |
| <b>PROTECTIVE COVERS</b> |   |
| 310 113 422              | Protective Cover, G20, Receiver, Pull-Thru  |
| 410 112 797              | Protective Cover, G20, ITA, Pull-Thru   |
| <b>ADAPTERS</b>          |   |
| 510 109 461              | PXI Pull-Thru Adapter, Single Slot, 1 Module Position   |
| 510 109 462              | PXI Module Adapter, Single Slot, 1 Module Position  |

## G20 Receiver • Pull-Thru • 20 Module Solution



### Receiver, G20, 20 Module, Pull-Thru • Part # 310 120 188

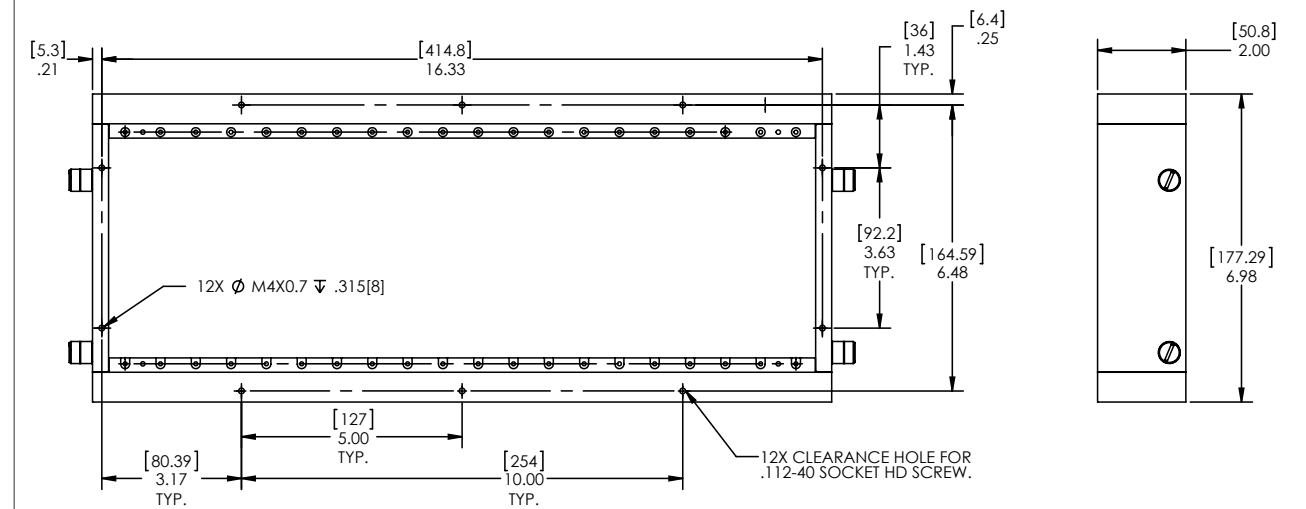
#### Receiver Specifications

|                                 |                                |
|---------------------------------|--------------------------------|
| Frame Material                  | Anodized aluminum              |
| Slide Material                  | Nickel plated steel            |
| Linkage, Handle, Latch Material | Stainless steel                |
| Available Module Slots          | 20 positions                   |
| Cycle Life                      | 20,000 cycles                  |
| Temperature                     | -55° C to 85° C                |
| Max. Weight Support             | 80 lbs @ 12" [36 kg @ 30.5 cm] |
| Max. Mating Force               | 1257 lbs [570.2 kg]            |



The G20 Pull-Thru receiver offers direct connection to instrument modules, enabling pull through removal of connector modules and instrumentation from the chassis backplane.

## G20 ITA • Pull-Thru • 20 Module Solution



### ITA, G20, 20 Module, Pull-Thru • Part # 410 120 199

#### ITA Specifications

|                        |                     |
|------------------------|---------------------|
| Frame Material         | Chromated aluminum  |
| Available Module Slots | 20 positions        |
| Cycle Life             | 20,000 cycles       |
| Temperature            | -55° C to 85° C     |
| Max. Mating Force      | 1257 lbs [570.2 kg] |



This G20 Pull-Thru ITA is intended to be used with the G20 receiver Part # 310 120 188. It is designed to front mount to the enclosure for ease of installation. A wide range of ITA modules are available separately for user configuration.

## G20x • Pull-Thru • 28 Module Solution

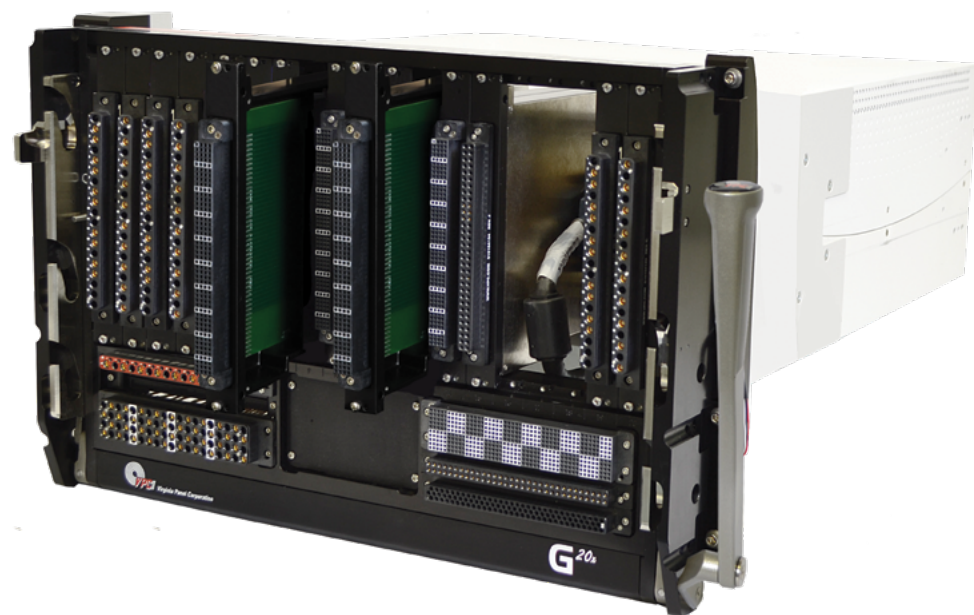
The G20x Pull-Thru enables pull through capability for PCB applications with a capacity of up to 28 modules, eight dedicated to discrete wiring in an extended tier for higher I/O needs. The adaptable G20x Pull-Thru integrates a wide variety of I/O options in various module configurations to meet the needs of each test application. In addition to rack mounting, it is also available in a slide mount configuration.

### Features and Benefits

- Screw mount locations correspond to the .80" centers of a PXI chassis, providing a 1:1 interface system
- 20 vertical modules with eight horizontal modules combine for 28 module capacity
- Accepts all standard 90 Series and iCon modules (with adapter) as well as i2 MX
- Enables pull through removal of connector modules and instrumentation from chassis backplane
- Precision engagement mechanism engineered to mate over 7,000 signal points in 7U height
- Modular and configurable
- Easy access to cables and test instrumentation
- Reversible handle for right or left mounting

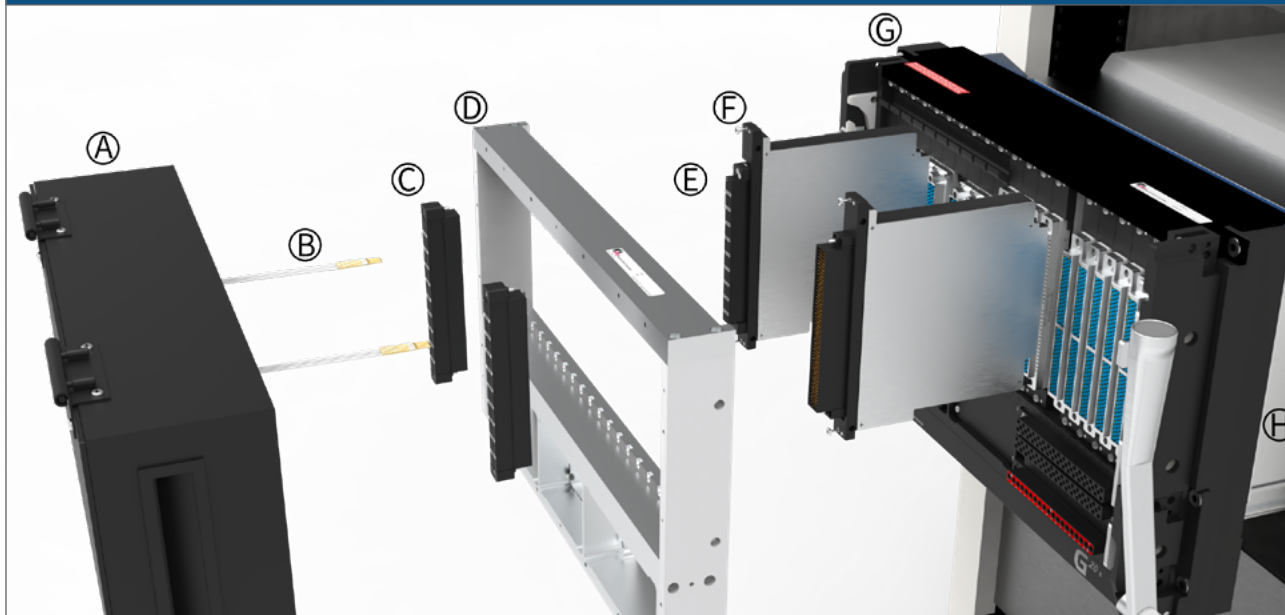


G20x Receiver



G20x Receiver Mounted to Chassis

### G20x - 28 Module Pull-Thru Slide Mount Configuration

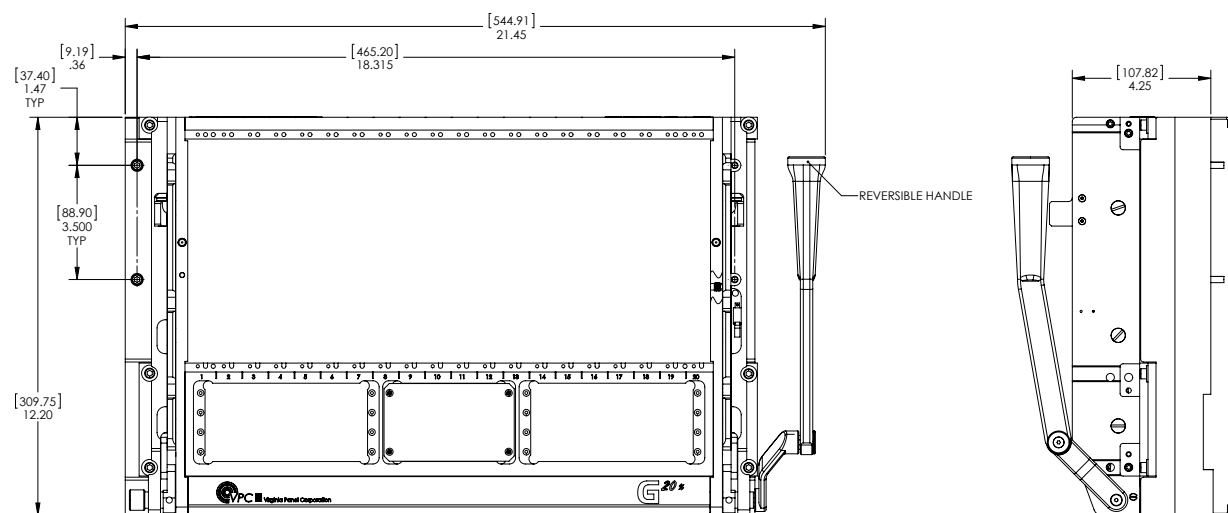


- A. ITA Enclosure
- B. ITA Patchcords
- C. ITA Module
- D. ITA Frame
- E. Receiver Module
- F. Receiver Module Carrier
- G. Receiver Frame

| Part #                 | Description  |
|------------------------|--|
| <b>RECEIVER</b>        |  |
| 310 120 186            | Receiver, G20x, 28 Module, Pull-Thru   |
| <b>ITA</b>             |  |
| 410 120 210            | ITA, G20x, 28 Module, Pull-Thru  |
| 410 120 199            | ITA, G20, 20 Module, Pull-Thru   |
| <b>MOUNTING FLANGE</b> |  |
| 310 113 622            | Mounting Flange Kit, G20/G20x Slide Mount, Pull-Thru, for NI PXI-1045 Chassis                                      |
| 310 113 760            | Mounting Flange Kit, G20/G20x Slide Mount, 6.75" Series Adapters, for NI PXI-1095 Chassis and NI PXIe-1084 Chassis |
| <b>ENCLOSURE</b>       |  |
| 410 112 984            | Enclosure, 28 Module, Hinged Cover Plate, 8" Deep  |
| <b>SLIDE KIT</b>       |  |
| 310 113 409            | 20" Slide Kit, Fits 18"-22" Deep Racks, Supports 180lbs.   |
| 310 113 410            | 24" Slide Kit, Fits 22"-26" Deep Racks, Supports 180lbs  |
| 310 113 451            | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180lbs  |
| 310 113 411            | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180lbs  |
| 310 113 500            | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180lbs  |
| <b>ACCESSORIES</b>     |  |
| 310 113 597            | Protective Cover, G20x, Receiver, Pull-Thru  |
| 410 112 986            | Protective Cover, G20x, ITA, Pull-Thru   |
| 310 113 606            | Adapter Plate, Pull-Thru, Allows G20x & G40x Receiver to Accept iCon Modules                                       |
| 410 112 996            | Adapter Plate, Pull-Thru, Allows G20x ITA to Accept iCon Modules   |
| <b>ADAPTERS</b>        |  |
| 510 109 461            | PXI Pull-Thru Adapter, Single Slot, 1 Module Position  |
| 510 109 462            | PXI Module Adapter, Single Slot, 1 Module Position   |



## G20x Receiver • Pull-Thru • 28 Module Solution



Reversible handle for right or left mounting

### Receiver, G20x, 28 Module, Pull-Thru • Part # 310 120 186

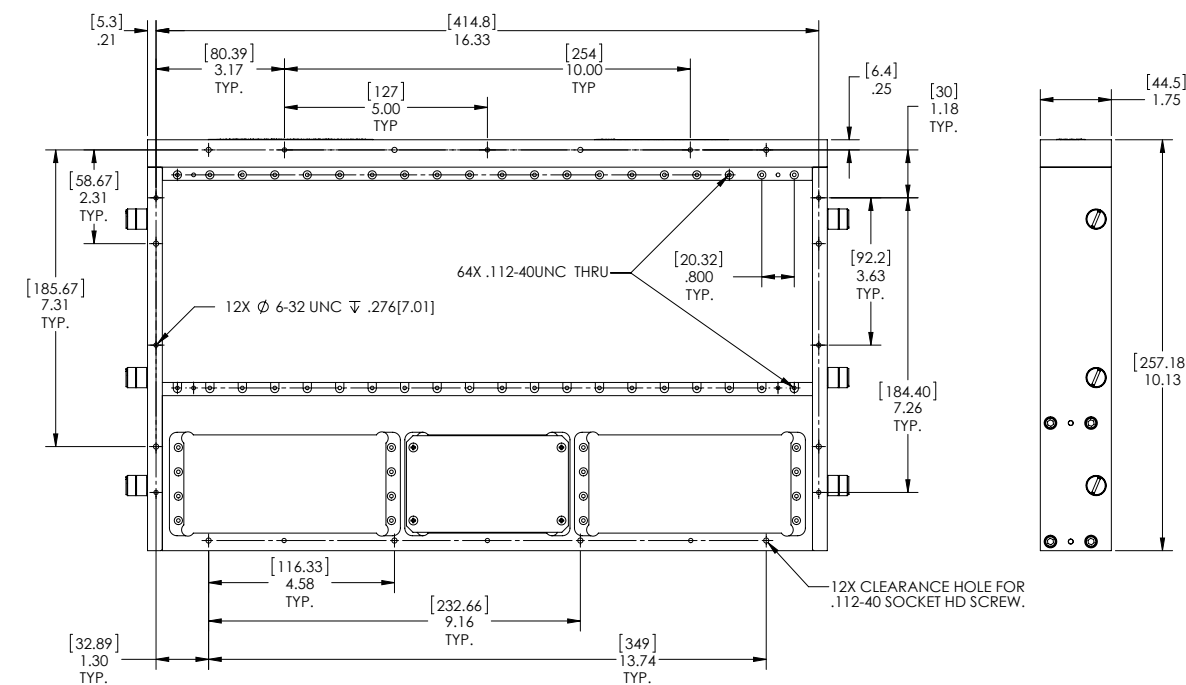
#### Receiver Specifications

|                                 |  |
|---------------------------------|--|
| Frame Material                  | Anodized aluminum  |
| Slide Material                  | Nickel plated steel  |
| Linkage, Handle, Latch Material | Stainless steel  |
| Available Module Slots          | 20 vertical module positions and eight horizontal module positions |
| Cycle Life                      | 20,000 cycles  |
| Temperature                     | -55° C to 85° C  |
| Max. Weight Support             | 80 lbs @ 12" [36 kg @ 30.5 cm]                                     |
| Max. Mating Force               | 1257 lbs [570.2 kg]  |



The G20x Pull-Thru receiver offers the same features of the G20 Pull-Thru system and adds an additional eight modules in an extended tier for higher I/O needs.

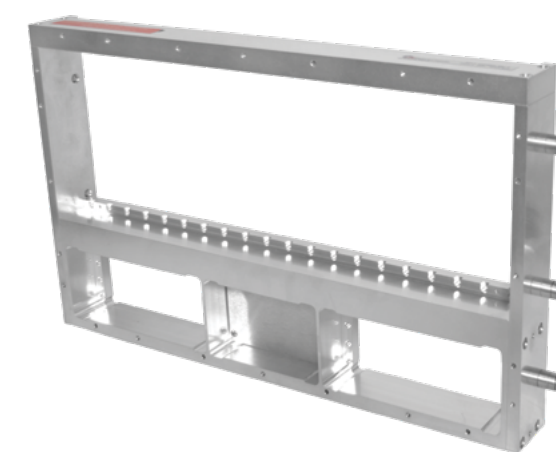
## G20x ITA • Pull-Thru • 28 Module Solution



### ITA, G20x, 28 Module, Pull-Thru • Part # 410 120 210

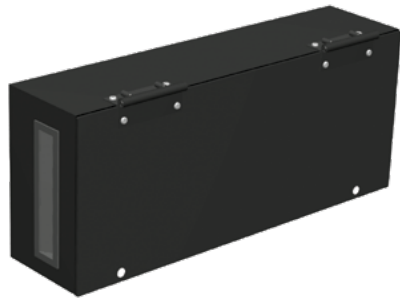
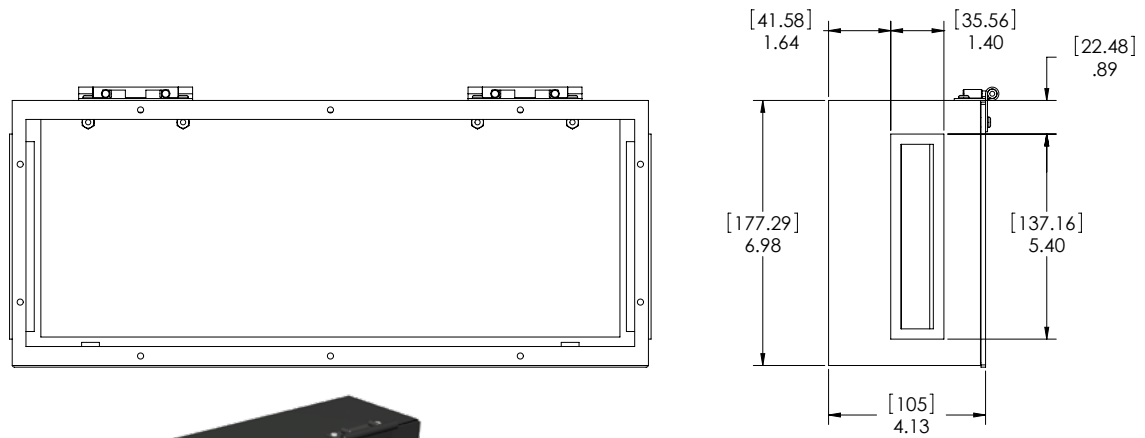
#### ITA Specifications

|                   |  |
|-------------------|--|
| Frame Material    | Chromated aluminum   |
| Available Slots   | 20 vertical module positions and eight horizontal module positions |
| Cycle Life        | 20,000 cycles  |
| Temperature       | -55° C to 85° C  |
| Max. Mating Force | 1257 lbs [570.2 kg]  |



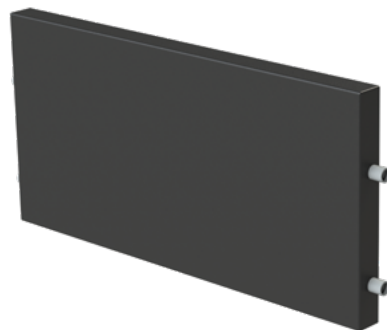
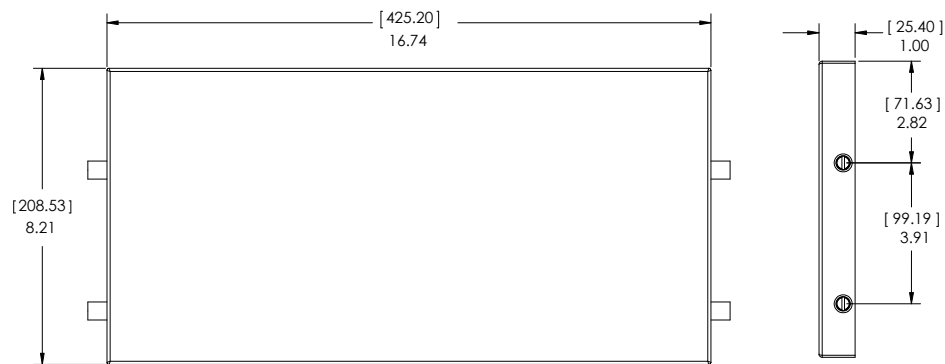
Accommodating 28 modules, the G20x Pull-Thru ITA can be used in a variety of applications to make the required connection to the G20x Pull-Thru receiver Part # 310 120 186.

## G20/G20x Pull-Thru • Accessories



The 20 module enclosure is made of aluminum, painted black, and secured to the ITA by eight socket head cap screws (included). It has a depth of 4".

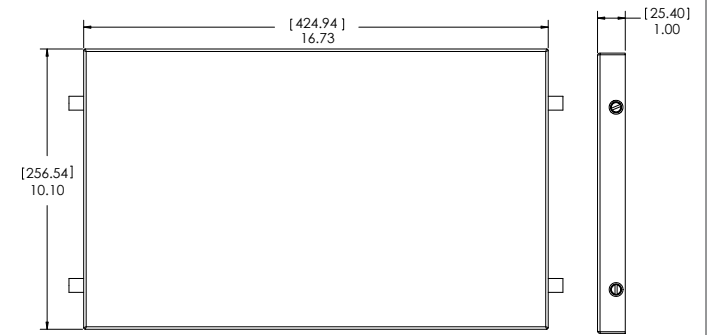
Enclosure, 20 Module, Hinged Cover Plate, 4" Deep • **Part # 410 112 790**



The G20 Pull-Thru receiver protective cover attaches securely to your receiver for easy and effective protection of contacts and modules.

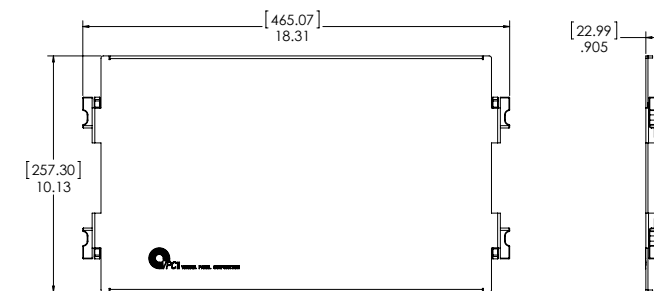
Protective Cover, G20, Receiver, Pull-Thru • **Part # 310 113 422**

## G20/G20x Pull-Thru • Accessories



The receiver protective cover protects contacts and modules when the receiver is not in use.

Protective Cover, G20x, Receiver, Pull-Thru, EMI • **Part # 310 113 597**



The ITA protective cover protects contacts and modules when the ITA is not in use.

Protective Cover, G20x, ITA, Pull-Thru • **Part # 410 112 986**

## G40x • Pull-Thru • 48 Module Solution

The G40x Pull-Thru is a two tier, 48 module system that enables pull through removal of 40 VPC modules, InterConnect Adapters, and test instrumentation in one piece. It offers eight additional standard 90 Series module slots, as well as space for two iCon modules as needed. The G40x Pull-Thru is slide mounted, allowing easy access to the discrete-wiring modules.

### Features and Benefits

- Screw mount locations correspond to the .80" centers of a PXI chassis, providing a 1:1 interface system
- 40 vertical modules with eight horizontal modules combine for 48 module capacity
- Accepts all standard 90 Series and iCon modules as well as i2 MX
- Enables pull through removal of connector modules and instrumentation from chassis backplane
- Precision engagement mechanism engineered to mate over 11,000 signal points in 12U height
- Modular and configurable
- Reversible handle for right or left mounting

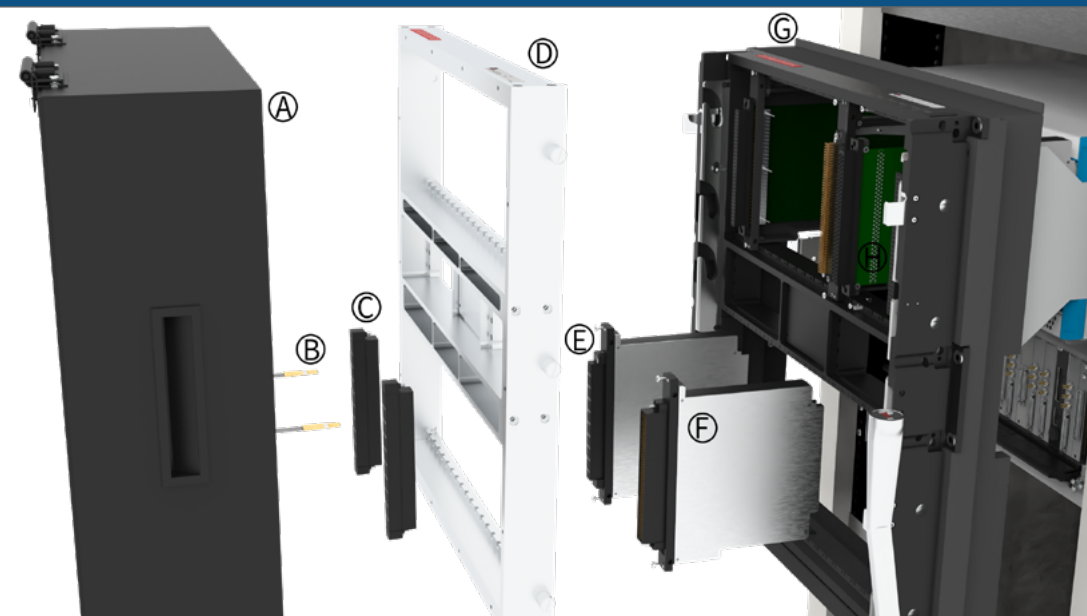


G40x Receiver



G40x Receiver Mounted to Chassis

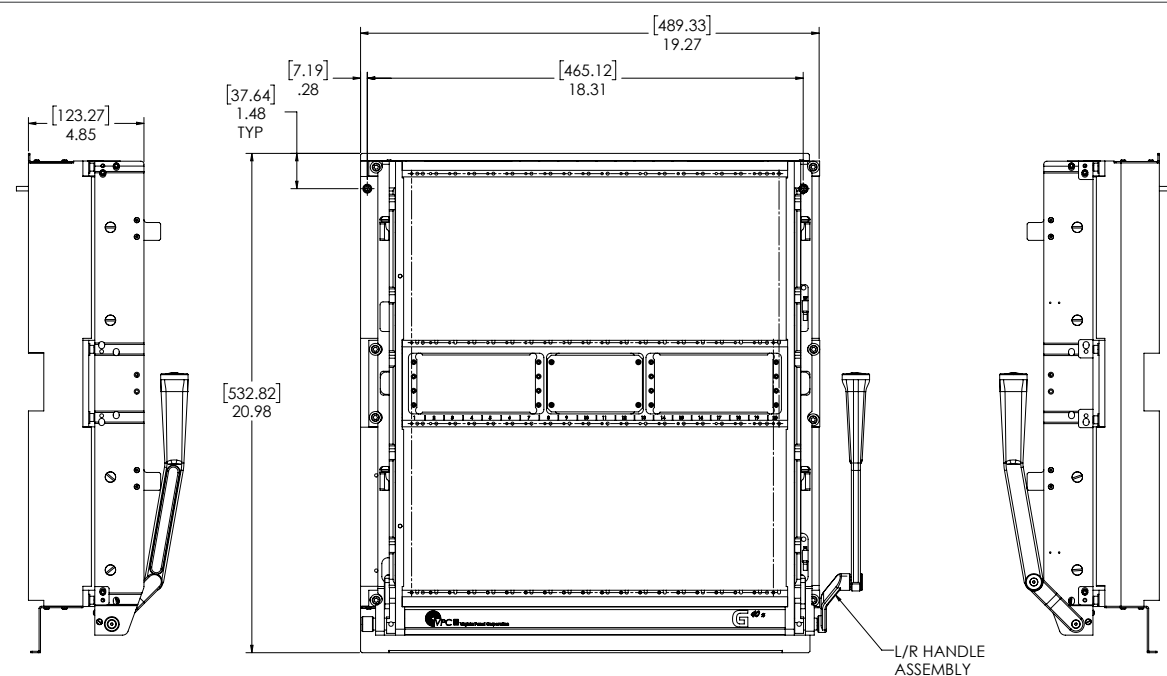
## G40x - 48 Module Pull-Thru Slide Mount Configuration



- |                   |                            |
|-------------------|----------------------------|
| A. ITA Enclosure  | E. Receiver Modules        |
| B. ITA Patchcords | F. Wired Pull-Thru Adapter |
| C. ITA Modules    | G. Receiver Frame          |
| D. ITA Frame      | H. Receiver PCB Adapter    |

| Part #             | Description  |
|--------------------|--|
| <b>RECEIVER</b>    |  |
| 310 120 163        | Receiver, G40x, 48 Module, Pull-Thru, with Slide Mounting (slide kit required) |
| <b>ITAS</b>        |  |
| 410 120 246        | ITA, G40x, 48 Module, Pull-Thru  |
| 410 120 210        | ITA, G20x, 28 Module, Pull-Thru  |
| 410 120 199        | ITA, G20, 20 Module, Pull-Thru   |
| <b>ENCLOSURE</b>   |  |
| 410 114 115        | Enclosure, 48 Module, Hinged Cover Plate, 6" Deep                              |
| <b>SLIDE KITS</b>  |  |
| 310 113 411        | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180lbs                        |
| 310 113 451        | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180lbs                        |
| 310 113 500        | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180lbs                        |
| <b>ACCESSORIES</b> |  |
| 310 113 686        | Protective Cover, G40x, Receiver, Pull-Thru                                    |
| 410 114 144        | Protective Cover, G40x, ITA, Pull-Thru, Aluminum                               |
| 310 113 606        | Adapter Plate, Receiver, Pull-Thru, Allows G20x & G40x Accept iCon Modules     |
| 410 112 996        | Adapter Plate, ITA, Pull-Thru, Allows G20x & G40x to Accept iCon Modules       |
| <b>ADAPTERS</b>    |  |
| 510 109 461        | PXI Pull-Thru Adapter, Single Slot, 1 Module Position                          |
| 510 109 462        | PXI Module Adapter, Single Slot, 1 Module Position                             |

## G40x Receiver • Pull-Thru • 48 Module Solution



Receiver, G40x, 48 Module, Pull-Thru, for Slide Mounting (Slide Kit Required) • Part # 310 120 163

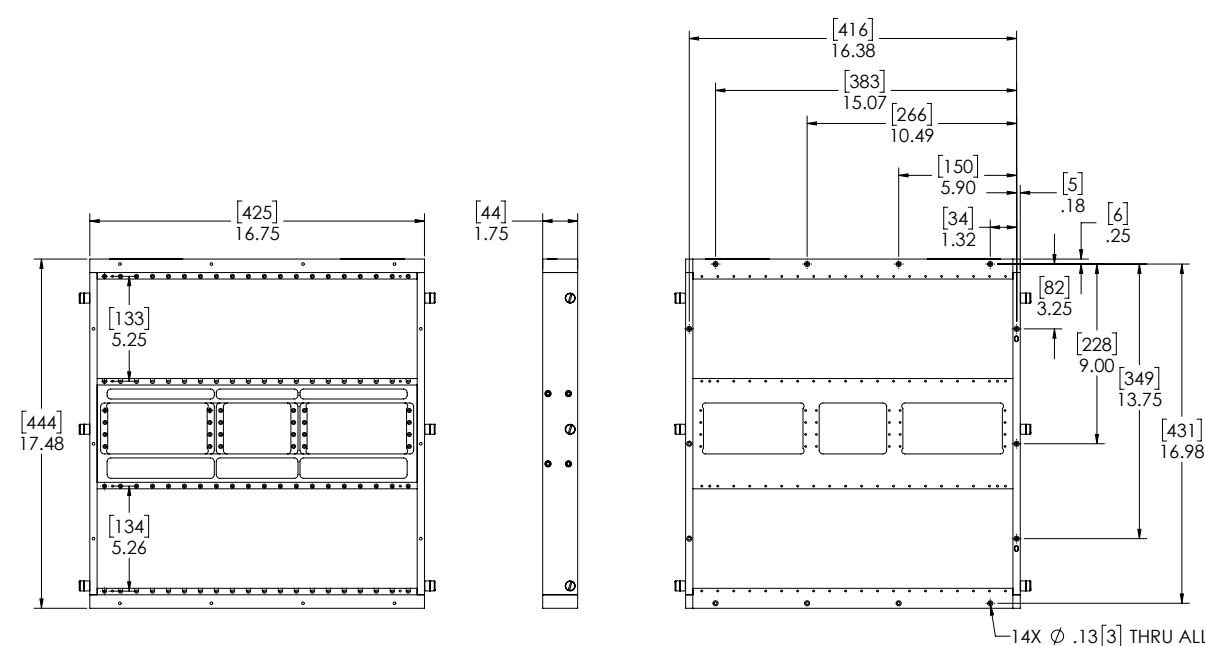
### Receiver Specifications

|                                 |  |
|---------------------------------|--|
| Weight                          | 31.4 lbs [14.2 kg]   |
| Frame Material                  | Anodized aluminum  |
| Slide Material                  | Nickel plated steel  |
| Linkage, Handle, Latch Material | Stainless steel  |
| Available Module Slots          | 40 vertical + eight horizontal + optional 320 position module or two iCon modules (with adapter) |
| Cycle Life                      | 20,000 cycles  |
| Max. Mating Force               | 1257 lbs [570.2 kg]  |
| Temperature                     | -55° C to 85° C  |
| Max. Weight Support             | 360 lbs @ 12" [163.3 kg @ 30.5 cm]   |



The G40x Pull-Thru receiver is a two tier, 48 module system that enables pull through removal of 40 VPC modules, InterConnect Adapters, and test instrumentation in one piece. It offers eight standard 90 Series module slots, plus space for two iCon modules, as needed. The G40x Pull-Thru is slide mounted, to enable easy access to the discrete-wiring modules.

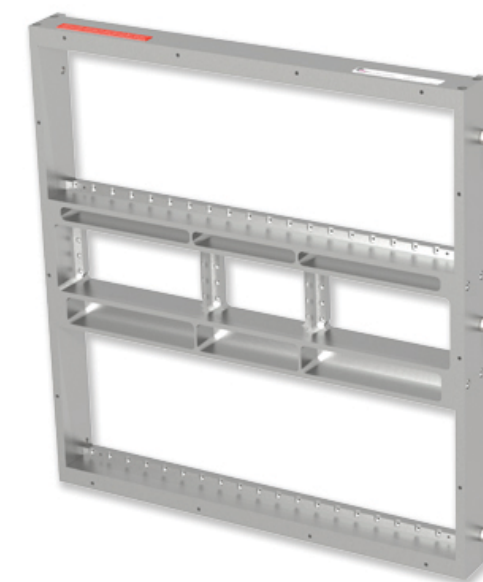
## G40x ITA • Pull-Thru • 48 Module Solution



ITA, G40x, 48 Module, Pull-Thru • Part # 410 120 246

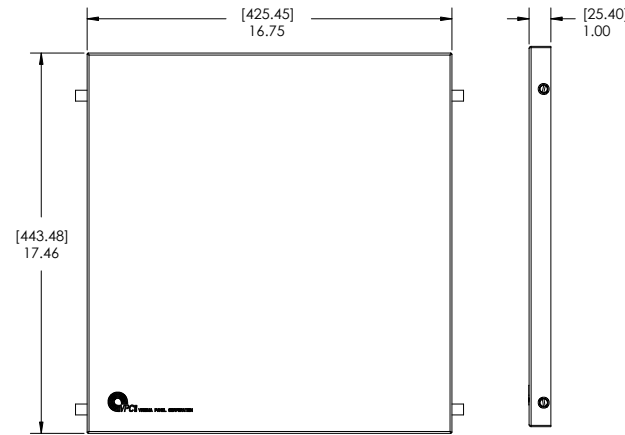
### ITA Specifications

|                        |  |
|------------------------|--|
| Weight                 | 31.4 lbs [14.2 kg]   |
| Frame Material         | Chromated aluminum   |
| Available Module Slots | 40 vertical + eight horizontal + optional 320 position module or two iCon modules (with adapter) |
| Cycle Life             | 20,000 cycles  |
| Temperature            | -55° C to 85° C  |
| Max. Mating Force      | 1257 lbs [570.2 kg]  |
| Max. Weight Support    | 80 lbs @ 12" [36 kg @ 30.5 cm]   |



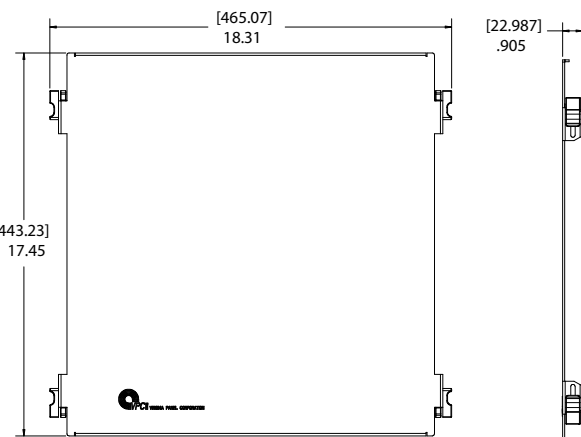
This 48 module Pull-Thru ITA can be used in a number of applications to accomplish the required connection to the unit under test (UUT). You can mount a VPC enclosure or customize your own fixture to be attached to the ITA frame. A wide range of ITA modules are available separately for user configuration.

### G40x Pull-Thru • Accessories



The receiver protective cover protects contacts and modules when the receiver is not in use.

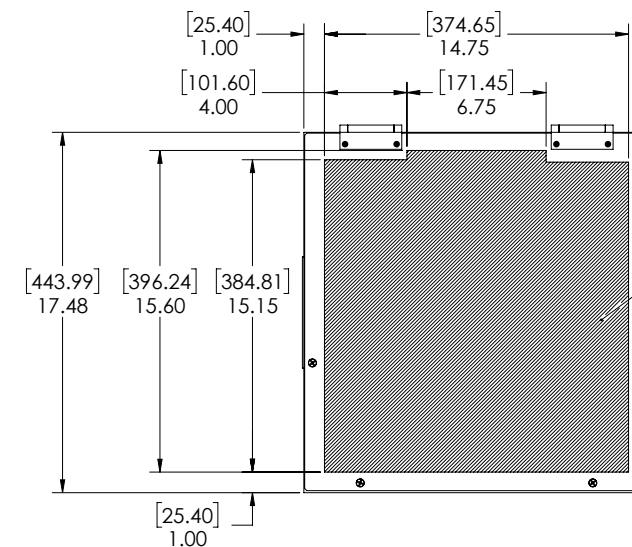
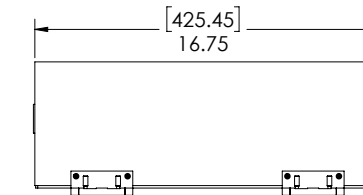
Protective Cover, G40x, Receiver, Pull-Thru • Part # 310 113 686



The ITA protective cover protects contacts and modules when the ITA is not in use.

Protective Cover, G40X, ITA, Pull-Thru, Aluminum • Part # 410 114 144

### G40x Pull-Thru • Accessories



SHADED REGION REPRESENTS RECOMMENDED MACHINABLE AREA ON COVER. FEATURES OUTSIDE OF THIS REGION MAY INTERFERE WITH EXISTING COMPONENTS OR FEATURES.

This 48 module enclosure features a hinged cover plate with ¼-turn hardware that provides easy access to the ITA wiring.



Enclosure, G40x, Hinged Cover Plate, 6" Deep • Part # 410 114 115

# Explore the choices

9025 & 9050

## 9025

### Rack Mounting Applications

- The high I/O systems are ideal for rack mounting applications
- Mount to a Vertical Hinged Mounting Frame or slides for access to wiring and instrumentation
- Time savings with rapid changeover



### Customize for Various Testing Needs

- Multiple ITAs are pre-configured for different tests
- Intermix connector modules to build custom interfaces
- Accommodate vacuum or mechanical fixturing



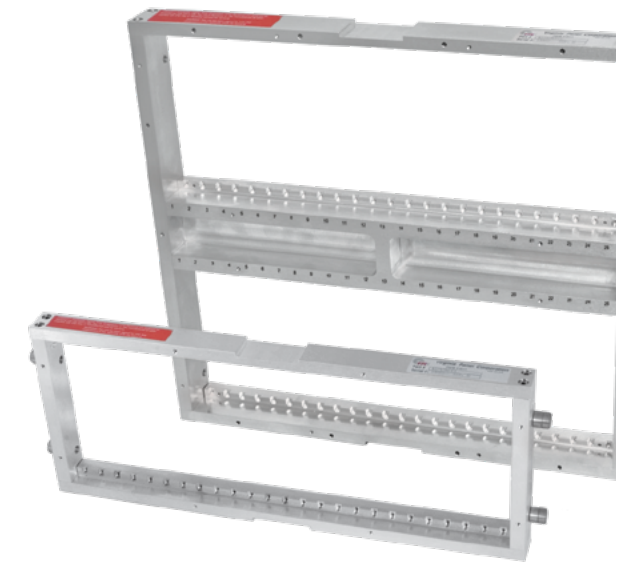
## 9025

## 9025 Receiver

- Enhanced mechanical advantage with 30% reduced handle force and lighter weight
- Available in rack and slide mount configurations
- Platform options with the 9025TR
- Silk screening enables easy installation and coordination of ITA and receiver modules

### Standard ITAs

- Use VPC ITAs with standard enclosures
- Customized enclosures available to fit your testing needs
- Guarantee a precise fit to VPC receivers
- Front and rear mount ITAs enable easy attachment to enclosures



## 9025 • 25 Module Solution

VPC's receivers meet the standards which are essential to support advanced interconnect solution requirements. Connector modules can be intermixed to establish custom interfaces which are ideal for functional and system testing applications.

### Features and Benefits

- Precision engagement mechanism engineered to mate over 5,900 contacts
- Standard ITA frame accommodates multiple enclosure types for a variety of fixture options
- Modular and reconfigurable for evolving tests requirements
- Reliable connectivity beyond 20,000 cycles
- Quick and easy integration and maintenance
- Wide range of I/O options including signal, coaxial, power, pneumatic, vacuum, thermocouple, fiber optic, and PCB solutions
- An integrated microswitch shuts power off when the ITA disengages
- Designed to fit a standard 19" rack
- Mounting options include: Vertical Hinged Mounting Frames and slide mount

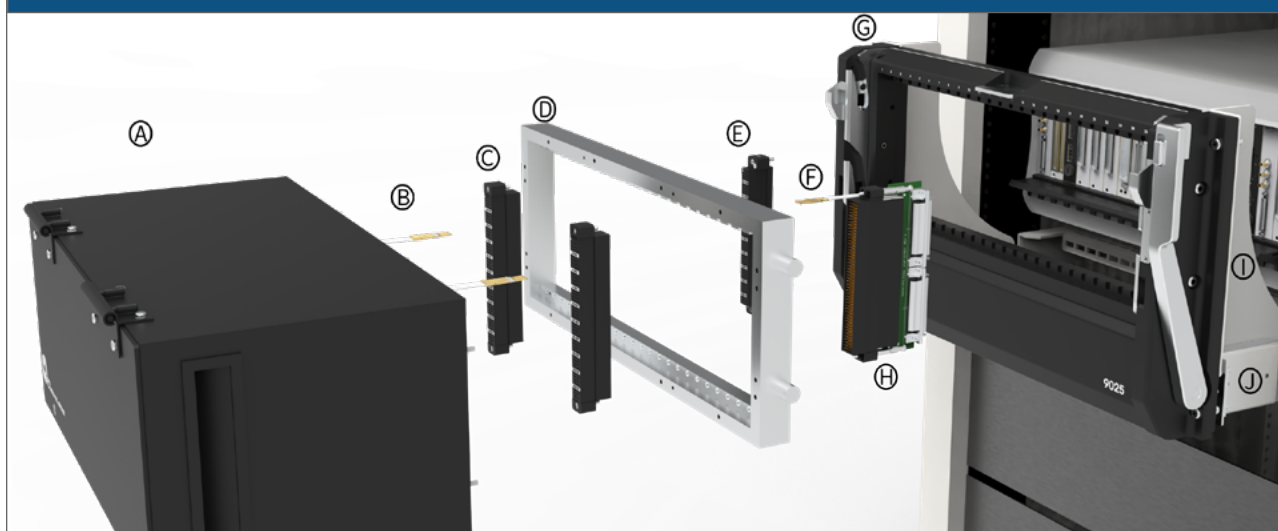


9025 Receiver



Slide Mount 9025 Receiver

### 9025 Slide Configuration



- A. ITA Enclosure
- E. Receiver Module
- I. Mounting Flanges
- B. ITA Patchcords
- F. Receiver Patchcords
- J. Slide Kit
- C. ITA Module
- G. 9025 Receiver
- D. ITA Frame
- H. PCB Adapter

| Part #                 | Description   |
|------------------------|---|
| <b>RECEIVERS</b>       |   |
| 310 104 437            | Receiver, 9025, 25 Module, with Slide Mounting Kit (slide kit required)               |
| 310 104 420            | Receiver, 9025, 25 Module, Single Tier  |
| 310 104 431            | Receiver, 9025, 25 Module, EMI Gasket   |
| <b>ITAS</b>            |   |
| 410 104 111            | ITA, 9025, 25 Module, Single Tier   |
| 410 104 304            | ITA, 9025, 25 Module, EMI, with 8" Enclosure  |
| 410 104 306            | ITA, 9025, 25 Module, Single Tier, for EMI  |
| 410 104 505            | ITA, 9025, 25 Module, Single Tier, 1.5" Thick   |
| <b>ENCLOSURES</b>      |   |
| 410 112 198            | Enclosure, 25 Module, Hinged Cover Plate, 4" Deep                                     |
| 410 112 273            | Enclosure, 25 Module, Hinged Cover Plate, 8" Deep                                     |
| 410 112 368            | Enclosure, 25 Module, Large   |
| <b>SLIDE KITS</b>      |   |
| 310 113 451            | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180lbs                               |
| 310 113 411            | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180lbs                               |
| 310 113 500            | 36" Slide Kit, Fits 34"-28" Deep Racks, Supports 180lbs                               |
| <b>MOUNTING FRAMES</b> |   |
| 310 113 316            | Vertical Hinged Mounting Frame, 9025, 8U  |
| 310 113 320            | Vertical Hinged Mounting Frame, 9025, 9U  |
| <b>ADAPTER PLATE</b>   |   |
| 410 112 976            | Adapter Plate, 9050 Enclosure to 9025 ITA (ITA Positioned on Lower Part of Enclosure) |
| <b>ACCESSORIES</b>     |   |
| 310 113 163            | Protective Cover, 9025, 9025VXI & 9025TR, Receiver                                    |
| 410 112 578            | Protective Cover, 9025, 9025VXI & 9025TR, ITA   |
| 310 113 542            | Instrument Bracket Mounting Block Kit, for use with Pickering PXI Chassis             |

## 9025TR • 25 Module Solution

The 9025TR has over twice the I/O as the G12 and is outfitted with the same 20" platform to support your enclosure while engaging and disengaging. The front-mount ITA is user-friendly, allowing the enclosure or fixture to be fastened from the mating side. The docking feature of the 9025TR provides an easy way of guiding a fixture into position prior to engagement. Runners along the platform provide a smooth-sliding action, ideal when using fixtures up to 180 lbs. VPC modules can be intermixed to establish flexible custom interfaces which are ideal for functional and system testing applications. The 9025TR uses all standard modules and contacts, and includes a microswitch.

### Features and Benefits

- 20" platform supports ITA when not in use (up to 180 lbs)
- Handle can be installed on either the right or left side of the receiver
- Accommodates over 5,900 signal contacts
- Accessories available: slide kit, support legs, retractable keyboard kit, and instrument bracket with strain relief

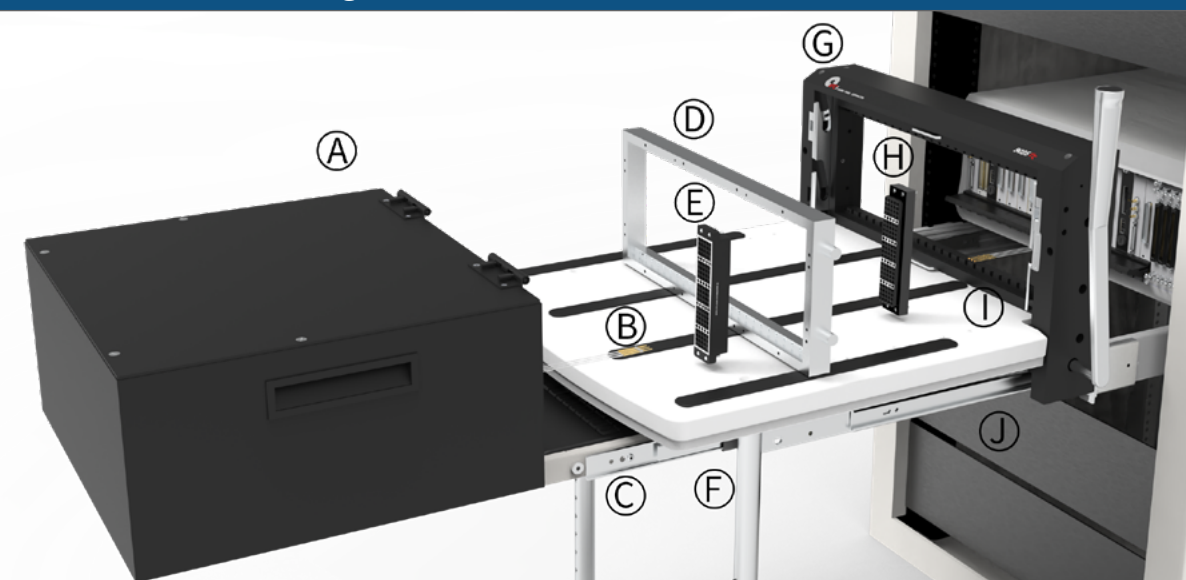


9025TR Receiver



Slide Mount 9025TR Receiver

### 9025TR Slide Configuration

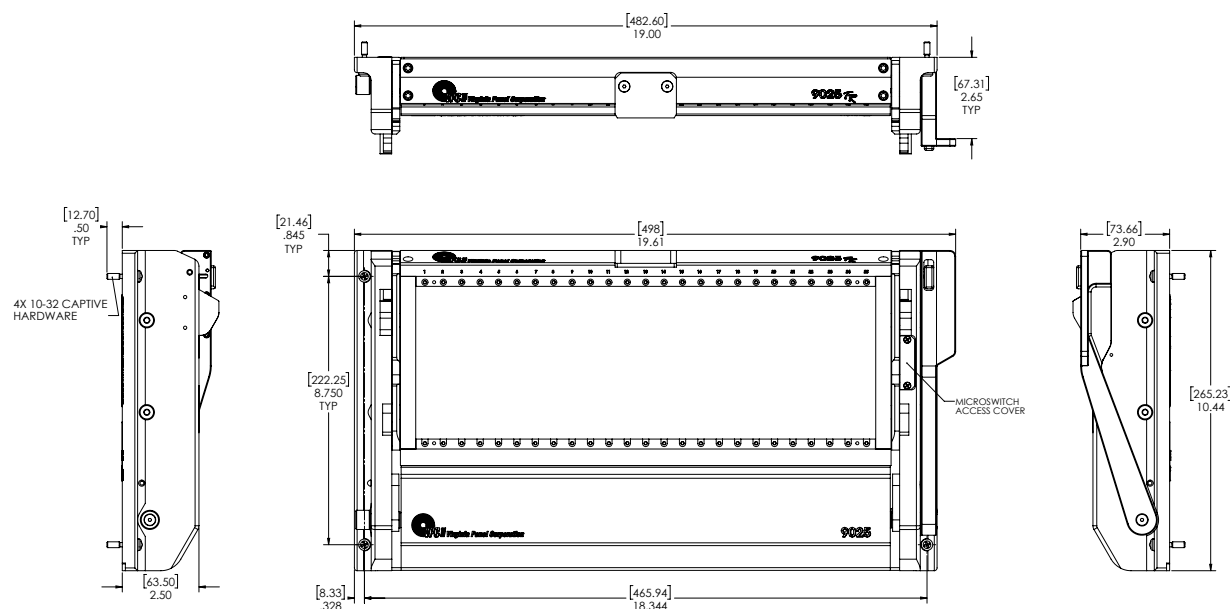


- |                   |                    |                        |
|-------------------|--------------------|------------------------|
| A. ITA Enclosure  | E. ITA Module      | I. Receiver Patchcords |
| B. ITA Patchcords | F. Leg Kit         | J. Slide Kit           |
| C. Keyboard Tray  | G. Receiver Frame  |                        |
| D. ITA Frame      | H. Receiver Module |                        |

| Part #             | Description   |
|--------------------|---|
| <b>RECEIVERS</b>   |   |
| 310 104 435        | Receiver, 9025TR, 25 Module, with 20" Platform (slide kit required)                                     |
| 310 104 436        | Receiver, 9025TR, 25 Module, with 20" Platform, for Tabletop  |
| <b>ITAS</b>        |   |
| 410 104 111        | ITA, 9025, 25 Module, Single Tier   |
| 410 104 505        | ITA, 9025, 25 Module, Single Tier, 1.5" Thick   |
| <b>ENCLOSURES</b>  |   |
| 410 112 273        | Enclosure, 25 Module, Hinged Cover Plate, 8" Deep   |
| 410 112 368        | Enclosure, 25 Module, Large   |
| 410 112 823        | Enclosure, 25 Module, Hinged Cover Plate, 15" Deep  |
| 410 114 103        | Enclosure, 25 Module, Front Mount, Sloped, with G10 Cover   |
| 410 114 004        | Enclosure, 25 Module, Front Mount, Sloped, for 9025TR   |
| <b>SLIDE KITS</b>  |   |
| 310 113 409        | 20" Slide Kit, Fits 18"-22" Deep Racks, Supports 180 lbs.   |
| 310 113 410        | 24" Slide Kit, Fits 22"-26" Deep Racks, Supports 180 lbs.   |
| 310 113 451        | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180 lbs.   |
| 310 113 411        | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180 lbs.   |
| 310 113 500        | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180 lbs.   |
| <b>ACCESSORIES</b> |   |
| 310 113 163        | Protective Cover, 9025, 9025VXI & 9025TR, Receiver  |
| 410 112 578        | Protective Cover, 9025, 9025VXI & 9025TR, ITA   |
| 410 114 133        | Enclosure Accessory Kit, Gas Spring for Sloped Enclosure  |
| 310 113 424        | Cable Tray, Slide Configuration, for Strain Relief and Cable Management, for 28" and longer slides only |
| 310 113 439        | Keyboard Tray Kit, Slide Configuration, Keyboard with Touchpad Mouse Included                           |
| 310 113 453        | Instrument Bracket Kit with Strain Relief, for 28" and longer slides only                               |
| 310 113 494        | Rack Extender Kit, 9025TR, 1.5" Deep  |
| 310 113 566        | Adjustable Leg Kit for the 20" Platform, 27"-36", Supports 350 lbs.                                     |



## 9025 Receiver • 25 Module Solution



Receiver, 9025, 25 Module, Single Tier • **Part # 310 104 420**

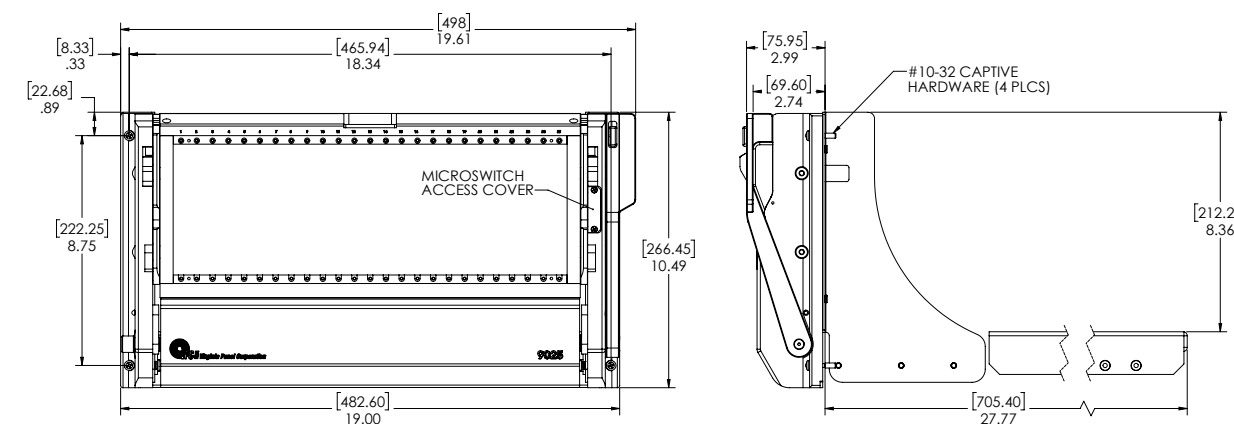
### Receiver Specifications

|                                 |                                |
|---------------------------------|--------------------------------|
| Weight                          | 12.6 lbs [5.72 kg]             |
| Frame Material                  | Anodized aluminum              |
| Slide Material                  | Nickel plated steel            |
| Linkage, Handle, Latch Material | Stainless steel                |
| Available Module Slots          | 25 positions                   |
| Cycle Life                      | 20,000 cycles                  |
| Temperature                     | -55° C to 85° C                |
| Max. Weight Support             | 80 lbs @ 12" [36 kg @ 30.5 cm] |
| Max. Mating Force               | 1102 lbs [499.9 kg]            |



The 25 module receiver is designed to fit into a standard 19" rack. It is equipped with a locking handle to ensure your contacts are engaged. A standard integrated microswitch shuts off power when the ITA disengages from the receiver.

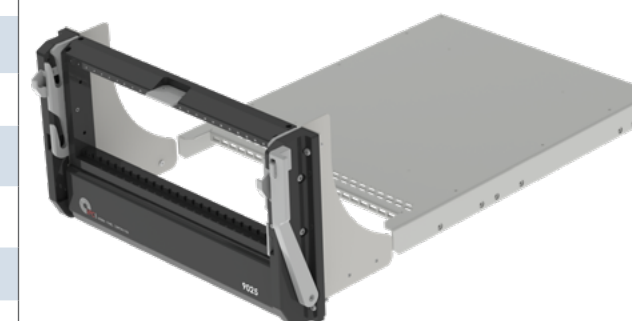
## 9025 Receiver with Slide Mount Kit • 25 Module Solution



Receiver, 9025, 25 Module, with Slide Mounting Kit (slide kit required) • **Part # 310 104 437**

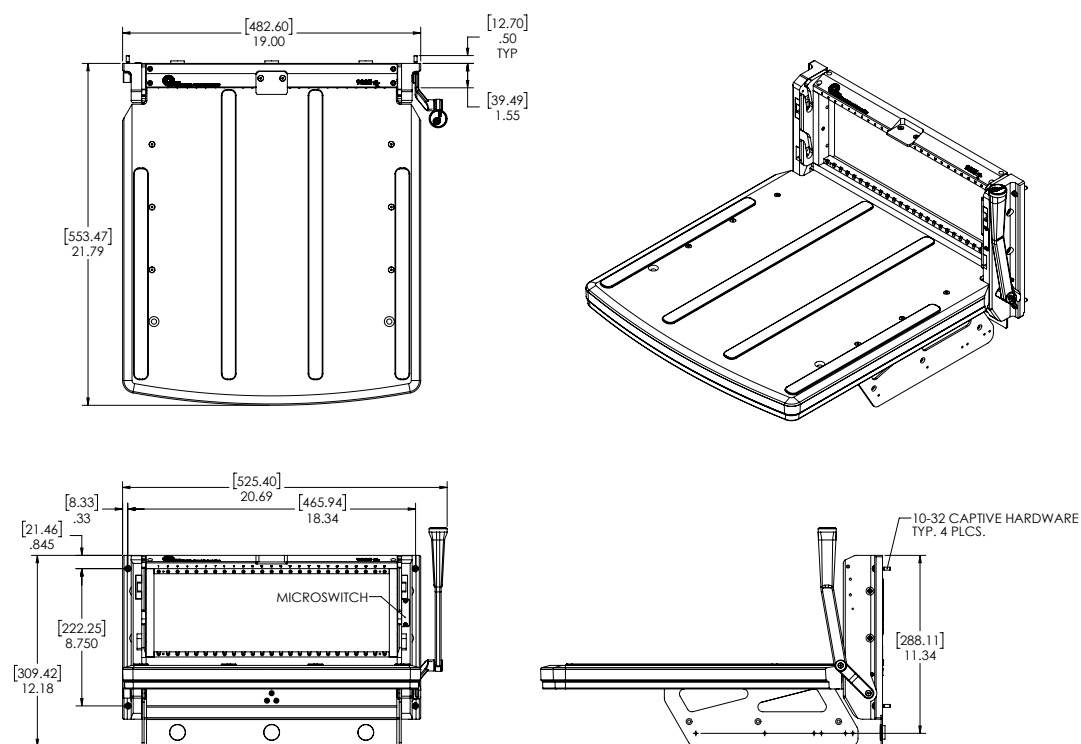
### Receiver Specifications

|  |                                |
|--|--------------------------------|
| Weight                                       | 18.3 lbs [8.3 kg]              |
| Frame Material                               | Anodized aluminum              |
| Slide Material                               | Nickel plated steel            |
| Linkage, Handle, Latch Material              | Stainless steel                |
| Mounting Flange, Instrument Bracket Material | Aluminum                       |
| Available Module Slots                       | 25 positions                   |
| Cycle Life                                   | 20,000 cycles                  |
| Temperature                                  | -55° C to 85° C                |
| Max. Weight Support                          | 80 lbs @ 12" [36 kg @ 30.5 cm] |
| Max. Mating Force                            | 1102 lbs [499.9 kg]            |



This 9025 receiver is designed to work with a slide kit and includes a mounting bracket, flanges, and instrument bracket. A slide kit is required for use.

## 9025TR Receiver with Platform • 25 Module Solution



Receiver, 9025TR, 25 Module, with 20" Platform (slide kit required) • Part # 310 104 435

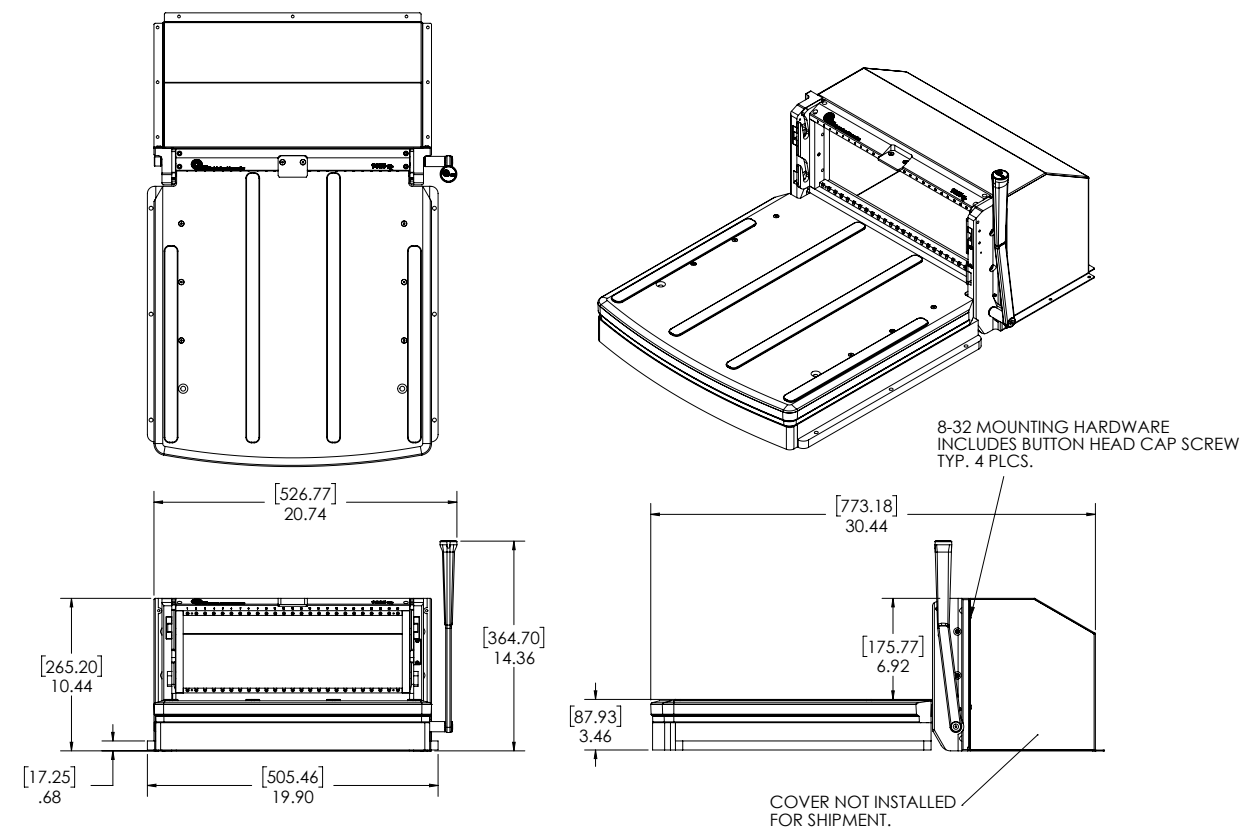
### Receiver Specifications

|                                 |                                    |
|---------------------------------|------------------------------------|
| Weight                          | 29.50 lbs [13.38 kg]               |
| Frame Material                  | Anodized aluminum                  |
| Slide Material                  | Nickel plated steel                |
| Linkage, Handle, Latch Material | Stainless steel                    |
| Available Module Slots          | 25 positions                       |
| Cycle Life                      | 20,000 cycles                      |
| Temperature                     | -55° C to 85° C                    |
| Max. Mating Force               | 1378 lbs [625.1 kg]                |
| Max. Weight Support             | 180 lbs @ 12" [81.65 kg @ 30.5 cm] |



Runners along the platform provide a smooth-sliding action, ideal when using fixtures up to 180 lbs. When used in conjunction with VPC slide mounts and leg kit, the receiver can support 350 lbs. The 9025TR can be adapted to accommodate vacuum or mechanical fixturing. The 9025TR uses all standard 90 Series modules and contacts, includes a microswitch and is available with optional leg and keyboard tray kits. A slide kit is required for use.

## 9025TR Receiver for Tabletop • 25 Module Solution



Receiver, 9025TR, 25 Module, with 20" Platform, for Tabletop • Part # 310 104 436

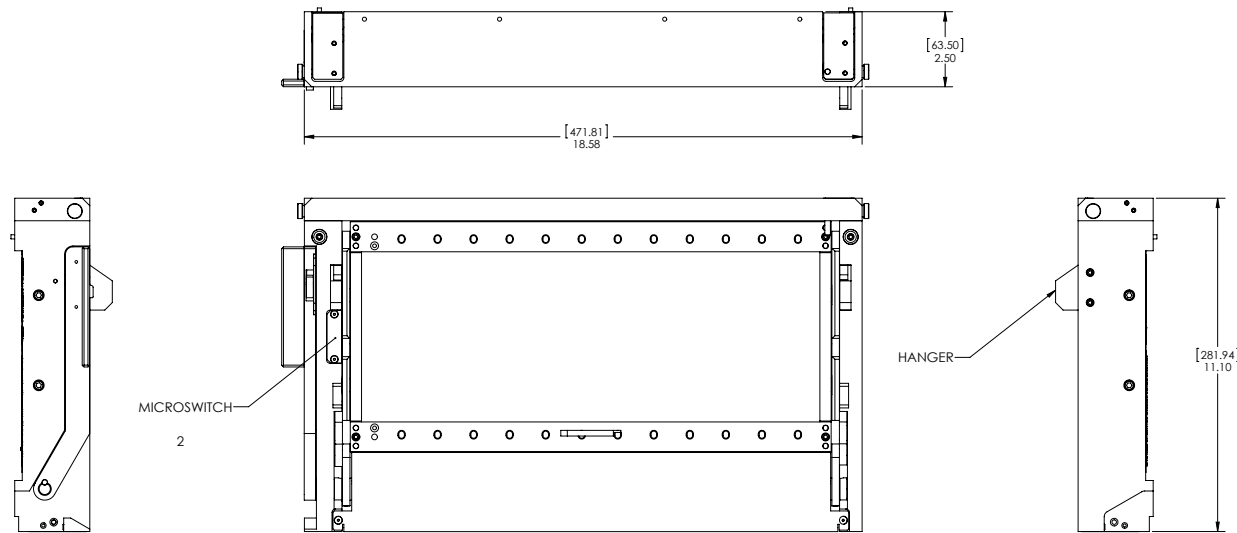
### Receiver Specifications

|                                 |                     |
|---------------------------------|---------------------|
| Weight                          | 38.1 lbs [17.28 kg] |
| Frame Material                  | Anodized aluminum   |
| Slide Material                  | Nickel plated steel |
| Linkage, Handle, Latch Material | Stainless steel     |
| Available Module Slots          | 25 positions        |
| Cycle Life                      | 20,000 cycles       |
| Temperature                     | -55° C to 85° C     |
| Max. Mating Force               | 1378 lbs [625.1 kg] |



The 9025TR for tabletop allows the receiver to be mounted to any horizontal surface. Four removable rubber feet enable permanent tabletop mounting configurations. Rear covers are available to protect wiring from the receiver to the test equipment.

## 9025 VXI C-Size Interlocking • 25 Module Solution



Receiver, 9025, 25 Module VXI, C-Size Interlocking • Part # 310 104 127

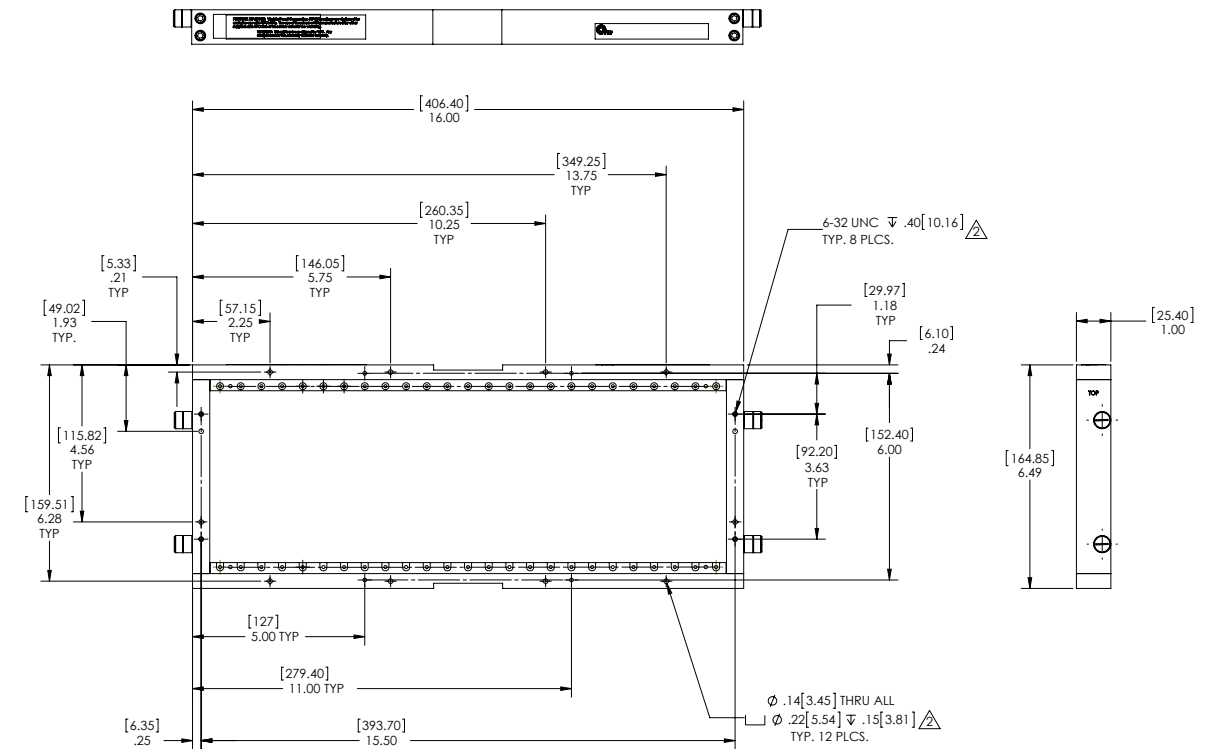
### Receiver Specifications

|                                 |                                |
|---------------------------------|--------------------------------|
| Weight                          | 16.06 lbs [7.29 kg]            |
| Frame Material                  | Anodized aluminum              |
| Slide Material                  | Nickel plated steel            |
| Linkage, Handle, Latch Material | Stainless steel                |
| Available Module Slots          | 25 positions                   |
| Cycle Life                      | 20,000 cycles                  |
| Temperature                     | -55° C to 85° C                |
| Max. Mating Force               | 605 lbs [274.4 kg]             |
| Max. Weight Support             | 80 lbs @ 12" [36 kg @ 30.5 cm] |



The 25 module VXI receiver allows you to use 12 pre-wired InterConnect adapters. It also hinges down for direct access to the instruments. It is equipped with a locking handle to ensure your contacts are engaged. A standard integrated microswitch shuts off power when the ITA disengages from the receiver.

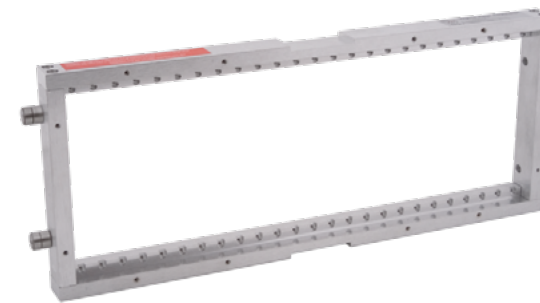
## 9025 ITA • 25 Module Solution



ITA, 9025, 25 Module, Single Tier • Part # 410 104 111

### ITA Specifications

|                        |                    |
|------------------------|--------------------|
| Weight                 | 2.6 lbs [1.18 kg]  |
| Frame Material         | Chromated aluminum |
| Available Module Slots | 25 positions       |
| Cycle Life             | 20,000 cycles      |
| Temperature            | -55° C to 85° C    |
| Max. Mating Force      | 787 lbs [357 kg]   |

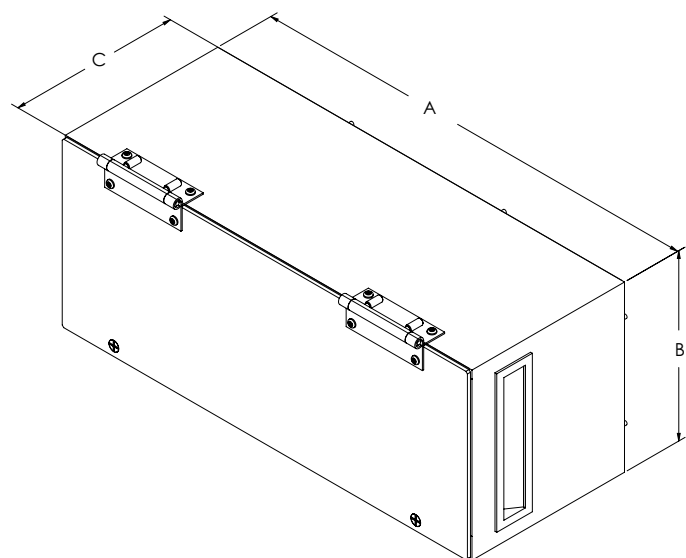


This ITA can accept both front and rear mount enclosures. It supports a maximum load of 787 lbs to achieve .015" total deflection. If application calls for a load that exceeds 787 lbs, please refer to VPC's 1.5" thick 9025 ITA Part # 410 104 505.

## 9025 ITA Enclosure

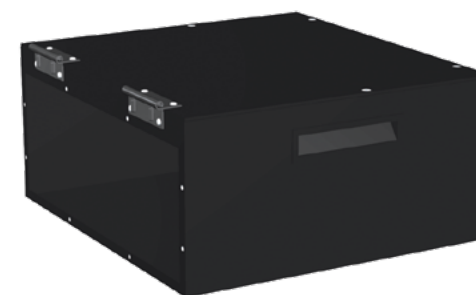
Enclosures for 25 module ITAs are made of aluminum and painted black. The top of the enclosure has a hinged cover plate with ¼ turn hardware that provides easy access to the ITA's wiring when required. The 9025 ITA can accept both front and rear mount enclosures.

All cover plates are black anodized. Screws for mounting the enclosures to the ITA are included. Handles are provided for easy removal of the ITA from the receiver.



| Part #      | Description  | A             | B              | C              |
|-------------|--|---------------|----------------|----------------|
| 410 112 198 | Enclosure, 25 Module, Hinged Cover Plate, 4" Deep                      | 16.00 [406.4] | 6.48 [164.6]   | 4.00 [101.6]   |
| 410 112 336 | Enclosure, 50 Module, 50 Module 4" Adapter for 25 Module, Hinged Cover | 16.00 [406.4] | 12.46 [316.48] | 4.12 [104.648] |
| 410 112 273 | Enclosure, 25 Module, Hinged Cover Plate, 8" Deep                      | 16.00 [406.4] | 6.48 [164.6]   | 8.00 [203.2]   |
| 410 112 823 | Enclosure, 25 Module, Hinged Cover Plate, 15" Deep                     | 16.00 [406.4] | 7.35 [186.69]  | 14.97 [380.28] |
| 410 112 368 | Enclosure, 25 Module, Large  |               |                |                |
| 410 114 103 | Enclosure, 25 Module, Front Mount, Sloped, for 9025TR, w/G10 Cover     |               |                |                |

## 9025 Accessories



Made of aluminum, the enclosure body is painted black and features a hinged cover plate with ¼ turn hardware that provides easy access to the ITA wiring. The enclosure is secured to the ITA by 12 #4 socket head cap screws.

The rack extender kit is used for mounting to racks with mounting rails recessed more than 1". It is made of aluminum with a black anodized finish.

Enclosure, 25 Module, Hinged Cover Plate, 15" Deep • **Part # 410 112 823**

Rack Extender Kit, 9025TR, 1.5" Deep  
**Part # 310 113 494**



This 25 module enclosure is made of powder coated aluminum. The top of the enclosure has a G10 hinged cover plate with ¼-turn hardware that provides easy access to the ITA wiring when required.

This 25 module enclosure is made of powder coated aluminum. The top of the enclosure has a hinged cover plate with ¼-turn hardware that provides easy access to the ITA wiring when required.

Enclosure, 25 Module, Front Module, Sloped, for 9025TR, with G10 Cover • **Part # 410 114 103**

Enclosure, 25 Module, Front Mount, Sloped, for 9025TR • **Part # 410 114 004**



The aluminum receiver protective cover protects contacts and modules when the ITA is not in use.

The aluminum ITA protective cover protects contacts and modules when the ITA is not in use.

Protective Cover, 9025, 9025TR Receiver  
**Part # 310 113 163**

Protective Cover, 9025, 9025TR ITA  
**Part # 410 112 578**

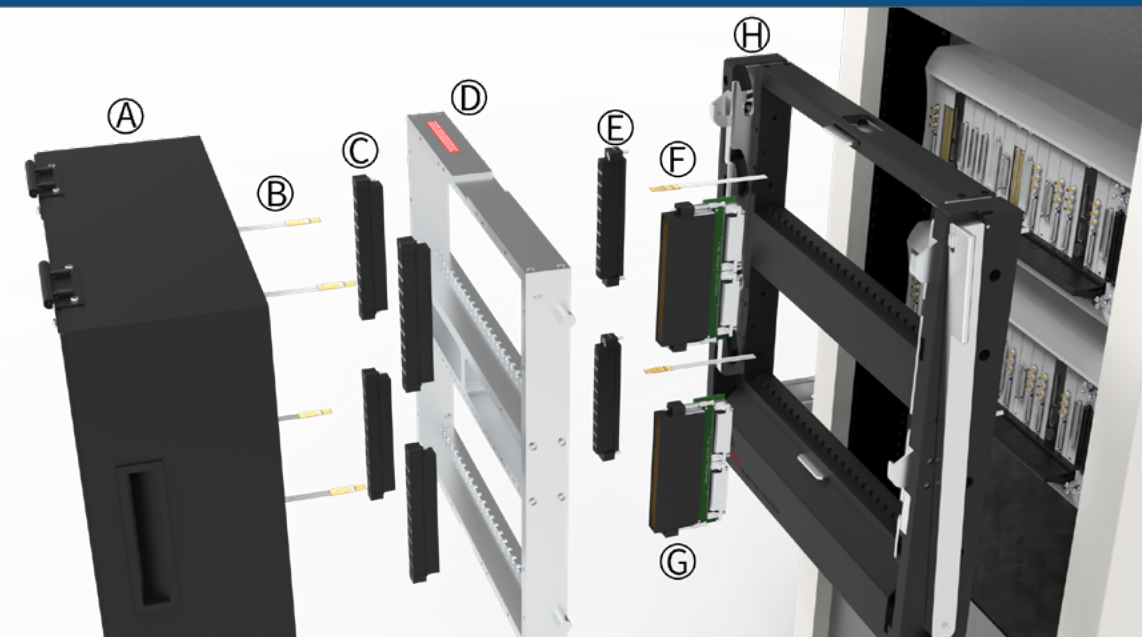
## 9050 • 50 Module Solution

The rack mountable 9050 receiver is designed to accept the 9025 and 9050 ITAs and is essential to support advanced interconnect solution requirements. The receiver hinges down to give the user access to instruments in the rack. The 50 module discrete-wiring receiver is available in rack mount, slide mount, and platform slide mount versions. The slide and rack mount options can accept two 9025 ITAs in addition to the standard 50 module ITA. The 50 module solution can be adapted to accommodate vacuum or mechanical fixturing. Connector modules can also be intermixed to establish custom interfaces, which are ideal for functional and system testing applications.

### Features and Benefits

- Precision engineered engagement mechanism
  - Standard ITA frame accommodates multiple enclosure types for a variety of fixture options
  - Modular and reconfigurable for evolving test requirements
  - Reliable connectivity beyond 20,000 cycles
  - Quick and easy integration and maintenance
  - Wide range of I/O options including signal, coaxial, power, pneumatic, vacuum, thermocouple, fiber optic, and PCB solutions
  - Designed to fit a standard 19" rack
- An integrated microswitch that shuts power off when the ITA disengages
  - Mounting options include: rack mount, slide mount, and platform slide mount

### 9050 Rack Mount Configuration

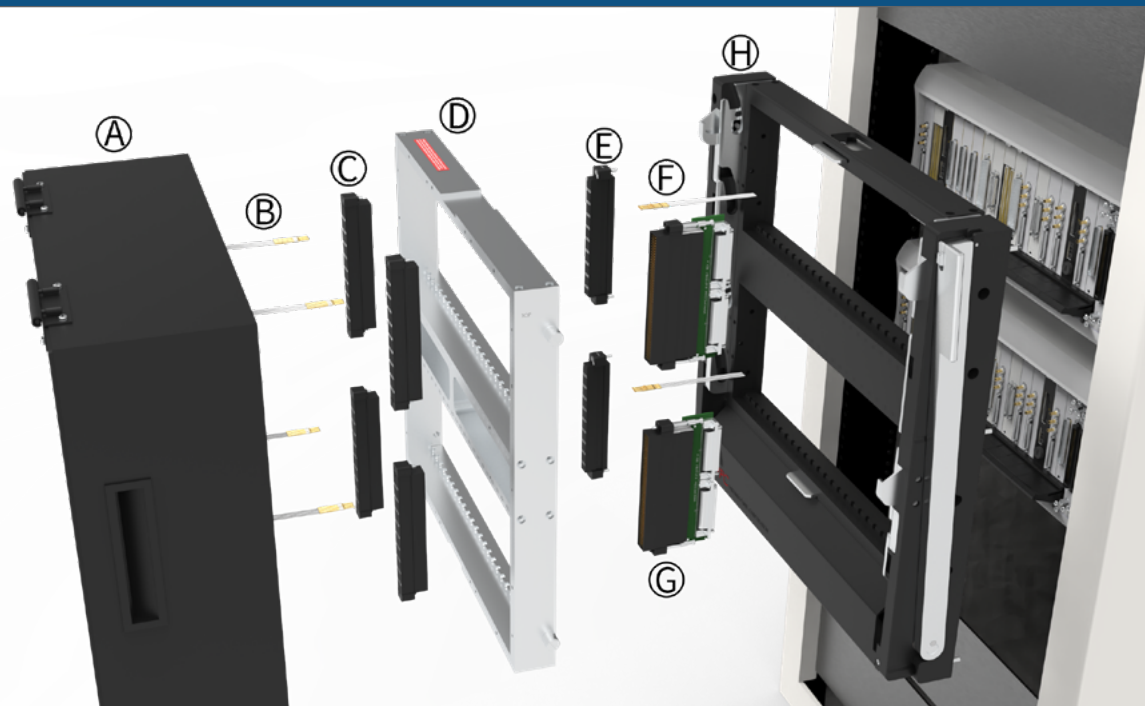


- A. ITA Enclosure
- D. ITA Frame
- G. PCB Adapter
- B. ITA Patchcords
- E. Receiver Module
- H. Receiver Frame
- C. ITA Module
- F. Receiver Patchcords

| Part #             | Description   |
|--------------------|---|
| <b>RECEIVER</b>    |   |
| 310 104 248        | Receiver, 9050, 50 Module, VXI and Discrete Wiring, Double Tier** |
| <b>ITAS</b>        |   |
| 410 104 538        | ITA, 9050, 50 Module, VXI and Discrete Wiring, Double Tier        |
| 410 104 111        | ITA, 9025, 25 Module, Single Tier                                 |
| <b>ENCLOSURES</b>  |   |
| 410 112 375        | Enclosure, 50 Module, Hinged Cover Plate, 8" Deep                 |
| 410 112 463        | Enclosure, 50 Module, Hinged Cover Plate, 6" Deep                 |
| 410 112 519        | Enclosure, 50 Module, Hinged Cover Plate, 12" Deep                |
| 410 112 770        | Enclosure, 50 Module, L-Shaped                                    |
| <b>ACCESSORIES</b> |   |
| 310 113 285        | Protective Cover, 9050, VXI and Discrete Wiring, Receiver         |
| 410 112 579        | Protective Cover, 9050, ITA                                       |
| 410 112 578        | Protective Cover, 9025, 9025VXI & 9025TR, ITA                     |
| 410 112 582        | Protective Cover, 9050, VXI and Discrete Wiring, ITA              |

\*\* With a typical contact load, approximately 35 lbs force is needed to engage the receiver handle. Consult VPC for increased contact load applications.

9050 Slide Configuration

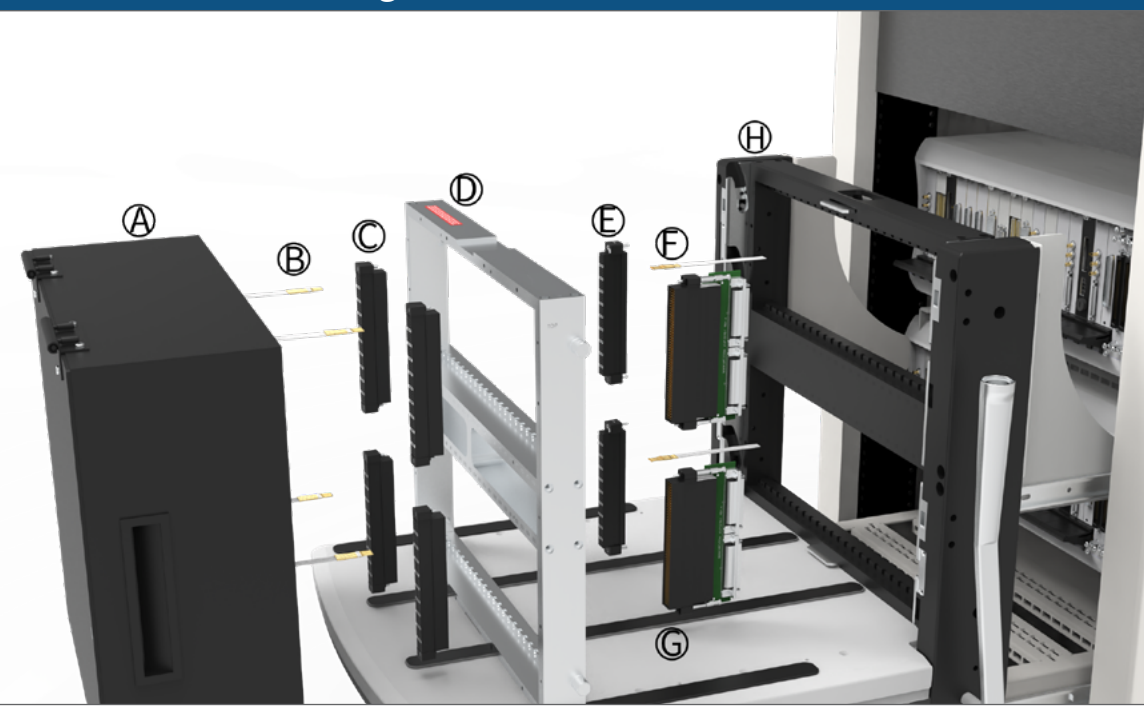


- A. ITA Enclosure
- B. ITA Patchcords
- C. ITA Module
- D. ITA Frame
- E. Receiver Module
- F. Receiver Patchcords
- G. PCB Adapter
- H. Receiver Frame

| Part #  | Description   |
|---|---|
| <b>RECEIVERS</b>  |   |
| 310 104 402   | Receiver, 9050, 50 Module, with Slide Mounting Kit (slide kit required)** |
| 310 104 429   | Receiver, 9050, 50 Module, Dual Discrete Wiring Tiers, EMI Gasket         |
| <b>ITAS</b>   |   |
| 410 104 538   | ITA, 9050, 50 Module, VXI and Discrete Wiring, Double Tier                |
| 410 104 580   | ITA, 9050, 50 Module, Double Tier, EMI, with 8" Enclosure                 |
| 410 104 111   | ITA, 9025, 25 Module, Single Tier   |
| <b>ENCLOSURES</b>   |   |
| 410 112 198   | Enclosure, 25 Module, Hinged Cover Plate, 4" Deep                         |
| 410 112 336   | Enclosure, 50 Module, 50 Module 4" Adapter for 25 Module, Hinged Cover    |
| 410 112 375   | Enclosure, 50 Module, Hinged Cover Plate, 8" Deep                         |
| 410 112 368   | Enclosure, 25 Module, Large   |
| 410 112 463   | Enclosure, 50 Module, Hinged Cover Plate, 6" Deep                         |
| 410 112 519   | Enclosure, 50 Module, Hinged Cover Plate, 12" Deep                        |
| 410 112 770   | Enclosure, 50 Module, L-Shaped  |
| NOTE: The 25 module enclosures only work with the 25 module ITA |   |
| <b>SLIDE KITS</b>   |   |
| 310 113 451   | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180 lbs.                 |
| 310 113 411   | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180 lbs.                 |
| 310 113 500   | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180 lbs.                 |
| <b>ACCESSORIES</b>  |   |
| 310 113 285   | Protective Cover, 9050, VXI and Discrete Wiring, Receiver                 |
| 410 112 578   | Protective Cover, 9025, 9025VXI & 9025TR, ITA                             |
| 410 112 582   | Protective Cover, 9050, VXI and Discrete Wiring, ITA                      |

\*\* With a typical contact load, approximately 35 lbs force is needed to engage the receiver handle. Consult VPC for increased contact load applications.

9050TR Platform Configuration

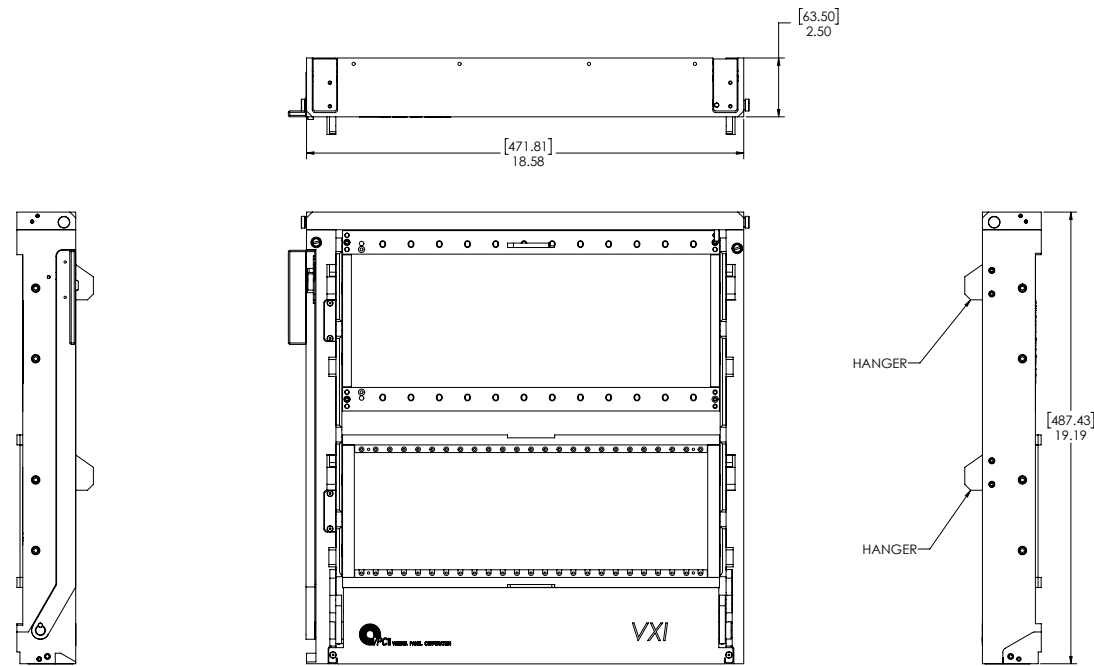


- A. ITA Enclosure
- B. ITA Patchcords
- C. ITA Module
- D. ITA Frame
- E. Receiver Module
- F. Receiver Patchcords
- G. PCB Adapter
- H. Receiver Frame
- I. Slide Kit

| Part #             | Description   |
|--------------------|---|
| <b>RECEIVER</b>    |   |
| 310 104 369        | Receiver, 9050TR, 50 Module, with 20" Platform (slide kit required)**         |
| <b>ITAS</b>        |   |
| 410 104 538        | ITA, 9050, 50 Module, VXI and Discrete Wiring, Double Tier                    |
| 410 104 111        | ITA, 9025, 25 Module, Single Tier   |
| <b>ENCLOSURES</b>  |   |
| 410 112 198        | Enclosure, 25 Module, Hinged Cover Plate, 4" Deep                             |
| 410 112 375        | Enclosure, 50 Module, Hinged Cover Plate, 8" Deep                             |
| 410 112 368        | Enclosure, 25 Module, Large   |
| 410 112 463        | Enclosure, 50 Module, Hinged Cover Plate, 6" Deep                             |
| 410 112 519        | Enclosure, 50 Module, Hinged Cover Plate, 12" Deep                            |
| 410 112 770        | Enclosure, 50 Module, L-Shaped  |
| 410 112 823        | Enclosure, 25 Module, Hinged Cover Plate                                      |
| <b>SLIDE KITS</b>  |   |
| 310 113 451        | 28" Slide Kit, Fits 26"-30" Deep Racks, Supports 180 lbs.                     |
| 310 113 411        | 30" Slide Kit, Fits 28"-32" Deep Racks, Supports 180 lbs.                     |
| 310 113 500        | 36" Slide Kit, Fits 34"-38" Deep Racks, Supports 180 lbs.                     |
| <b>ACCESSORIES</b> |   |
| 310 113 285        | Protective Cover, 9050, VXI and Discrete Wiring, Receiver                     |
| 410 112 578        | Protective Cover, 9025, 9025VXI & 9025TR, ITA                                 |
| 410 112 582        | Protective Cover, 9050, VXI and Discrete Wiring, ITA                          |
| 310 113 439        | Keyboard Tray Kit, Slide Configuration, Keyboard with Touchpad Mouse Included |
| 310 113 566        | Adjustable Leg Kit for the 20" Platform, 27"-36", Supports 350 lbs.           |

\*\* With a typical contact load, approximately 35 lbs force is needed to engage the receiver handle. Consult VPC for increased contact load applications.

## 9050 VXI and Discrete Wiring • 50 Module Solution



Receiver, 9050, 50 Module, VXI and Discrete Wiring, Double Tier • Part # 310 104 248

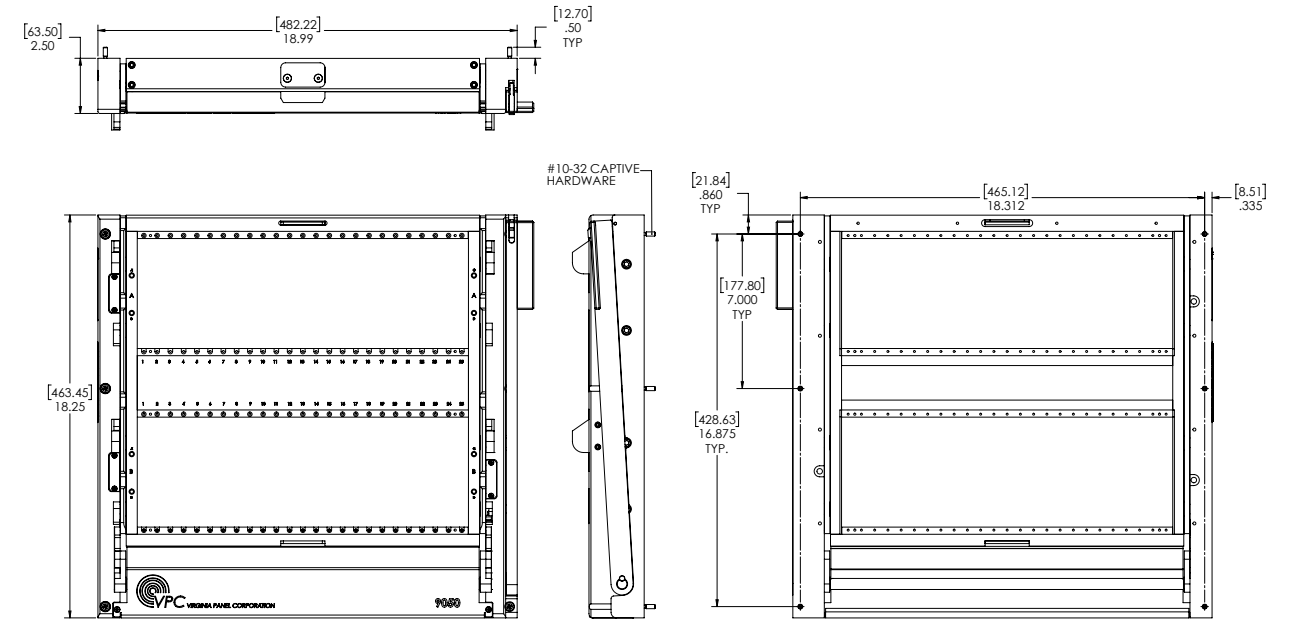
### Receiver Specifications

|                                 |                                |
|---------------------------------|--------------------------------|
| Weight                          | 25 lbs [11.34 kg]              |
| Frame Material                  | Anodized aluminum              |
| Slide Material                  | Nickel plated steel            |
| Linkage, Handle, Latch Material | Stainless steel                |
| Available Module Slots          | 50 psitions                    |
| Cycle Life                      | 20,000 cycles                  |
| Temperature                     | -55° C to 85° C                |
| Max. Mating Force               | 1331 lbs [603.7 kg]            |
| Max. Weight Support             | 80 lbs @ 12" [36 kg @ 30.5 cm] |



The 9050 VXI receiver's op tier accommodates VXI instruments and accepts VPC interconnect adapters. The bottom tier is for discrete wiring.

## 9050 Dual Discrete Wiring • 50 Module Solution



Receiver, 9050, 50 Module, Dual Discrete Wiring Tiers • Part # 310 104 368

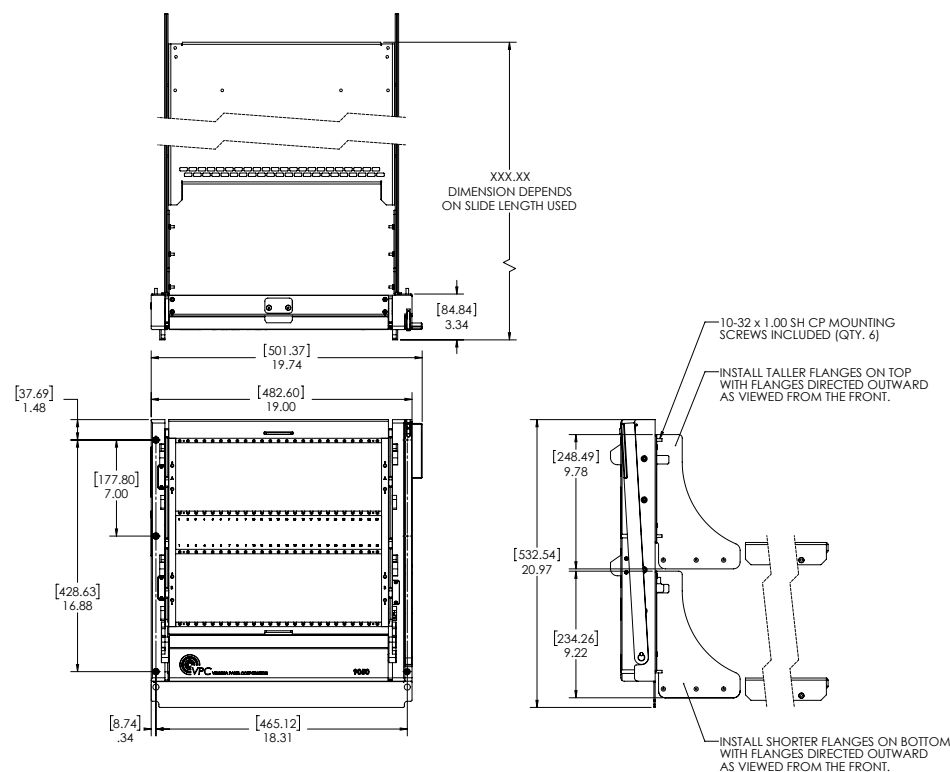
### Receiver Specifications

|                                 |                                |
|---------------------------------|--------------------------------|
| Weight                          | 30.4 lbs [13.79 kg]            |
| Frame Material                  | Anodized aluminum              |
| Slide Material                  | Nickel plated steel            |
| Linkage, Handle, Latch Material | Stainless steel                |
| Available Module Slots          | 50 positions                   |
| Cycle Life                      | 20,000 cycles                  |
| Temperature                     | -55° C to 85° C                |
| Max. Mating Force               | 1870 lbs [848.2 kg]            |
| Max. Weight Support             | 80 lbs @ 12" [36 kg @ 30.5 cm] |



The 9050 receiver is a rugged system devised to accommodate high I/O. With high contact point availability, the 50 module receiver is suited for larger test and measurement systems. Both tiers are designed for discrete wiring and can accommodate individual 9025 ITAs.

## 9050 Receiver for Slide Mount • 50 Module Solution



Receiver, 9050, 50 Module, with Slide Mounting Kit (slide kit required) • Part # 310 104 402

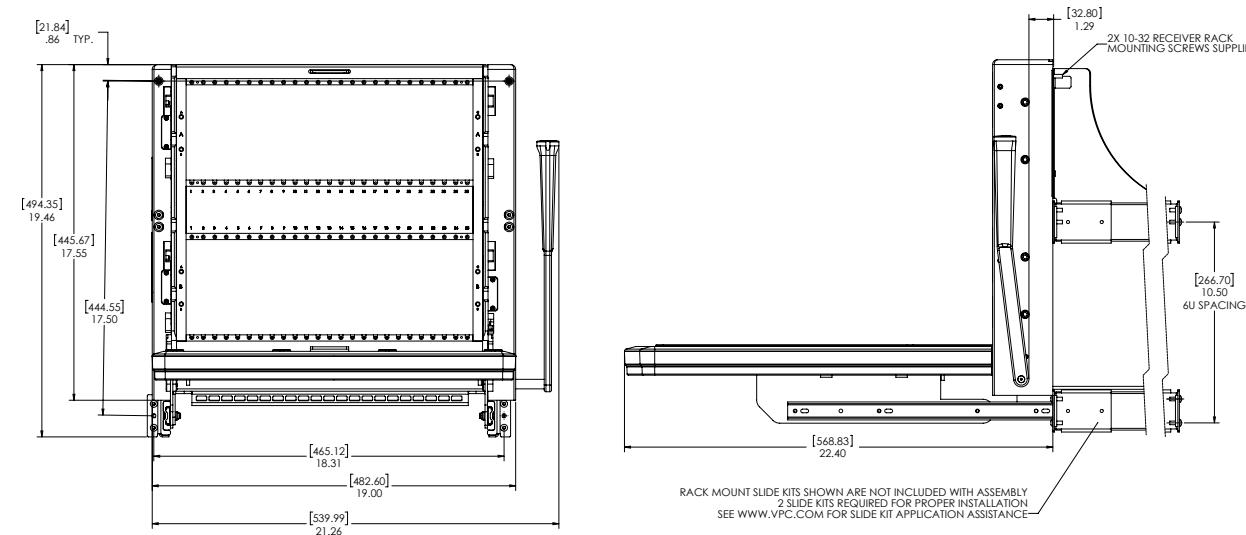
### Receiver Specifications

|                                 |                                    |
|---------------------------------|------------------------------------|
| Weight                          | 41.7 lbs [18.9 kg]                 |
| Frame Material                  | Anodized aluminum                  |
| Slide Material                  | Nickel plated steel                |
| Linkage, Handle, Latch Material | Stainless steel                    |
| Available Module Slots          | 50 positions                       |
| Cycle Life                      | 20,000 cycles                      |
| Temperature                     | -55° C to 85° C                    |
| Max. Mating Force               | 1870 lbs [848.2 kg]                |
| Max. Weight Support             | 360 lbs @ 12" [163.3 kg @ 30.5 cm] |



The 50 module receiver is a rugged system designed to accommodate high I/O. The 9050 with Slide Mounting Kit enables slide-out access to both chassis and instrumentation. This receiver is designed to work with a slide kit and includes a mounting bracket, flanges and instrument bracket. Two slide kits are required for use.

## 9050TR Receiver for Slide Mount • 50 Module Solution



Receiver, 9050TR, 50 Module, with 20" Platform (slide kit required) • Part # 310 104 369



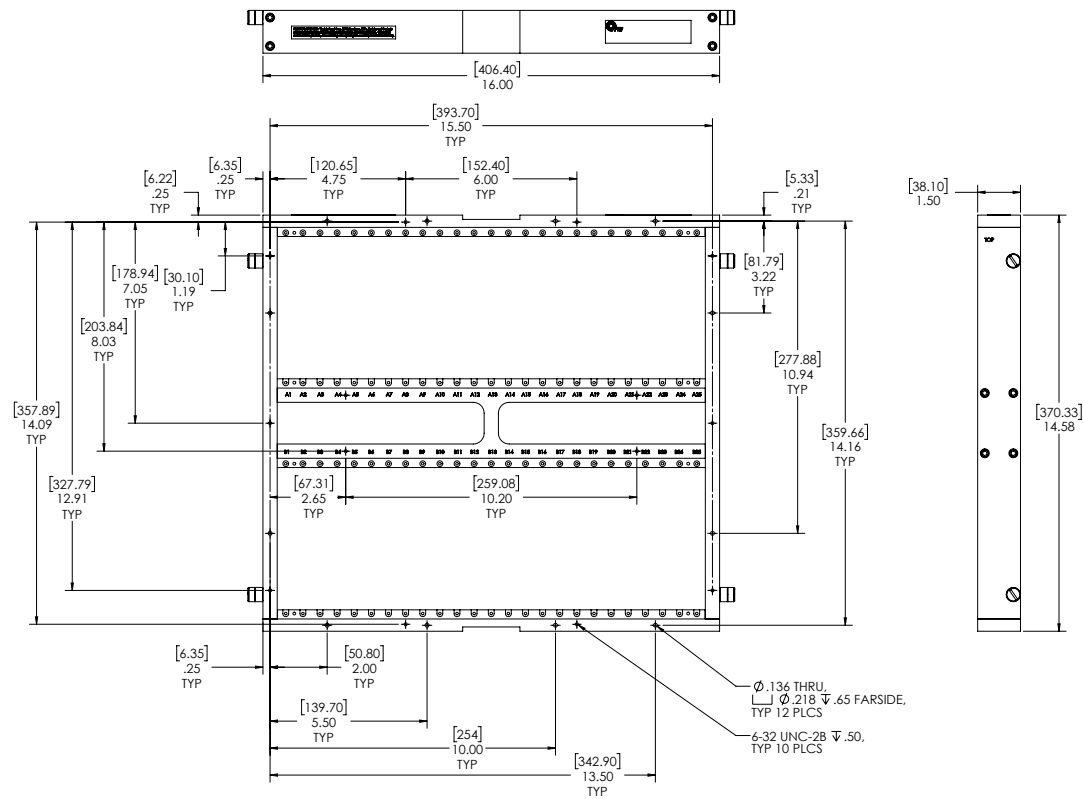
### Receiver Specifications

|                                 |                                    |
|---------------------------------|------------------------------------|
| Weight                          | 72 lbs [32.66 kg]                  |
| Frame Material                  | Anodized aluminum                  |
| Slide Material                  | Nickel plated steel                |
| Linkage, Handle, Latch Material | Stainless steel                    |
| Available Module Slots          | 50 positions                       |
| Cycle Life                      | 20,000 cycles                      |
| Temperature                     | -55° C to 85° C                    |
| Max. Mating Force               | 1654 lbs [750.2 kg]                |
| Max. Weight Support             | 360 lbs @ 12" [163.3 kg @ 30.5 cm] |

The 50 module platform receiver is designed to fit into a standard 19" rack. It is equipped with a locking handle to ensure your contacts are engaged. A standard integrated microswitch shuts off power when the ITA disengages from the receiver. This receiver is designed to work with a slide kit and includes mounting flanges and instrument bracket, Part # 310 113 507. Two slide kits are required for use.



## 9050 VXI ITA • 50 Module Solution



ITA, 9050, 50 Module, VXI and Discrete Wiring, Double Tier • **Part # 410 104 538**

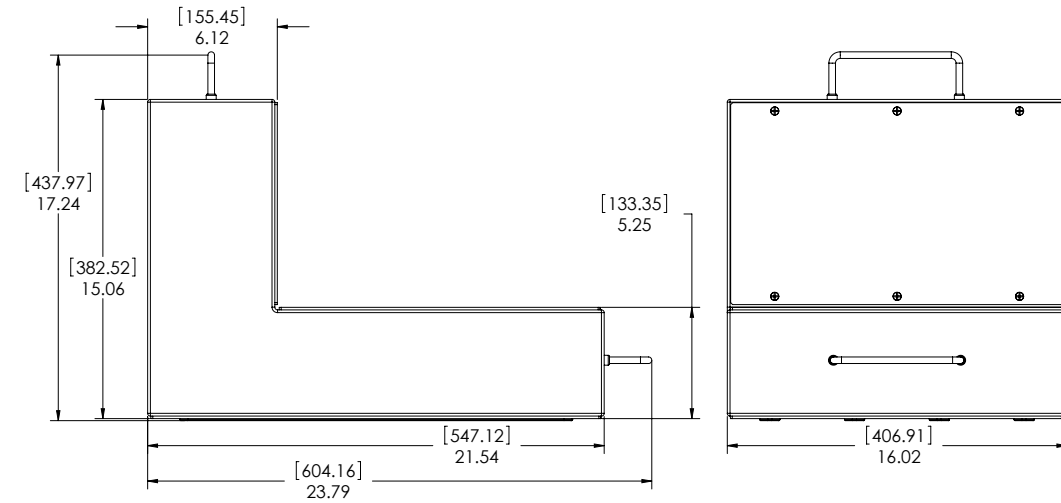


### ITA Specifications

|                        |                     |
|------------------------|---------------------|
| Weight                 | 8.25 lbs [3.74 kg]  |
| Frame Material         | Chromated aluminum  |
| Available Module Slots | 50 positions        |
| Cycle Life             | 20,000 cycles       |
| Max. Mating Force      | 2133 lbs [967.5 kg] |
| Temperature            | -55° C to 85° C     |

The 50 module ITA can be used in a number of applications to accomplish the required connection to the unit under test (UUT). You can mount a VPC front or rear mount enclosure or customize your own fixture to be attached to the ITA frame. A wide range of ITA modules are available separately for user configuration.

## 9050 VXI • Accessories



The L-Shaped Enclosure provides significant area for external I/O devices. The three access panels (front, top, and bottom) are removable covers with ¼ turn fasteners. With the use of adapter plates, it can be used with 9050 and 9025 ITAs.

Enclosure, 50 Module, L-Shaped • **Part # 410 112 770**



When the receiver is not in use, the protective cover is used to protect the modules and contacts. The protective cover is made up of black anodized aluminum.

Protective Cover, 9050, VXI and Discrete Wiring Receiver • **Part # 310 113 285**



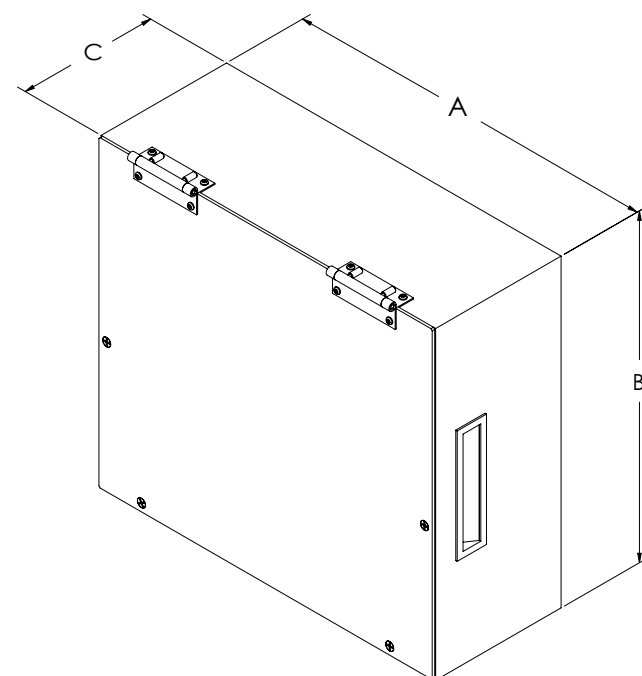
The aluminum ITA protective cover protects contacts and modules when the ITA is not in use.

Protective Cover, 9050, VXI and Discrete Wiring, ITA • **Part # 410 112 582**

## 9050 ITA Enclosures

Enclosures for 50 module ITA are made of aluminum and painted black. The top of the enclosure has a hinged cover plate with ¼ turn hardware that provides easy access to the ITAs wiring when required. The 9050 ITA can accept both front and rear mount enclosures.

All cover plates are black anodized. Screws for mounting the enclosures to the ITA are included. Handles are provided for easy removal of the TPS hardware from the receiver, except where noted.



| Part #      | Description  | A             | B             | C             |
|-------------|--|---------------|---------------|---------------|
| 410 112 463 | Enclosure, 50 Module, Hinged Cover Plate, 6" Deep  | 16.00 [406.4] | 14.57 [370.1] | 6.12 [155.45] |
| 410 112 519 | Enclosure, 50 Module, Hinged Cover Plate, 12" Deep | 16.00 [406.4] | 14.57 [370.1] | 12.00 [208.8] |

## 9025 and 9050 ITA Enclosures



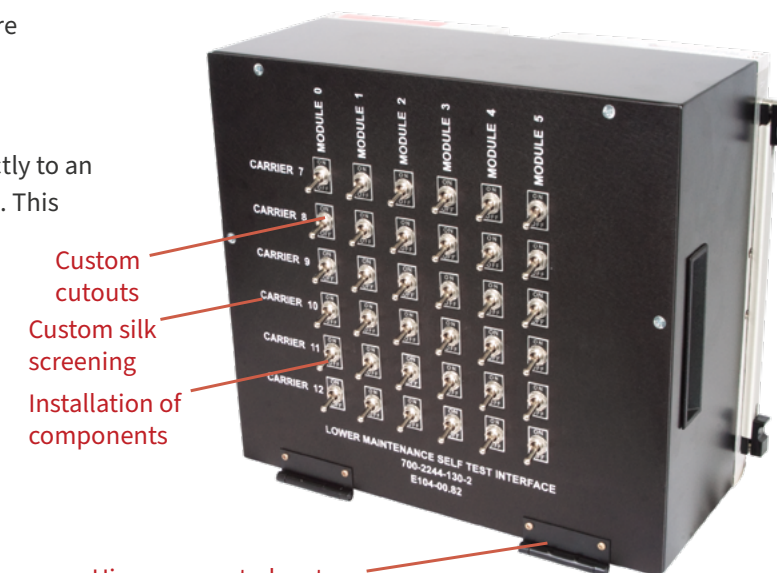
Front Mount ITA to Standard Enclosure

### Standard Enclosures

VPC offers a variety of standard enclosures for discrete-wiring needs. VPC's enclosures range from the low I/O ITAs such as the G2 and G6 to the high I/O systems such as the 9050. Several of VPC's receiver systems offer multiple standard enclosures to meet varying test requirements. Larger enclosures come with standard hinged cover plates to enable easy access to wiring.

### Custom Enclosures

VPC's highly reliable ITAs mount directly to an enclosure to house your test fixturing. This enclosure can be customized to fit your application requirements. VPC offers custom cut-outs for accommodating your secondary connectors and custom silk screening and engraving to guarantee quick and fail-safe identification of your test lines. Hinged or removable covers can be added to any side of your enclosure to provide quick and easy access.



Hinges mounted on top, bottom, left or right

Standard Enclosure with Custom Cutouts



Custom Enclosure with Custom Cutouts

Different manufacturing methods are available for creating your quality enclosure. VPC offers enclosures in both deep drawn and sheet metal sides that can be welded together. We can manufacture your enclosure with removable side panels and mounting hardware. We can also wire the enclosure to your specifications.

Many enclosure accessories are available, such as protective covers that prevent damage to your pins, and adapter plates for making your solution scalable.

## Platform Mount Slide Kit Accessories



The keyboard tray kit with touchpad mouse connects to the computer's USB port.



The universal edge card adapter kit's card guides are hinged and can be folded for storage by releasing the holding latches on either side of the card.

Keyboard Tray Kit • **Part # 310 113 439**

Edge Card Adapter, Universal, For .062 PCB  
**Part # 111 107 138**  
Edge Card Adapter, Universal, For .093 PCB  
**Part # 111 107 148**



The adjustable leg kit is designed to alleviate added weight from your enclosure by giving the platform extra support. The leg kit works with all 20" platform solutions.



The instrument bracket works only with the platform slide configuration. It is used to mount the testing instrument to the slides. The brackets allow the test instruments to slide out for maintenance access and have a strain relief area in the front of the bracket to tie down wires and cables.

Adjustable Leg Kit for the 20" Platform, 27"-36", Supports 350 lbs. • **Part # 310 113 566**

Instrument Bracket Kit with Strain Relief, for Slide Configuration, for 28" or longer slides only • **Part # 310 113 453**



Measure rack depth between mounting rails to determine the slide mounting kit that fits the rack. A rack extender kit is available for mounting to racks with recessed rails.

20" Slide Kit, Fits 18"-22" deep racks, Supports 180 lbs • **Part # 310 113 409**  
24" Slide Kit, Fits 22"-26" deep racks, Supports 180 lbs • **Part # 310 113 410**  
28" Slide Kit, Fits 26"-30" deep racks, Supports 180 lbs • **Part # 310 113 451**  
30" Slide Kit, Fits 28"-32" deep racks, Supports 180 lbs • **Part # 310 113 411**  
36" Slide Kit, Fits 34"-38" deep racks, Supports 180 lbs • **Part # 310 113 500**

## Accessory Kits

See Cross Reference charts for module screw sizes to determine which accessory kit contains the needed module screw.



| Part #       | Description  | Module Used in  |
|--------------|--|---|
| 910 121 174  | Allen Wrench Kit, Contains $\frac{3}{32}$ , $\frac{7}{64}$ , and $\frac{5}{32}$  |   |
| 510 109 299  | Module Accessory Master Kit with Allen Wrenches (contains all kits listed below) |   |
| 910 121 172  | Module Accessory Kit Quantity 5, $\frac{3}{32}$ Allen Wrenches                   |   |
| 510 109 300* | Module Accessory Kit Quantity 39, 0-80 X .25" Screws                             | 510 104 120/123/267/270   |
| 510 109 301  | Module Accessory Kit Quantity 26, 4-40 X .375" Screws                            | 510 104 118<br>510 108 104  |
| 510 109 302  | Module Accessory Kit Quantity 26, 4-40 X .625" Screws                            | 510 108 169/179<br>510 104 209/224<br>510 108 144/160<br>510 104 109/128/134/135<br>510 104 136/139/149/185<br>510 151 104/105/106/107/108<br>510 151 121/124 |
| 510 109 303  | Module Accessory Kit Quantity 26, 4-40 X .56" Screws                             | 510 104 102/120/123/150/155<br>510 104 267/270<br>510 108 101/102/111/112/115<br>510 108 124/125/126/131/132/138<br>510 108 140/148<br>510 108 262/263        |
| 510 109 305* | Module Accessory Kit Quantity 26, 2-56 X .187" Screws                            | 510 104 128/133/134/135/136/139/261   |
| 510 109 306* | Module Accessory Kit Quantity 26, 2-56 X .375" Screws                            | 510 104 139/149<br>510 108 148  |
| 510 109 307* | Module Accessory Kit Quantity 26, 2-56 X .25" Screws                             | 510 104 206/243/249   |
| 510 109 359  | Module Accessory Kit Quantity 26, 4-40 X .75" Screws                             | 510 150 115/116<br>510 150 130/131/135/136/137<br>510 150 147   |

\* These screws are used to assemble the top and bottom half of a module.

# Complete the Package

## Contacts, Modules, Patchcords & Tools



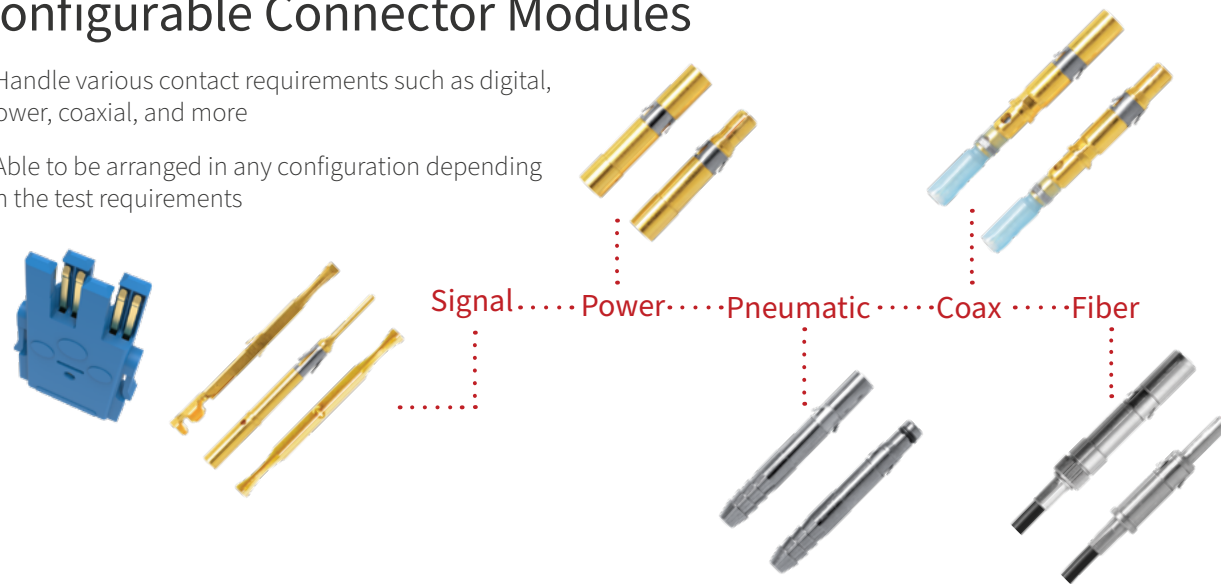
### Fewer Complications with Patchcords

- Patchcords are available in various lengths to suit any application
- Cost-effective solution for your wiring needs
- Reduced setup time with pre-built patchcords



### Reconfigurable Connector Modules

- Handle various contact requirements such as digital, power, coaxial, and more
- Able to be arranged in any configuration depending on the test requirements

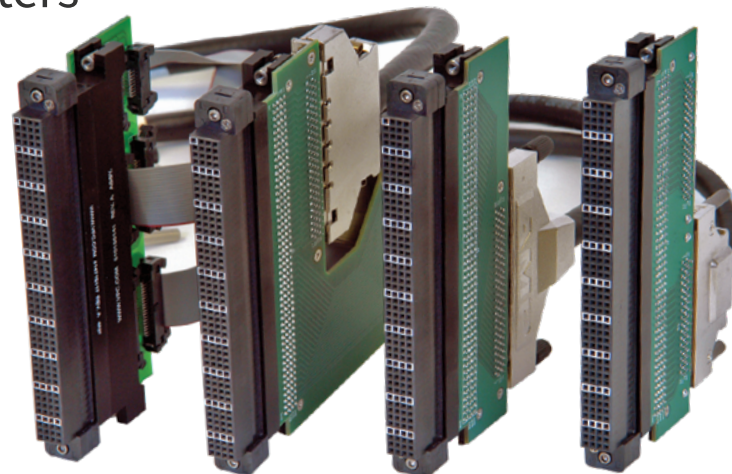


### Variety of Connection Options

- Configurable for virtually any connection requirement
- Reliable connections maintain signal integrity
- Most contacts are rated to 20,000 mating cycles

### Easy Integration with PCB Adapters

- Enables ease of integration while providing wiring convenience in a cost-effective package
- Incorporates a PCB with multiple standard connectors
- Offers “plug and play” capability between module and instrumentation



### Complete Tool Selection

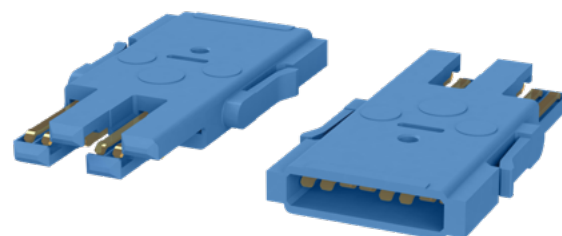
- Crimp tools and locators are available to easily terminate contacts and wires
- Extraction tools are available to remove contacts from the module quickly when necessary, saving time
- Inspection tools are available to ensure proper function before system integration



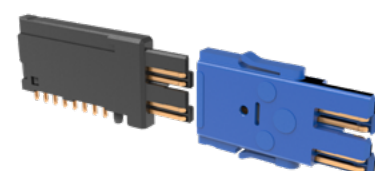
## VTAC Insert

### Contact Specifications

|                                 |   |
|---------------------------------|---|
| Data Rate                       | 12.5+ Gbps per differential pair                            |
| Crosstalk                       | 30 dB min   |
| Characteristic Impedance        | 100+/- 10 Ω - differential pair<br>50+/- 5 Ω - single ended |
| Operating Voltage and Current   | 3 amps max. continuous (350 volts max.)                     |
| Contact Resistance              | 40 mΩ max. per mated contact                                |
| Insulation Resistance           | 1000 MΩ min.  |
| Dielectric withstanding Voltage | 1050 VDC RMS min.   |
| Mating Force                    | 12 oz max. [340 g] per insert                               |
| Insert                          | Outer shell: blue LCP<br>Male contact: alloy 7025           |
| Contact Plating                 | 50 μ" Au over 100 μ" Ni                                     |
| Mating Cycles                   | 20,000  |



Receiver/ITA Insert  
**Part # 610 151 103**



SIM VTAC Right Angle Kit  
(Receiver/ITA)  
**Part # 610 151 106**

## VTAC RIGHT ANGLE

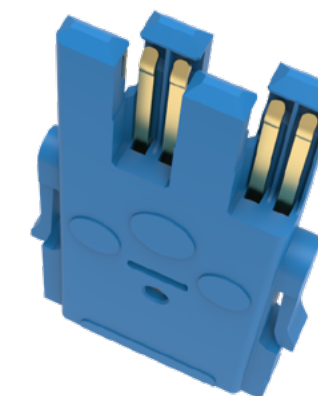
The Part # 610 151 103 (image above) insert allows custom designed PCBs to have SIM VTAC HSD inserts attached. Sold in individual quantities. Compatible with Part # 610 151 104 and available in a set as Part # 610 151 106 (image to left).

| Part #                                 | Description   | Used in Module                                       |
|--|---|--|
| <b>VTAC INSERT</b><br>610 151 103      | High Speed Insert, Receiver/ITA, SIM, 50μ", VTAC HSD, Double Ended Insert (For Use with Right Angle Only) | 510 170 101/ 510 171 101<br>510 143 001/ 510 144 001 |
| 610 151 104                            | High Speed Insert, Receiver/ITA, SIM, 50μ", VTAC HSD, Right Angle Insert                                  | 510 170 101/ 510 171 101                             |
| 610 151 105                            | High Speed Insert, Receiver/ITA, SIM, 50μ", VTAC HSD, Retention Insert (For Use with Right Angle only)    | 510 143 001/ 510 144 001                             |
| 610 151 106                            | High Speed Insert, Receiver/ITA, SIM, 50μ", VTAC HSD Kit (For Use with Right Angle Only)                  | 510 170 101/ 510 171 101<br>510 143 001/ 510 144 001 |
| <b>EXTRACTION TOOLS</b><br>910 112 130 | Extraction Tool, SIM, Receiver and ITA  |  |

## VTAC Insert

### Contact Specifications

|                                 |   |
|---------------------------------|---|
| Data Rate                       | 12.5+ Gbps per differential pair                            |
| Crosstalk                       | 30 dB min   |
| Characteristic Impedance        | 100+/- 10 Ω - differential pair<br>50+/- 5 Ω - single ended |
| Operating Voltage and Current   | 3 amps max. continuous (350 volts max.)                     |
| Contact Resistance              | 40 mΩ max. per mated contact                                |
| Insulation Resistance           | 1000 MΩ min.  |
| Dielectric withstanding Voltage | 1050 VDC RMS min.   |
| Mating Force                    | 12 oz max. [340 g] per insert                               |
| Insert                          | Outer shell: black LCP<br>Male contact: alloy 7025          |
| Contact Termination             | Welded  |
| Contact Plating                 | 50 μ" Au over 100 μ" Ni                                     |
| Mating Cycles                   | 20,000  |



Receiver/ITA Contact

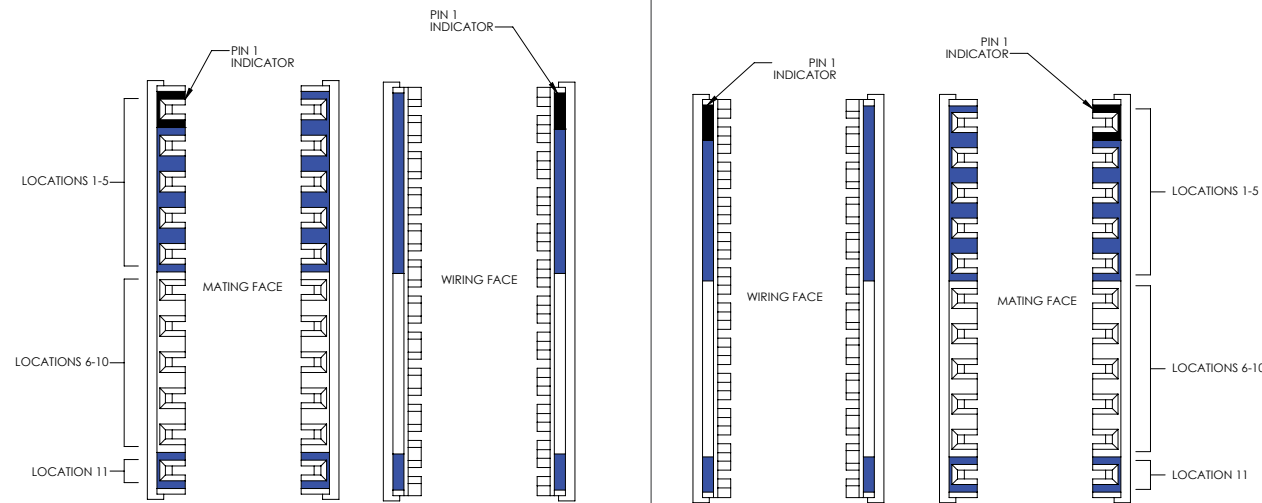
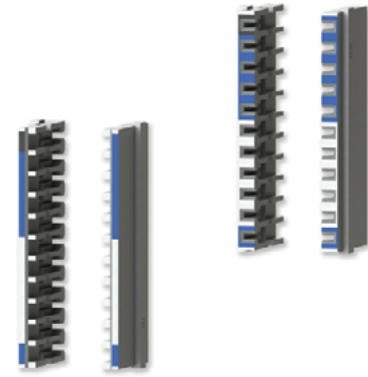
### Receiver/ITA Insert • Part # 610 151 101

| Part #                            | Description   |
|-----------------------------------|---|
| <b>VTAC PATCHCORDS - RECEIVER</b> |   |
| 7-142702731-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, Rosenberger HSD Plug, 1 Position      |
| 7-142877655-036                   | Signal Patchcord, Receiver, SIM VTAC HSD, 36", DVI-D Male Dual Link, 5 Position |
| 7-142890690-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, USB 3.0 Type A Male, 2 Position       |
| 7-142890691-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, USB 3.0 Type A Female, 2 Position     |
| 7-142890692-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, USB 3.0 Type B Male, 2 Position       |
| 7-142891693-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, HDMI Male, 3 Position                 |
| 7-142892700-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, SATA Male, 1 Position                 |
| 7-142893694-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, RJ45 Plug, 2 Position                 |
| 7-142861000-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, Twinax Flying Leads, 1 Position       |
| 7-142895000-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, 24 AWG, Flying Leads, 1 Position      |
| 7-142896722-0XX                   | Signal Patchcord, Receiver, SIM VTAC HSD, Mini-SAS HD Plug, 4 Position          |
| <b>VTAC PATCHCORDS - ITA</b>      |   |
| 7-141702731-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, Rosenberger HSD Plug, 1 Position           |
| 7-142877655-036                   | Signal Patchcord, Receiver, SIM VTAC HSD, 36", DVI-D Male Dual Link, 5 Position |
| 7-141890690-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, USB 3.0 Type A Male, 2 Position            |
| 7-141890691-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, USB 3.0 Type A Female, 2 Position          |
| 7-141890692-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, USB 3.0 Type B Male, 2 Position            |
| 7-141891693-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, HDMI Male, 3 Position                      |
| 7-141892700-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, SATA Male, 1 Position                      |
| 7-141893694-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, RJ45 Plug, 2 Position                      |
| 7-141861000-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, Twinax Flying Leads, 1 Position            |
| 7-141895000-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, 24 AWG, Flying Leads, 1 Position           |
| 7-141896722-0XX                   | Signal Patchcord, ITA, SIM VTAC HSD, Mini-SAS HD Plug, 4 Position               |

## SIM Module • i2 MX Insert

### Specifications

|                            |                    |
|----------------------------|--------------------|
| Material                   | Nickel plated zinc |
| Operating Temperature      | -40°C to 125°C     |
| Available Insert Positions | 11                 |
| Module Positions Needed    | 1                  |



Receiver • Part # 510 143 001

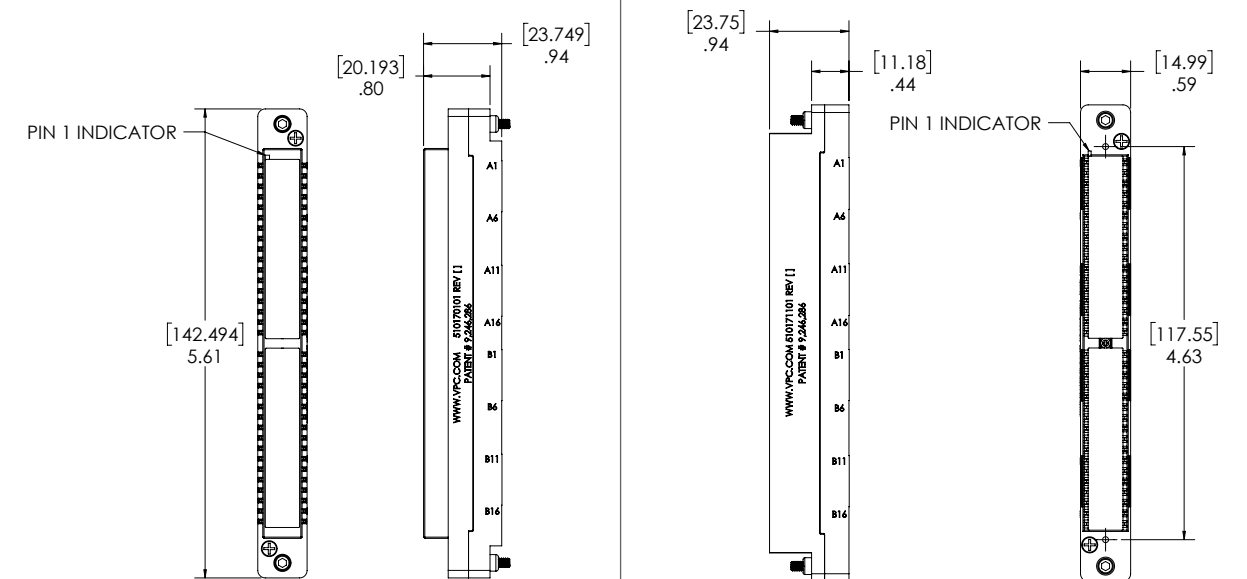
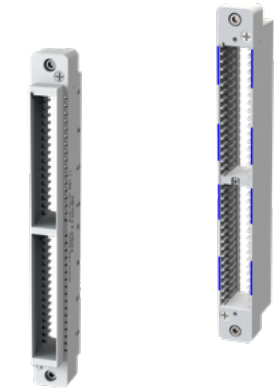
ITA • Part # 510 144 001

| Part #      | Description  | Contacts Used                             |
|-------------|--|---|
| 510 143 001 | <b>I2 MX RECEIVER SIM MODULE INSERT</b><br>SIM Module Insert, Receiver, i2 MX, 11 Position | 610 151 101<br>610 151 103<br>510 180 101 |
| 510 144 001 | <b>I2 MX ITA SIM MODULE INSERT</b><br>SIM Module Insert, ITA, i2 MX, 11 Position           | 610 151 101<br>610 151 103<br>510 181 101 |

## SIM Module • 90 Series Insert

### Specifications

|                            |                    |
|----------------------------|--------------------|
| Material                   | Nickel plated zinc |
| Operating Temperature      | -40°C to 125°C     |
| Available Insert Positions | 34                 |
| Module Positions Needed    | 1                  |



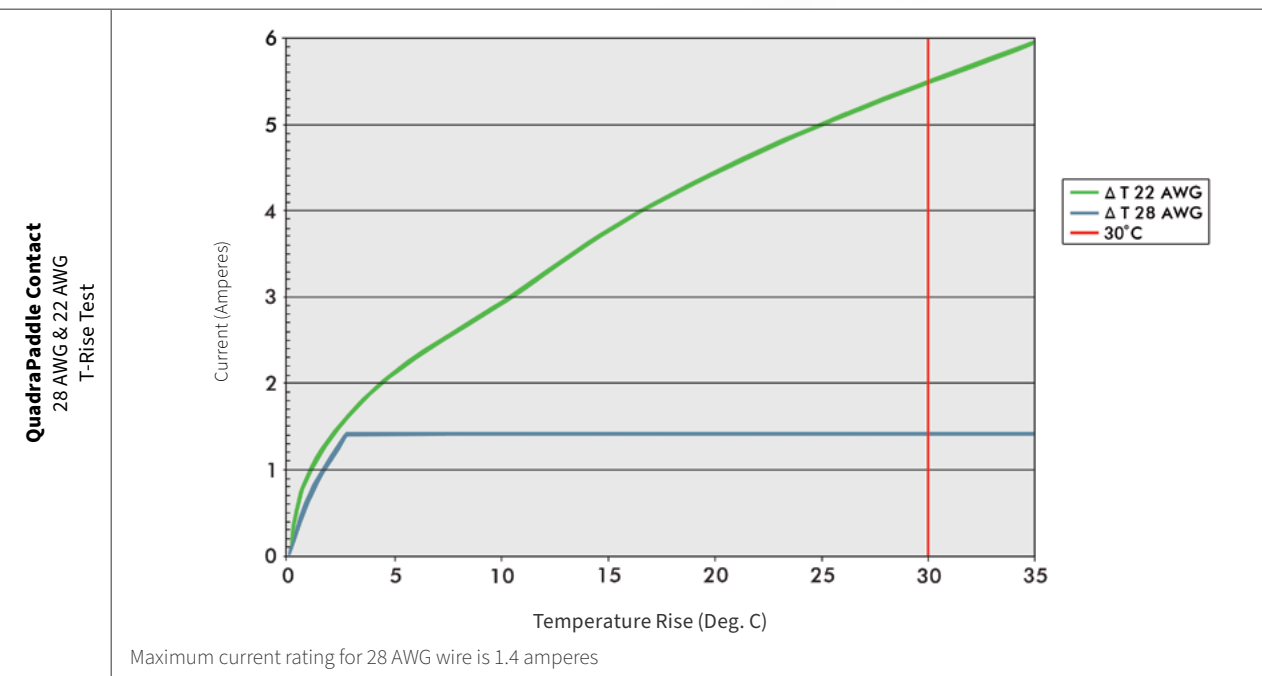
Receiver • Part # 510 170 101

ITA • Part # 510 171 101

| Part #      | Description   | ContactsUsed                              |
|-------------|---|---|
| 510 170 101 | <b>MODULE - RECEIVER</b><br>SIM Module, Receiver, 34 Position | 610 151 101<br>610 151 103<br>510 180 101 |
| 510 171 101 | <b>MODULE - ITA</b><br>SIM Module, ITA, 34 Position           | 610 151 101<br>610 151 103<br>510 181 101 |

## QuadraPaddle Signal Contacts

| Contact Specifications                |  |
|---------------------------------------|--|
| Operating Current and Voltage         | 5 amp max. continuous; 600 volt max. use of wire Mil-W-16878/4             |
| Contact Resistance                    | 25 mΩ max. Measured at 50 mV @ 100 mA                                      |
| Mating Force                          | 6 oz. nominal [.15 kg]   |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Insulation Resistance                 | 5000 MΩ min.   |
| Contact Body Material                 | Twin Female (RCV) – BeCu/PhBrz<br>Crimp (RCV) – BeCu<br>Male (ITA) – Brass |
| Contact Plating                       | Female (RCV) – 30μ" Au over 100μ" Ni<br>Male (ITA) – 30μ" Au over 100μ" Ni |
| Cycle Life                            | 20,000 cycles  |



## QuadraPaddle Signal Contacts

Receiver Contact  
**Part # 610 138 200**



Round Post Receiver Contact  
**Part # 610 138 117**



Square Post Receiver Contact  
**Part # 610 138 118**



QuadraPaddle round and square post adapter pins convert QuadraPaddle twin female pins to female-male contacts

| Part #                                | Description  | Used in Module  |
|---------------------------------------|--|---|
| <b>QUADRAPADDLE RECEIVER CONTACTS</b> |  |   |
| 610 138 200*                          | Signal Contact, Receiver, QuadraPaddle, 5 Amp, 30μ" Gold, Twin Female Replacement Contact    | 510 150 130/131/135<br>510 150 136/137/147<br>510 160 105/112/122 |
| 610 138 117*                          | Signal Contact, Receiver, QuadraPaddle, 5 Amp, Male Adapter, .025" Round Post                | 510 150 130/131/135/137<br>510 160 105/112/113                    |
| 610 138 118*                          | Signal Contact, Receiver, QuadraPaddle, 5 Amp, Male Adapter, .025" Square Post for Wire Wrap | 510 150 130/131/136/147<br>510 160 105/112                        |
| 610 138 216                           | Signal Contact, Receiver, QuadraPaddle, 5 Amp, 22-28 AWG, 30μ" Gold                          | 510 150 115/116<br>510 160 101/102/107                            |
| <b>QUADRAPADDLE ITA CONTACTS</b>      |  |   |
| 610 138 109                           | Signal Contact, QuadraPaddle, ITA, 5 Amp, 22-24 AWG  | 510 151 105/106<br>510 161 101/102/107                            |
| 610 138 112                           | Signal Contact, ITA, QuadraPaddle, 5 Amp, 26-30 AWG  | 510 151 105/106<br>510 161 101/102/107                            |
| 610 138 115                           | Signal Contact, ITA, QuadraPaddle, 5 Amp, .025" Round Post                                   | 510 151 105/106/107/108<br>510 161 101/102/107                    |
| 610 138 122                           | Signal Contact, ITA, QuadraPaddle, 5 Amp, .025" Square Post for Wire Wrap with Anti-Rotation | 510 151 105/106/107/124<br>510 161 101/102/107                    |

| Part #                  | Description   | Used on Contact                                |
|-------------------------|---|--|
| <b>CRIMP TOOLS</b>      |   |  |
| 910 101 125             | Tool, Crimp, QuadraPaddle, Receiver   | 610 138 216                                    |
| 910 101 103             | Tool, Crimp, QuadraPaddle ITA and TriPaddle Receiver and ITA Contacts, Locator Required | 610 138 109/112<br>610 110 101/108/109/167/169 |
| <b>LOCATOR</b>          |   |  |
| 910 104 140             | Tool, Locator, QuadraPaddle, ITA Contact  | 610 138 109/112                                |
| <b>EXTRACTION TOOLS</b> |   |  |
| 910 110 111             | Tool, Extraction, ITA, QuadraPaddle   | 610 138 109/112/115/122                        |
| 910 110 112             | Tool, Extraction, Receiver, QuadraPaddle  | 610 138 216                                    |
| <b>INSERTION TOOL</b>   |   |  |
| 910 113 106             | Tool, Insertion, QuadraPaddle ITA Wire Wrap Contact                                     | 610 138 122                                    |

## QuadraPaddle Signal Patchcords



| QuadraPaddle Receiver Patchcord                 |  | QuadraPaddle ITA Patchcord             |
|---|--|--|
| Part #  | Description  | Used in Module                         |
| <b>QUADRAPADDLE RECEIVER AND ITA PATCHCORDS</b> |  |  |
| 7-124 924 000-036                               | Signal Patchcord, Receiver, QuadraPaddle, 5 Amp, 36", 24 AWG, Single Ended   | 510 150 115/116<br>510 160 101/102/107 |
| 7-124 922 000-036                               | Signal Patchcord, Receiver, QuadraPaddle, 5 Amp, 36", 22 AWG, Single Ended   | 510 150 115/116<br>510 160 101/102/107 |
| 7-121 924 000-036                               | Signal Patchcord, ITA, QuadraPaddle, 5 Amp, 36", 24 AWG, Single Ended        | 510 151 105/106<br>510 161 101/102/107 |
| 7-121 922 000-036                               | Signal Patchcord, ITA, QuadraPaddle, 5 Amp, 36", 22 AWG, Single Ended        | 510 151 105/106<br>510 161 101/102/107 |
| <b>QUADRAPADDLE ITA JUMPERS</b>                 |  |  |
| 7-121 924 121-006                               | Signal Patchcord, ITA, QuadraPaddle, 5 Amp, 6", 24 AWG, Double Ended Jumpers | 510 151 105/106<br>510 161 101/102/107 |
| 7-121 922 121-006                               | Signal Patchcord, ITA, QuadraPaddle, 5 Amp, 6", 22 AWG, Double Ended Jumpers | 510 151 105/106<br>510 161 101/102/107 |

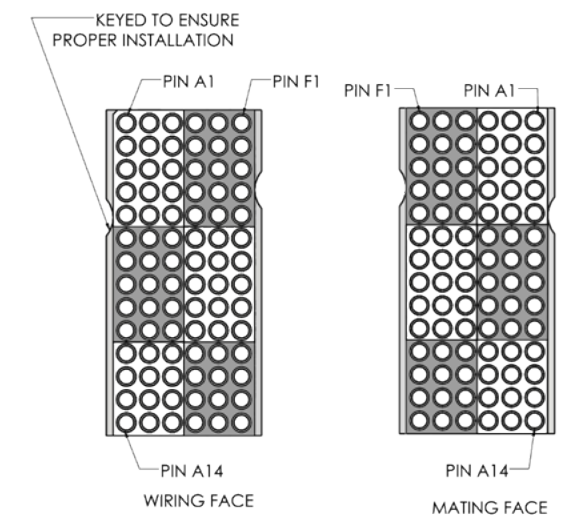
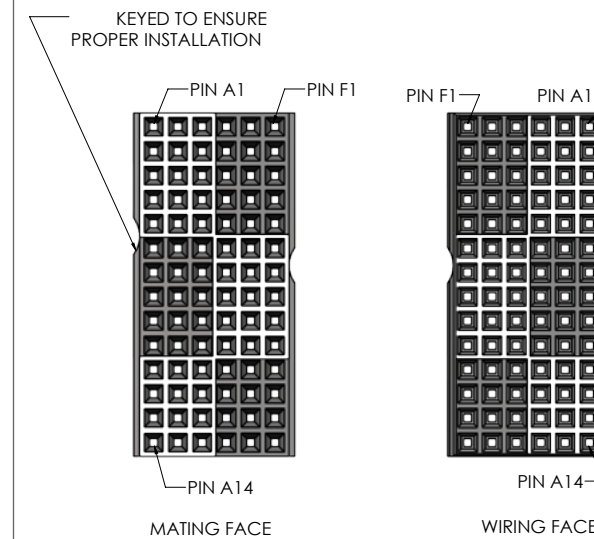
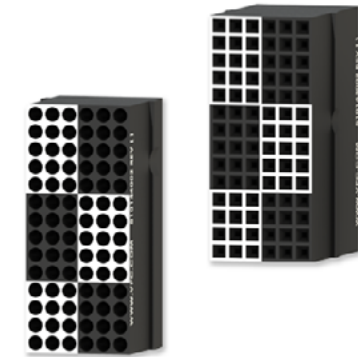


| QuadraPaddle Receiver Twisted Pair Patchcord                 |   | QuadraPaddle ITA Twisted Pair Patchcord |
|--|---|---|
| Part #   | Description   | Used in Module                          |
| <b>QUADRAPADDLE RECEIVER AND ITA TWISTED PAIR PATCHCORDS</b> |   |   |
| 7-124 424 000-036  | Signal Patchcord, Receiver, QuadraPaddle, 36", 24 AWG Twisted Pair, Single Ended        | 510 150 115/116<br>510 160 101/102/107  |
| 7-124 422 000-036  | Signal Patchcord, Receiver, QuadraPaddle, 5 Amp, 36", 22 AWG Twisted Pair, Single Ended | 510 150 115/116<br>510 160 101/102/107  |
| 7-121 424 000-036  | Signal Patchcord, ITA, QuadraPaddle, 36", 5 Amp, 24 AWG Twisted Pair, Single Ended      | 510 151 105/106<br>510 161 101/102/107  |
| 7-123 426 000-036  | Signal Patchcord, ITA, QuadraPaddle, 36", 26 AWG Twisted Pair, Single Ended             |   |
| 7-121 422 000-036  | Signal Patchcord, ITA, QuadraPaddle, 36", 22 AWG Twisted Pair, Single Ended             | 510 151 105/106<br>510 161 101/102/107  |
| <b>QUADRAPADDLE ITA TWISTED PAIR JUMPERS</b>                 |   |   |
| 7-121 424 121-006  | Signal Patchcord, ITA, QuadraPaddle, 6", 24 AWG Twisted Pair, Double Ended Jumpers      | 510 151 105/106<br>510 161 101/102/107  |
| 7-121 422 121-006  | Signal Patchcord, ITA, QuadraPaddle, 6", 22 AWG Twisted Pair, Double Ended Jumpers      | 510 151 105/106<br>510 161 101/102/107  |
| <b>USB PATCHCORDS</b>  |   |   |
| 7-124 872 596-036  | Signal Patchcord, Receiver, QuadraPaddle, 36", USB 2.0 Wire, to USB Type A Plug         |   |
| 7-121 872 596-036  | Signal Patchcord, ITA, QuadraPaddle, 36", USB 2.0 Wire, to USB Type A Plug              |   |
| <b>RJ45 PATCHCORDS</b>                                       |   |   |
| 7-124 870 595-036  | Signal Patchcord, Receiver, QuadraPaddle, 36", CAT5e, to RJ45 Plug                      |   |
| 7-123 870 595-036  | Signal Patchcord, ITA, QuadraPaddle, 36", CAT5e, to RJ45 Plug                           |   |

## QuadraPaddle Module • i2 MX Inserts

### Specifications

|                                       |                               |
|---------------------------------------|-------------------------------|
| Material                              | Black high-temp thermoplastic |
| Operating Temperature                 | -40°C to 125°C                |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC Min.                 |
| Available Contact Positions           | 84                            |
| Module Positions Needed               | 1                             |



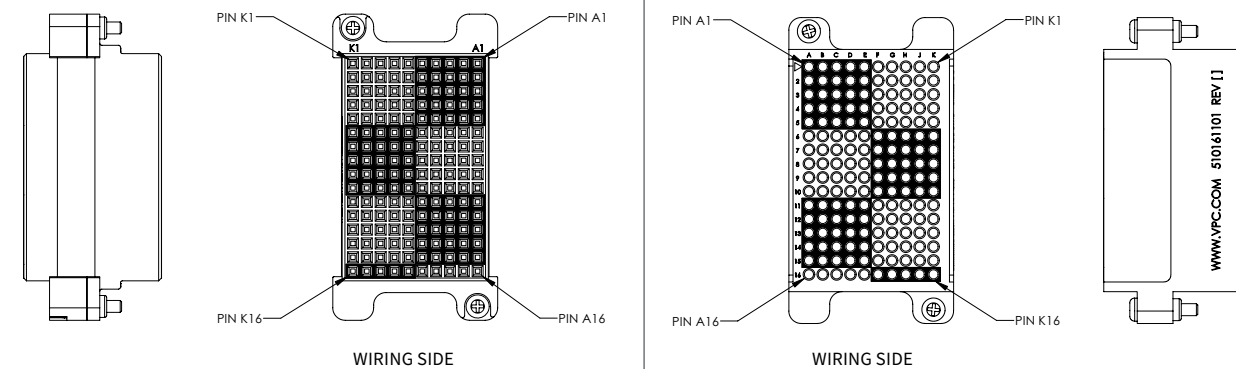
| Receiver • Part # 510 143 002                     |  | ITA • Part # 510 144 002                                 |
|---|--|--|
| Part #  | Description  | Contacts Used  |
| <b>I2 MX RECEIVER QUADRAPADDLE MODULE INSERTS</b> |  |  |
| 510 143 002                                       | QuadraPaddle Signal, Module Insert, Receiver, i2 MX, 84 Position, Crimp  | 610 138 216  |
| 510 143 003                                       | QuadraPaddle Signal, Module Insert, Receiver, i2 MX, 84 Position, Fully Loaded with Twin Female Contacts (610 138 200) | 610 138 200  |
| <b>I2 MX ITA QUADRAPADDLE MODULE INSERT</b>       |  |  |
| 510 144 002                                       | QuadraPaddle Signal, Module Insert, ITA, i2 MX, 84 Position, Crimp   | 610 138 109<br>610 138 112<br>610 138 115<br>610 138 122 |



## QuadraPaddle Module • iCon Insert

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Material                              | Black high-temp thermoplastic                                |
| Temperature                           | Operating • -55°C to 125°C<br>Non-operating • -65°C to 220°C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 160  |
| Module Positions Needed               | 1  |



Receiver • Part # 510 160 101

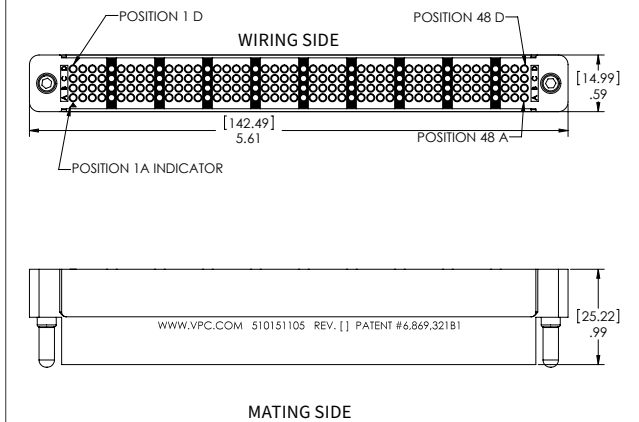
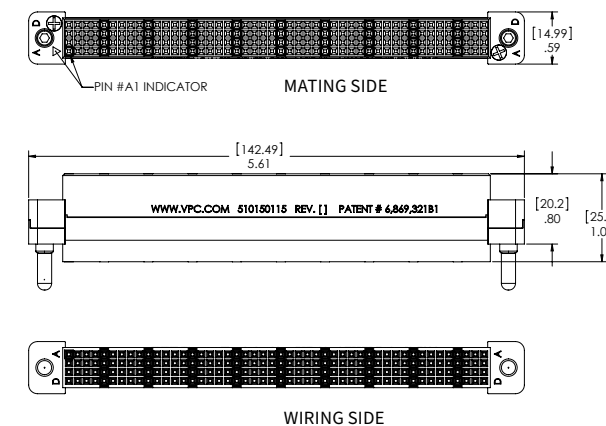
ITA • Part # 510 161 101

| Part #                                    | Description   | Contacts Used           |
|---|---|-------------------------|
| <b>ICON RECEIVER QUADRAPADDLE MODULES</b> |   |                         |
| 510 160 101                               | Signal Module, Receiver, QuadraPaddle, iCon, 160 Position, for Crimp Contacts   | 610 138 216             |
| 510 160 105                               | Signal Module, Receiver, QuadraPaddle, iCon, 160 Position, Fully Loaded with Twin Female Contacts (610 138 200)                                 | 610 138 117/118/200     |
| 510 160 122                               | Signal Module, Receiver, QuadraPaddle, iCon, 160 Position, Fully Loaded with Twin Female Contacts and Round Posts (610 138 200 and 610 138 117) | 610 138 117/200         |
| <b>ICON ITA QUADRAPADDLE MODULE</b>       |   |                         |
| 510 161 101                               | Signal Module, ITA, QuadraPaddle, iCon, 160 Position  | 610 138 109/112/115/122 |

## QuadraPaddle Modules • 90 Series Insert

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Material                              | Black liquid crystal polymer                                 |
| Temperature                           | Operating • -55°C to 125°C<br>Non-operating • -65°C to 225°C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 192  |
| Module Positions Needed               | 1  |



Receiver • Part # 510 150 115

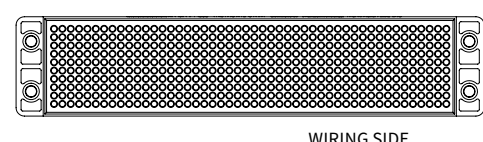
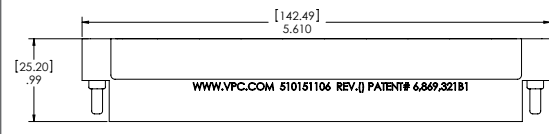
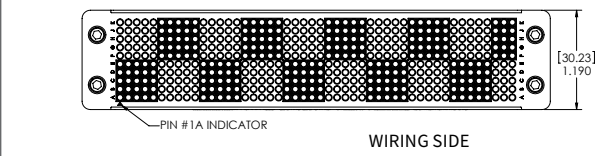
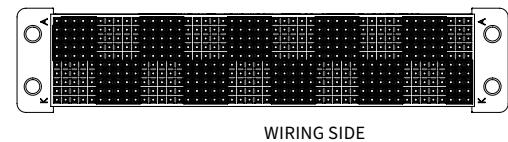
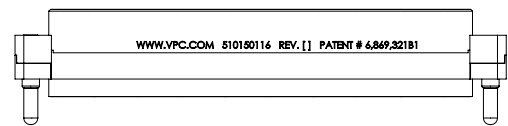
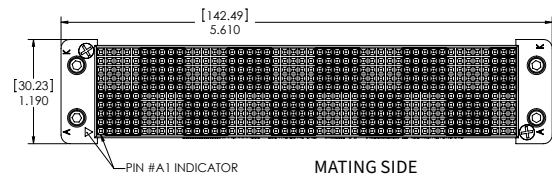
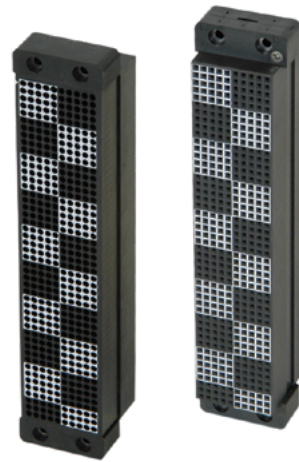
ITA • Part # 510 151 105

| Part #   | Description  | Contacts Used           |
|--|--|-------------------------|
| <b>90 SERIES RECEIVER MODULES AND STRAIN RELIEFS</b> |  |                         |
| 510 150 130  | Signal Module, Receiver, QuadraPaddle, 192 Position, Fully Loaded with Twin Female Contacts (610 138 200)  | 610 138 117/118/200     |
| 510 150 115  | Signal Module, Receiver, QuadraPaddle, 192 Position, Wire Crimp, Unloaded  | 610 138 216             |
| 510 150 136  | Signal Module, Receiver, QuadraPaddle, 192 Position, Fully Loaded with Twin Female Contacts and Square Posts for Wire Wrap (610 138 200 and 610 138 118) | 610 138 118/200         |
| 510 150 137  | Signal Module, Receiver, QuadraPaddle, 192 Position, Fully Loaded with Twin Female Contacts and Round Posts (610 138 200 and 610 138 117)                | 610 138 117/200         |
| 510 109 349  | Strain Relief Plate for QuadraPaddle 192 Position Modules  |                         |
| <b>90 SERIES ITA MODULES AND STRAIN RELIEFS</b>      |  |                         |
| 510 151 105  | Signal Module, ITA, QuadraPaddle, 192 Position, Unloaded   | 610 138 109/112/115/122 |
| 510 151 107  | Signal Module, ITA, QuadraPaddle, 192 Position, Fully Loaded with 610 138 115 Round Posts (610 138 115)  |                         |
| 510 151 124  | Signal Module, ITA, QuadraPaddle, 192 Position, Fully Loaded with Square Posts for Wire Wrap with Anti-Rotation (610 138 122)                            | 610 138 122             |
| 510 109 296  | Strain Relief Plate for ITA Modules  |                         |

## QuadraPaddle Modules • 90 Series Insert

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Receiver Material                     | Black liquid crystal polymer                                     |
| Receiver Temperature                  | Operating • -55° C to 125° C<br>Non-operating • -65° C to 225° C |
| ITA Material                          | Black PPS  |
| ITA Temperature                       | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 480  |
| Module Positions Needed               | 2  |



Receiver • Part # 510 150 116

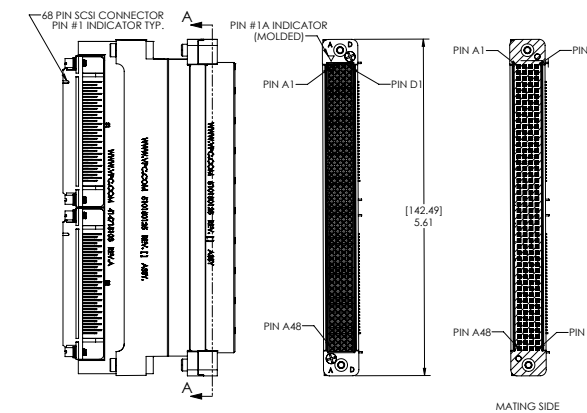
ITA • Part # 510 151 106

| Part #  | Description  | Contacts Used           |
|---|--|-------------------------|
| <b>480 POSITION RECEIVER MODULES AND STRAIN RELIEFS</b> |  |                         |
| 510 150 131   | Signal Module, Receiver, QuadraPaddle, 480 Position, Fully Loaded with Twin Female Contacts (610 138 200)  | 610 138 117/118/200     |
| 510 150 116   | Signal Module, Receiver, QuadraPaddle, 480 Position, Unloaded  | 610 138 216             |
| 510 150 147   | Signal Module, Receiver, QuadraPaddle, 480 Position, Fully Loaded with Twin Female Contacts and Square Posts for Wire Wrap (610 138 200 and 610 138 118) | 610 138 118/200         |
| 510 150 135   | Signal Module, Receiver, QuadraPaddle, 480 Position, Fully Loaded with Twin Female Contacts and Round Posts (610 138 200 and 610 138 117)                | 610 138 117/200         |
| 510 109 348   | Strain Relief Plate for QuadraPaddle 480 Position Receiver Modules   |                         |
| <b>480 POSITION ITA MODULES AND STRAIN RELIEFS</b>      |  |                         |
| 510 151 106   | Signal Module, ITA, QuadraPaddle, 480 Position, Unloaded   | 610 138 109/112/115/122 |
| 510 151 108   | Signal Module, ITA, QuadraPaddle, 480 Position, Fully Loaded with Round Posts (610 138 115)  | 610 138 115             |
| 510 151 127   | Signal Module, ITA, QuadraPaddle, 480 Position, Fully Loaded with Square Posts for Wire Wrap with Anti-Rotation (610 138 122)                            | 610 138 122             |
| 510 109 296   | Strain Relief Plate for ITA Modules  |                         |

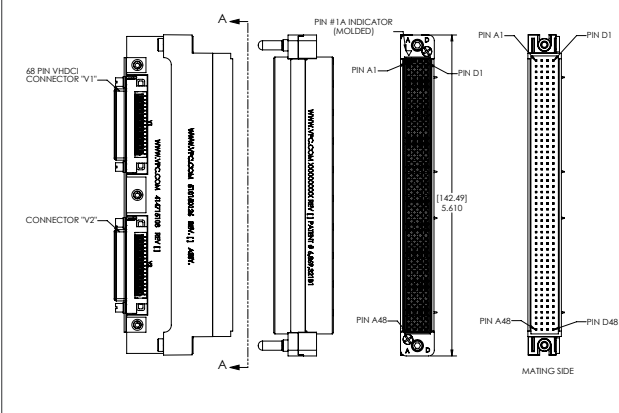
## SCSI and VHDCI Receiver PCB Adapters • 2 x 68

### PCB Specifications

|                                       |                  |
|---------------------------------------|------------------|
| Current Rating                        | 1 amp @ 30 VAC   |
| Temperature                           | -55° C to 105° C |
| Termination Resistance                | 50 mΩ typical    |
| Insulation Resistance                 | 1000 MΩ min.     |
| Dielectric Withstanding Voltage (DWV) | 500 VAC min.     |
| Module Positions Needed               | 1                |



PCB Adapter, Receiver • Part # 510 150 125



PCB Adapter, Receiver • Part # 510 150 126

| Part #                          | Description  |
|---------------------------------|--|
| <b>2 X 68 SCSI PCB ADAPTERS</b> |  |
| 510 150 125                     | PCB Adapter, Receiver, QuadraPaddle, 192 Position, to PCB-Mounted 2x68 Male SCSI Connectors    |
| 510 150 126                     | PCB Adapter, Receiver, QuadraPaddle, 192 Position, to PCB-Mounted 2x68 Female VHDCI Connectors |

### STANDARD CABLES FOR PCB ADAPTERS – 18"

|             |   |
|-------------|---|
| 515 109 113 | Cable Assembly, 68 Pin Female SCSI (Thumb Screws) to 68 Pin Male VHDCI (Thumb Screws), 18"  |
| 515 109 117 | Cable Assembly, 68 Pin Female SCSI (Thumb Screws) to 68 Pin Female SCSI (Thumb Screws), 18" |
| 515 109 119 | Cable Assembly, 68 Pin Female SCSI (Thumb Screws) to 68 Pin Male SCSI (Spring Latch), 18"   |
| 515 109 121 | Cable Assembly, 68 Pin Female SCSI (Thumb Screws) to 68 Pin Male SCSI (Thumb Screws), 18"   |
| 515 109 130 | Cable Assembly, 68 Pin Female SCSI (Thumb Screws) to 68 Pin Female SCSI (Spring Latch), 18" |
| 515 109 001 | Cable Assembly, 68 Pin Male VHDCI (Thumb Screws) to 68 Pin Male VHDCI (Thumb Screws), 18"   |

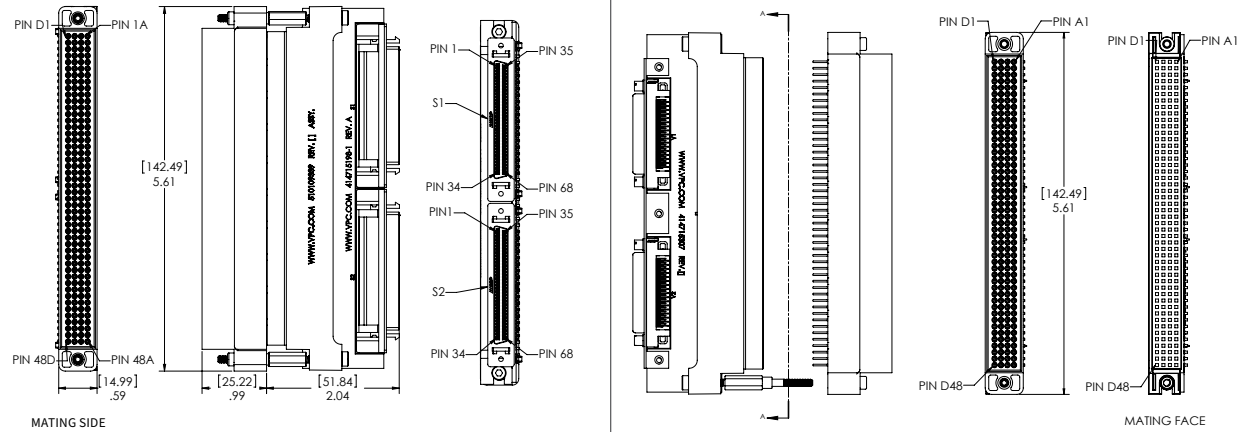
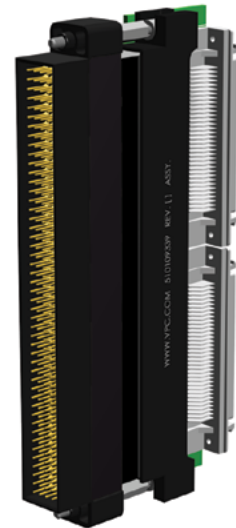
### STANDARD CABLES FOR PCB ADAPTERS – 36"

|             |   |
|-------------|---|
| 515 109 114 | Cable Assembly, 68 Pin Female SCSI (Thumb Screws) to 68 Pin Male VHDCI (Thumb Screws), 36"  |
| 515 109 118 | Cable Assembly, 68 Pin Female SCSI (Thumb Screws) to 68 Pin Female SCSI (Thumb Screws), 36" |
| 515 109 120 | Cable Assembly, 68 Pin Female SCSI (Thumb Screws) to 68 Pin Male SCSI (Spring Latch), 36"   |
| 515 109 122 | Cable Assembly, 68 Pin Female SCSI (Thumb Screws) to 68 Pin Male SCSI (Thumb Screws), 36"   |
| 515 109 131 | Cable Assembly, 68 Pin Female SCSI (Thumb Screws) to 68 Pin Female SCSI (Spring Latch), 36" |
| 515 109 002 | Cable Assembly, 68 Pin Male VHDCI (Thumb Screws) to 68 Pin Male VHDCI (Thumb Screws), 36"   |

## SCSI and VHDCI ITA PCB Adapters • 2 x 68

### PCB Specifications

|                                       |                  |
|---------------------------------------|------------------|
| Current Rating                        | 1 amp @ 30 VAC   |
| Temperature                           | -55° C to 105° C |
| Termination Resistance                | 50 mΩ typical    |
| Insulation Resistance                 | 1000 MΩ min.     |
| Dielectric Withstanding Voltage (DWV) | 500 VAC min.     |
| Module Positions Needed               | 1                |



PCB Adapter, ITA • Part # 510 109 339

PCB Adapter, ITA • Part # 510 151 123

| Part # | Description |
|--------|-------------|
|--------|-------------|

#### 2 X 68 ITA PCB ADAPTERS

|             |   |
|-------------|---|
| 510 109 339 | PCB Adapter, ITA, QuadraPaddle, 192 Position, to PCB-mounted 2x68 Pin Female SCSI Connectors  |
| 510 150 165 | PCB Adapter, ITA, QuadraPaddle, 192 Position, to PCB-mounted 2x68 Pin Male SCSI Connectors    |
| 510 151 123 | PCB Adapter, ITA, QuadraPaddle, 192 Position, to PCB-mounted 2x68 Pin Female VHDCI Connectors |

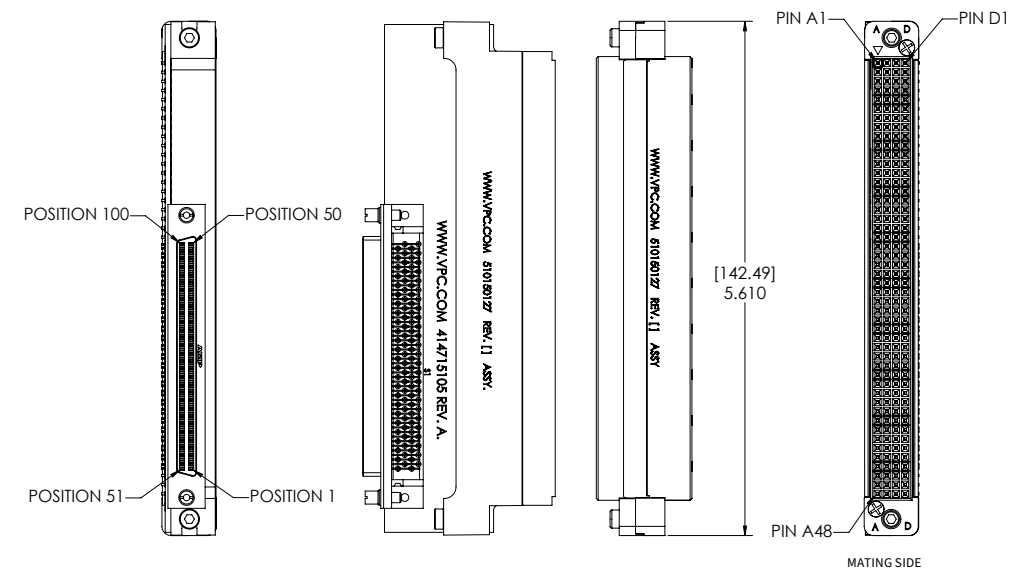
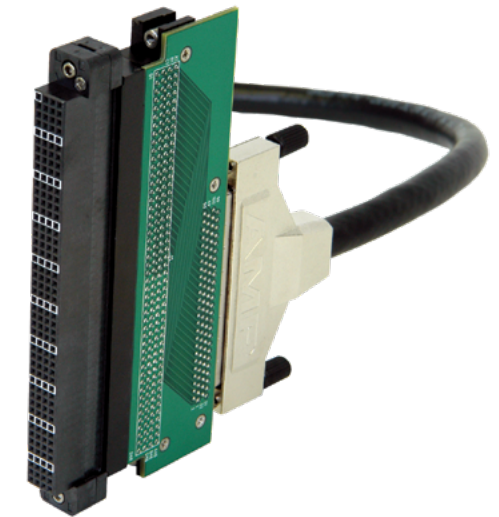
#### STANDARD CABLES FOR PCB ADAPTERS – 18"

|             |   |
|-------------|---|
| 515 109 119 | Cable Assembly, 68 Pin Female SCSI (Thumb Screws) to 68 Pin Male SCSI (Spring Latch), 18" |
| 515 109 001 | Cable Assembly, 68 Pin Male VHDCI (Thumb Screws) to 68 Pin Male VHDCI (Thumb Screws), 18" |

## SCSI PCB Adapter • 1 x 100

### PCB Specifications

|                                       |                  |
|---------------------------------------|------------------|
| Current Rating                        | 1 amp @ 30 VAC   |
| Temperature                           | -55° C to 105° C |
| Termination Resistance                | 50 mΩ typical    |
| Insulation Resistance                 | 1000 MΩ min.     |
| Dielectric Withstanding Voltage (DWV) | 500 VAC min.     |
| Module Positions Needed               | 1                |



PCB Adapter, Receiver • Part # 510 150 127

| Part # | Description |
|--------|-------------|
|--------|-------------|

#### 1 X 100 SCSI PCB ADAPTER

|             |   |
|-------------|---|
| 510 150 127 | PCB Adapter, Receiver, QuadraPaddle, 192 Position, to PCB-mounted 1x100 Pin Female SCSI Connector |
|-------------|---|

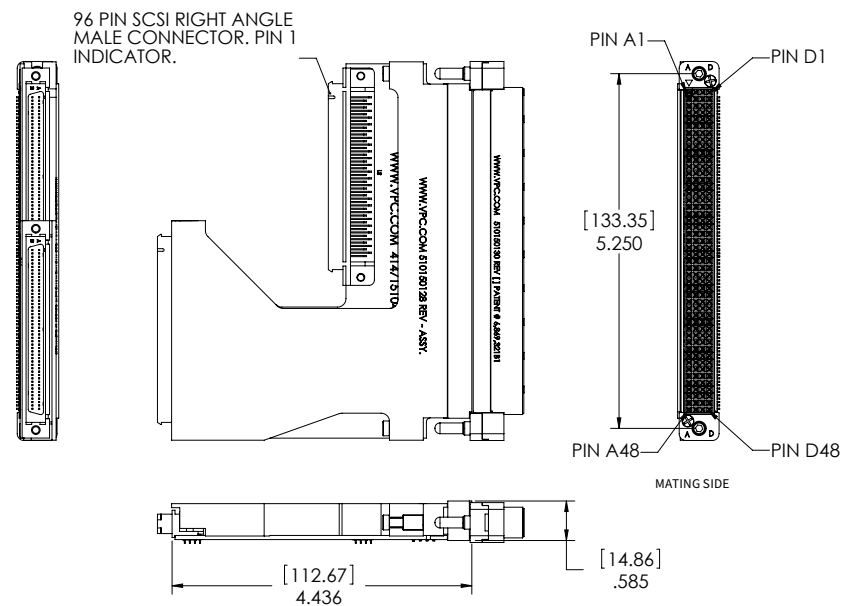
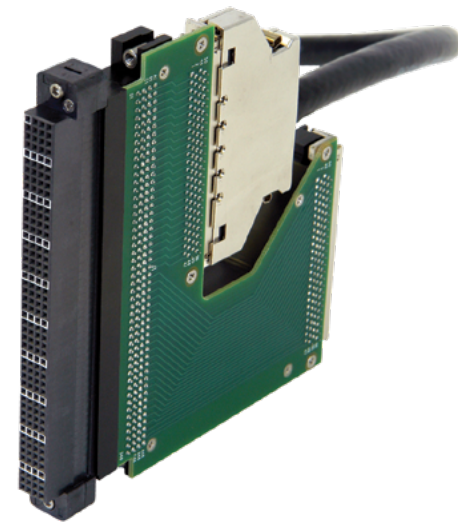
#### STANDARD CABLES FOR PCB ADAPTERS – 18" AND 36"

|             |  |
|-------------|--|
| 515 109 134 | Cable Assembly, 100 Pin Male SCSI (Thumb Screws) to 100 Pin Male SCSI, Twisted Pair, Double Ended, 18" |
| 515 109 133 | Cable Assembly, 100 Pin Male SCSI (Thumb Screws) to 100 Pin Male SCSI, Twisted Pair, Double Ended, 36" |

## SCSI PCB Adapter • 2 x 96

### PCB Specifications

|                                       |                  |
|---------------------------------------|------------------|
| Current Rating                        | 1 amp @ 30 VAC   |
| Temperature                           | -55° C to 105° C |
| Termination Resistance                | 50 mΩ typical    |
| Insulation Resistance                 | 1000 MΩ min.     |
| Dielectric Withstanding Voltage (DWV) | 500 VAC min.     |
| Module Positions Needed               | 1                |



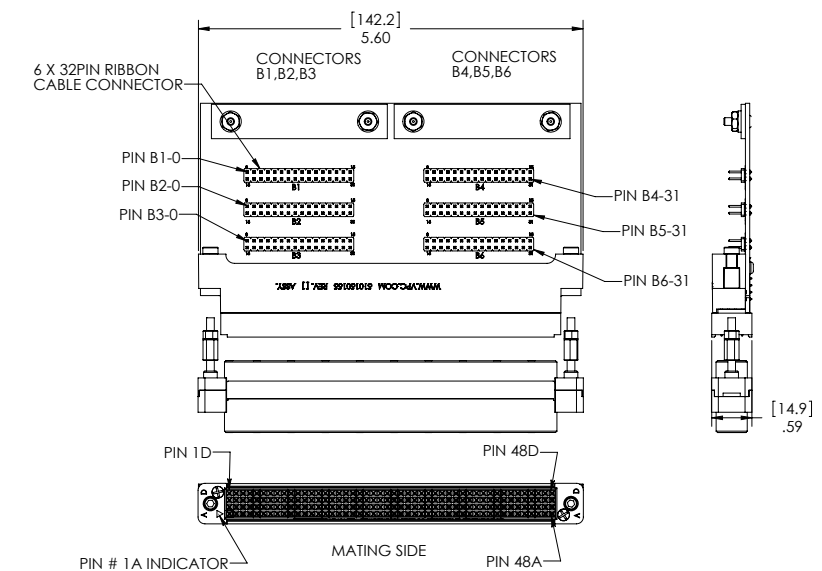
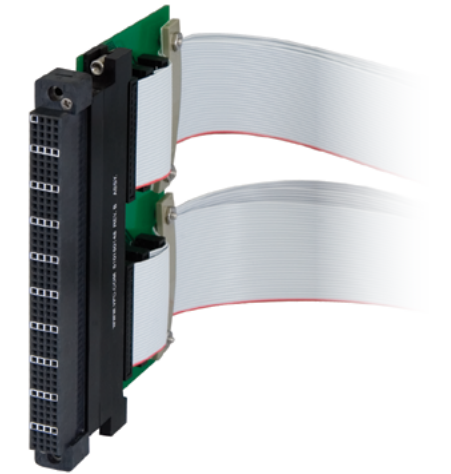
### PCB Adapter, Receiver • Part # 510 150 128

| Part #  | Description  |
|---|--|
| 2 X 96 SCSI PCB ADAPTER<br>510 150 128                | PCB Adapter, Receiver, QuadraPaddle, 192 Position, to 2x96 Pin Male SCSI Connectors        |
| <b>STANDARD CABLES FOR PCB ADAPTERS – 18" AND 36"</b> |  |
| 515 109 007   | Cable Assembly, 96 Pin Female SCSI (Spring Latch) to 96 Pin Female SCSI, Double Ended, 18" |
| 515 109 008   | Cable Assembly, 96 Pin Female SCSI (Spring Latch) to 96 Pin Female SCSI, Double Ended, 36" |

## PCB Adapter

### PCB Specifications

|                                       |                       |
|---------------------------------------|-----------------------|
| Current Rating                        | 3 amps @ 50 volts RMS |
| Temperature                           | -55° C to 105° C      |
| Termination Resistance                | 50 mΩ typical         |
| Insulation Resistance                 | 1000 MΩ min.          |
| Dielectric Withstanding Voltage (DWV) | 500 VAC min.          |
| Module Slots Needed                   | 1                     |

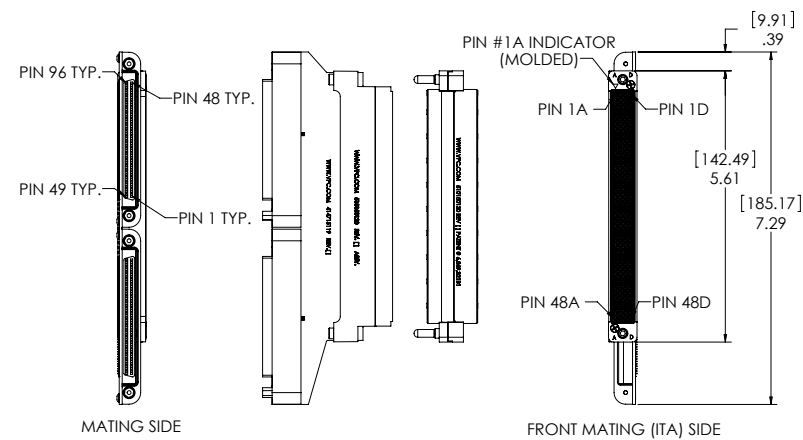


### PCB Adapter, Receiver • Part # 510 150 155

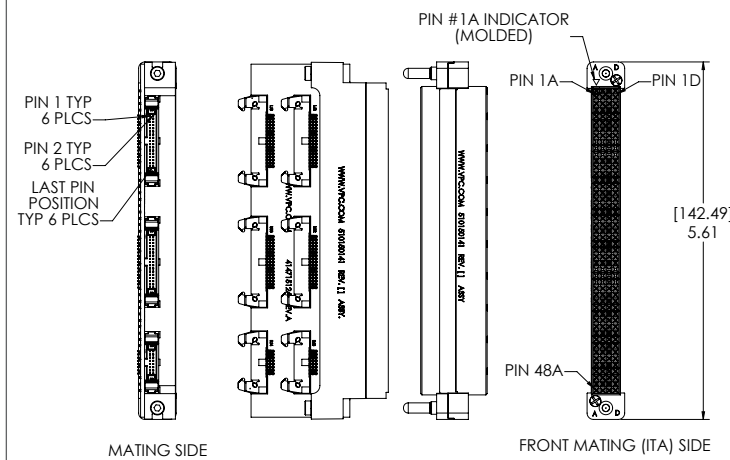
| Part #  | Description  |
|---|--|
| 510 150 155   | PCB ADAPTER WITH ALL PINS WIRED<br>PCB Adapter, Receiver, QuadraPaddle, 192 Position, to PCB-Mounted 6x32-Pin Ribbon Cable Headers |
| <b>STANDARD CABLES FOR PCB ADAPTERS – 20" AND 36"</b> |  |
| 515 109 162   | Cable Assembly, 32 Pin .100" [2.54 mm] Pitch Ribbon Cable, Double Ended, 20"   |
| 515 109 163   | Cable Assembly, 32 Pin .100" [2.54 mm] Pitch Ribbon Cable, Double Ended, 36"   |

NOTE: This is a left mount PCB adapter for optimal cable management. Do not use beside a right mount PCB Adapter.

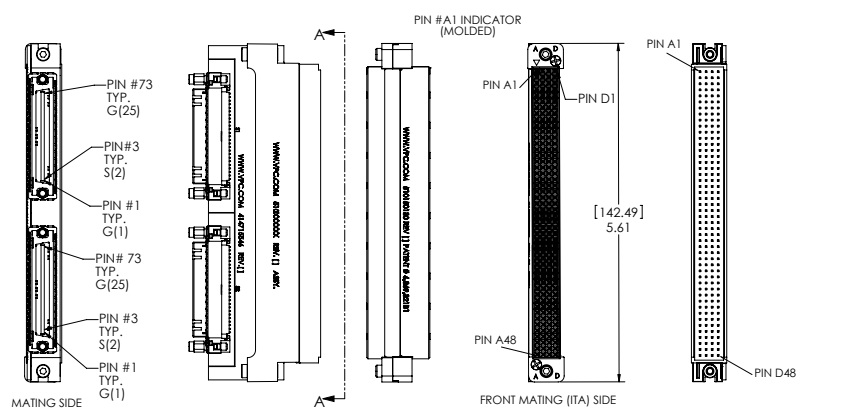
## PCB Adapter Solutions



PCB Adapter, Receiver, QuadraPaddle, 192 Position, to PCB-Mounted 2x96 SCSI Connectors • Part # 510 150 120



PCB Adapter, Receiver, QuadraPaddle, 192 Position, to NI PXI-2532 • Part # 510 150 141



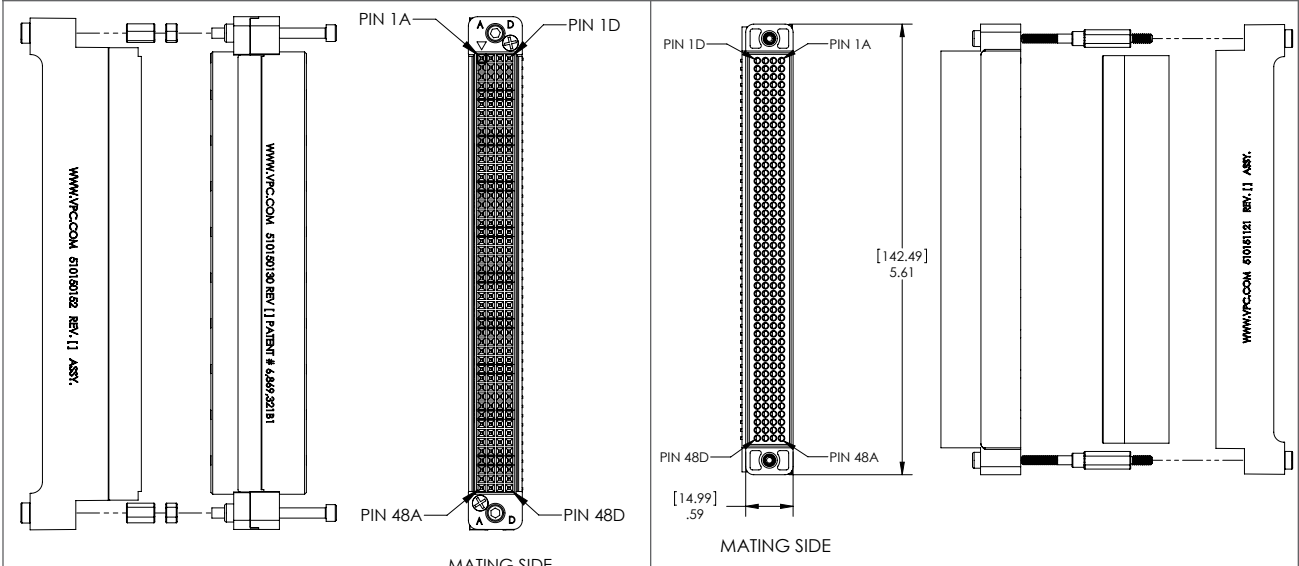
PCB Adapter, Receiver, QuadraPaddle, 192 Position, to 2 PCB Mounted 12X Male InfiniBand Connectors (LVDS) • Part # 510 150 210



## QuadraPaddle Right Angle Contact Modules

### PCB Specifications

|                                       |                     |
|---------------------------------------|---------------------|
| Receiver and ITA Material             | Black LCP/black PEI |
| Temperature                           | -55° C to 125° C    |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.       |
| Available Contact Positions           | 192                 |
| Module Positions Needed               | 1                   |



Receiver • Part # 510 150 152

ITA • Part # 510 151 121

| Part #   | Description   |
|--|---|
| <b>QUADRAPADDLE RECEIVER RIGHT ANGLE CONTACT MODULES</b> |   |
| 510 150 152  | Signal Module, Receiver, QuadraPaddle, 192 Position, Right Angle Contacts for Custom PCB Mounting (510 150 130 and 510 109 315) |
| 510 109 315  | Header/Shroud Right Angle Kit, Receiver, QuadraPaddle, for Custom PCB Mounting (requires 510 150 130)                           |
| <b>QUADRAPADDLE ITA RIGHT ANGLE CONTACT MODULES</b>      |   |
| 510 151 121  | Signal Module, ITA, QuadraPaddle, 192 Position, Right Angle Contacts for Custom PCB Mounting (510 151 107 and 510 109 316)      |
| 510 109 316  | Header/Shroud Right Angle Kit, ITA, QuadraPaddle, for Custom PCB Mounting (requires 510 151 107)                                |

## TriPaddle Signal Contacts

### Contact Specifications

|                                       |  |
|---------------------------------------|--|
| Operating Current and Voltage         | 7 amps max. continuous (20 AWG)<br>10 amps max. continuous (14 AWG)<br>600 volt max. use of wire<br>MIL-W-16878/4        |
| Contact Resistance                    | 4 mΩ max.<br>Measured at 50 mV @ 100 mA  |
| Mating Force                          | 10 oz. nominal [.25 kg]  |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Insulation Resistance                 | 4000 MΩ min.   |
| Contact Body Material                 | Female (RCV) – BeCu<br>Male (ITA) – brass  |
| Contact Plating                       | Female (RCV) – 30μ" Au over 100μ" Ni<br>Male (ITA) – 30μ" Au over 100μ" Ni<br>10 Amp (RCV & ITA) – 50μ" Au over 100μ" Ni |
| Cycle Life                            | 20,000 cycles  |

ITA Contact

**Part # 610 110 108**



Receiver Contact  
**Part # 610 110 101**

Receiver Contact

**Part # 610 110 128**



ITA Contact

**Part # 610 110 129**

Receiver Contact

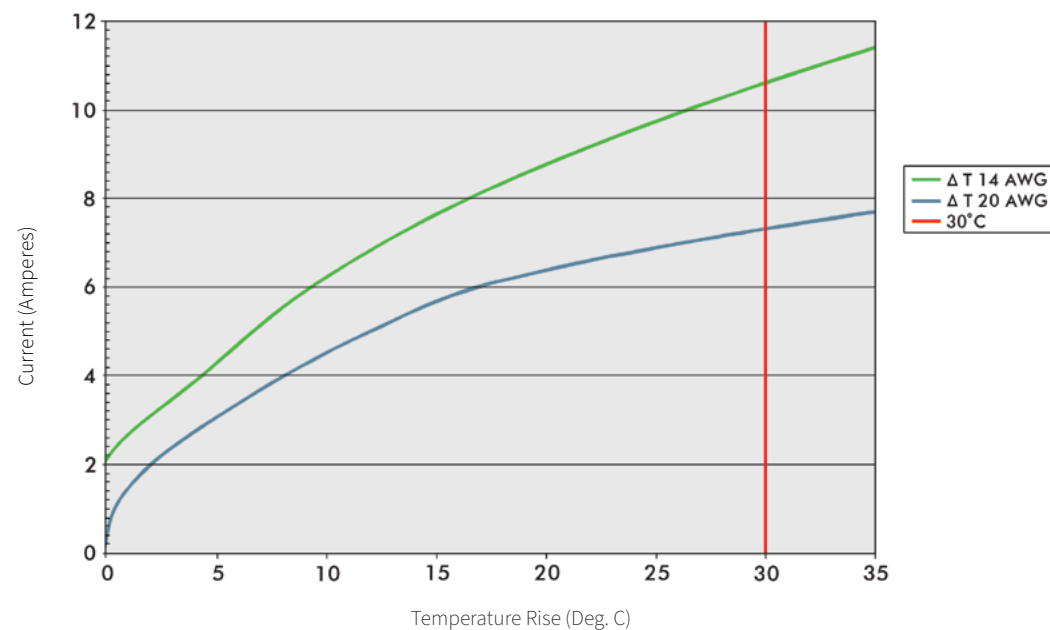
**Part # 610 110 167**



ITA Contact

**Part # 610 110 169**

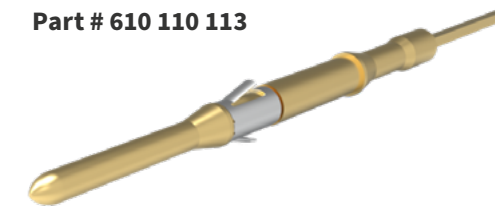
TriPaddle Contact  
20 AWG & 14 AWG  
T-Rise Test



## TriPaddle Signal Contacts

ITA Contact

**Part # 610 110 113**



Receiver Contact

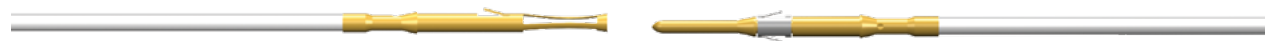
**Part # 610 110 104**



| Part #                             | Description  | Used in Module   |
|------------------------------------|--|--|
| <b>TRIPADDLE RECEIVER CONTACTS</b> |  |  |
| 610 110 101                        | Signal Contact, Receiver, TriPaddle, 7 Amp, 20-24 AWG, 30μ" Gold           | 510 104 134/136/149/206/243/261/306/307<br>510 160 103/108/109/111/115/124 |
| 610 110 128                        | Signal Contact, Receiver, TriPaddle, 10 Amp, 14-18 AWG max, 50μ" Gold      | 510 104 134/136/149/206/243/261/306/307<br>510 160 103/108/109/111/115/124 |
| 610 110 167                        | Signal Contact, Receiver, TriPaddle, 7 Amp, 26-28 AWG, 30μ" Gold           | 510 104 134/136/149/206/243/261/306/307<br>510 160 103/108/109/111/115/124 |
| 610 110 177                        | Signal Contact, Receiver, TriPaddle, 10 Amp, 14-18 AWG, 30μ" Gold          | 510 104 134/136/149/206/243/261/306/307<br>510 160 103/108/109/111/115/124 |
| 610 110 179                        | Signal Contact, Receiver, TriPaddle, 5 Amp, .025" Round Post, 30μ" Gold    | 510 104 134/136/149/206/243/261/306/307<br>510 160 103/108/109/111/115/124 |
| <b>TRIPADDLE ITA CONTACTS</b>      |  |  |
| 610 110 108                        | Signal Contact, ITA, TriPaddle, 7 Amp, 20-24 AWG, 30μ" Gold                | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |
| 610 110 129                        | Signal Contact, ITA, TriPaddle, 10 Amp, 14-18 AWG max, 30μ" Gold           | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |
| 610 110 146                        | Signal Contact, ITA, TriPaddle, 7 Amp, 20-24 AWG, 50μ" Gold, Crimp/Solder  | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |
| 610 110 169                        | Signal Contact, ITA, TriPaddle, 7 Amp, 26-28 AWG, 30μ" Gold                | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |
| 610 110 113                        | Signal Contact, ITA, TriPaddle, 7 Amp, .025" Post for Wire Wrap, 30μ" Gold | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |

| Part #                 | Description  | Used on Contact             |
|------------------------|--|-----------------------------|
| <b>CRIMP TOOLS</b>     |  |                             |
| 910 101 102            | Tool, Crimp, 10 Amp TriPaddle, Thermocouple, Micro Power, Receiver and ITA, Locator Required | 610 110 128/129/177         |
| 910 101 103            | Tool, Crimp, QuadraPaddle and TriPaddle, Receiver and ITA Contacts, Locator Required         | 610 110 101/108/167/169/179 |
| <b>LOCATORS</b>        |  |                             |
| 910 104 127            | Tool, Locator, TriPaddle, Receiver   | 610 110 101/167/179         |
| 910 104 107            | Tool, Locator, TriPaddle, ITA  | 610 110 108/169             |
| 910 104 116            | Tool, Locator, TriPaddle, Receiver   | 610 110 128                 |
| 910 104 118            | Tool, Locator, TriPaddle, ITA  | 610 110 129                 |
| <b>EXTRACTION TOOL</b> |  |                             |
| 910 110 102            | Tool, Extraction, Receiver and ITA, TriPaddle and Thermocouple                               |                             |

## TriPaddle Signal Patchcords



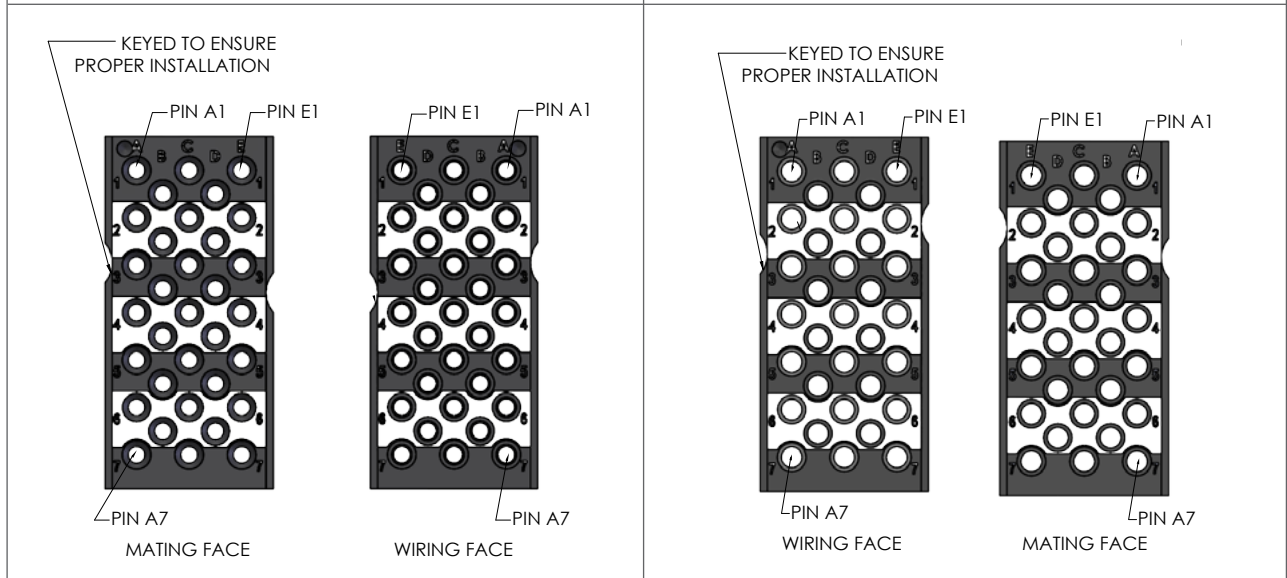
| TriPaddle Receiver Patchcord                          |  | TriPaddle ITA Patchcord  |
|---|--|--|
| Part #  | Description  | Used in Module   |
| <b>TRIPADDLE RECEIVER AND ITA PATCHCORDS</b>          |  |  |
| 7-104 924 000-036                                     | Signal Patchcord, Receiver, TriPaddle, 3 Amp, 36", 24 AWG, Single Ended    | 510 104 134/136/149/206/243/261/306/307<br>510 160 103/108/109/111/115/124 |
| 7-104 922 000-036                                     | Signal Patchcord, Receiver, TriPaddle, 5 Amp, 36", 22 AWG, Single Ended    | 510 104 134/136/149/206/243/261/306/307<br>510 160 103/108/109/111/115/124 |
| 7-102 914 000-036                                     | Signal Patchcord, Receiver, TriPaddle, 10 Amp, 36", 14 AWG, Single Ended   | 510 104 134/136/149/206/243/261/306/307<br>510 160 103/108/109/111/115/124 |
| 7-103 924 000-036                                     | Signal Patchcord, ITA, TriPaddle, 36", 3 Amp, 24 AWG, Single Ended         | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115/            |
| 7-103 922 000-036                                     | Signal Patchcord, ITA, TriPaddle, 36", 5 Amp, 22 AWG, Single Ended         | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |
| 7-101 914 000-036                                     | Signal Patchcord, ITA, TriPaddle, 36", 10 Amp, 14 AWG, Single Ended        | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |
| <b>TRIPADDLE ITA PATCHCORD JUMPERS (DOUBLE ENDED)</b> |  |  |
| 7-103 924 103-006                                     | Signal Patchcord, ITA, TriPaddle, 6", 3 Amp, 24 AWG, Double Ended Jumpers  | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |
| 7-103 922 103-006                                     | Signal Patchcord, ITA, TriPaddle, 6", 5 Amp, 22 AWG, Double Ended Jumpers  | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |
| 7-101 914 101-006                                     | Signal Patchcord, ITA, TriPaddle, 6", 10 Amp, 14 AWG, Double Ended Jumpers | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |



| TriPaddle Receiver Twisted Pair Patchcord                          |  | TriPaddle ITA Twisted Pair Patchcord                                       |
|--|--|--|
| Part #   | Description  | Used in Module   |
| <b>TRIPADDLE TWISTED PAIR RECEIVER AND ITA PATCHCORDS</b>          |  |  |
| 7-104 424 000-036  | Signal Patchcord, Receiver, TriPaddle, 3 Amp, 36", 24 AWG Twisted Pair, Single Ended   | 510 104 134/136/149/206/243/261/306/307<br>510 160 103/108/109/111/115/124 |
| 7-104 422 000-036  | Signal Patchcord, Receiver, TriPaddle, 5 Amp, 36", 22 AWG Twisted Pair, Single Ended   | 510 104 134/136/149/206/243/261/306/307<br>510 160 103/108/109/111/115/124 |
| 7-103 424 000-036  | Signal Patchcord, ITA, TriPaddle, 36", 3 Amp, 24 AWG Twisted Pair, Single Ended        | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |
| 7-103 422 000-036  | Signal Patchcord, ITA, TriPaddle, 36", 5 Amp, 24 AWG Twisted Pair, Single Ended        | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |
| <b>TRIPADDLE ITA TWISTED PAIR PATCHCORD JUMPERS (DOUBLE ENDED)</b> |  |  |
| 7-103 424 103-006  | Signal Patchcord, ITA, TriPaddle, 6", 24 AWG Twisted Pair, Double Ended Jumpers        | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |
| 7-103 422 103-006  | Signal Patchcord, ITA, TriPaddle, 3 Amp, 6", 22 AWG Twisted Pair, Double Ended Jumpers | 510 108 101/126/131/178/210/245<br>510 161 103/108/109/111/115             |
| <b>USB PATCHCORDS</b>  |  |  |
| 7-104 872 596-036  | Signal Patchcord, Receiver, TriPaddle, 36", USB 2.0 Wire, to USB Type A Plug           |  |
| 7-103 872 596-036  | Signal Patchcord, ITA, TriPaddle, 36", USB 2.0 Wire, to USB Type A Plug                |  |
| <b>RJ45 PATCHCORDS</b>   |  |  |
| 7-106 870 595-036  | Signal Patchcord, Receiver, TriPaddle, 36", CAT5e, to RJ45 Plug                        |  |
| 7-105 870 595-036  | Signal Patchcord, ITA, TriPaddle, 36", CAT5e, to RJ45 Plug                             |  |

## TRIPADDLE MODULE • I2 MX INSERT

| Specifications                        |                 |
|---------------------------------------|-----------------|
| Material                              | G10 epoxy glass |
| Operating Temperature                 | -40°C to 125°C  |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.   |
| Available Contact Positions           | 33              |
| Module Positions Needed               | 1               |

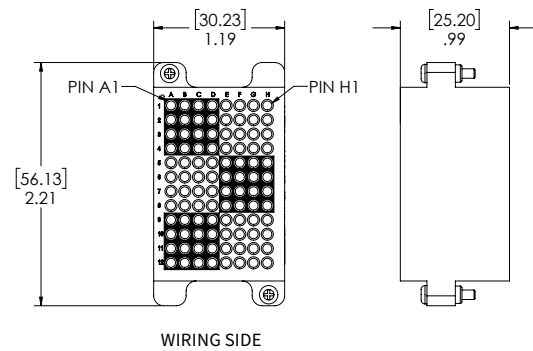
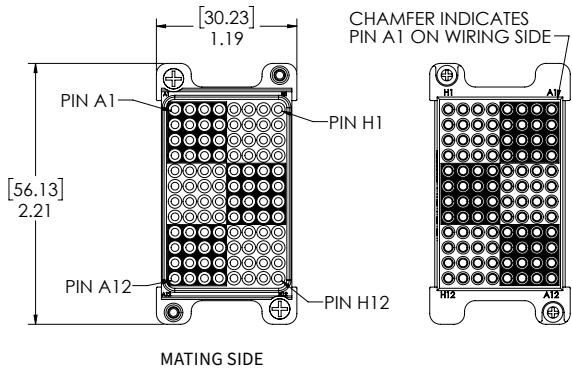


| Receiver • Part # 510 143 006                 |   | ITA • Part # 510 144 006                                 |
|---|---|--|
| Part #  | Description   | Contacts Used  |
| <b>I2 MX RECEIVER TRIPADDLE MODULE INSERT</b> |   |  |
| 510 143 006                                   | TriPaddle Signal, Module Insert, Receiver, i2 MX, 33 Position | 610 110 101<br>610 110 177<br>610 110 128<br>610 110 167 |
| <b>I2 MX ITA TRIPADDLE MODULE INSERT</b>      |   |  |
| 510 144 006                                   | TriPaddle Signal, Module Insert, ITA, i2 MX, 33 Position      | 610 110 108<br>610 110 113<br>610 110 129<br>610 110 169 |

## TriPaddle Module • iCon Insert

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Material                              | Black Ryton R4-230 (ITA)<br>G10 epoxy glass (receiver)           |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 96   |
| Module Positions Needed               | 1  |



Receiver • Part # 510 160 108

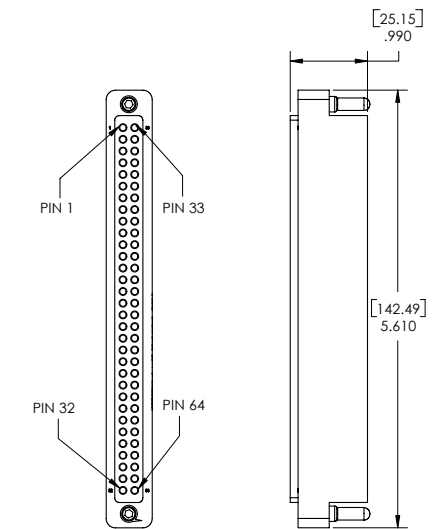
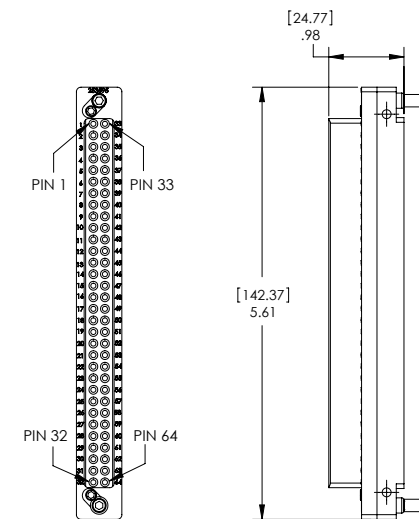
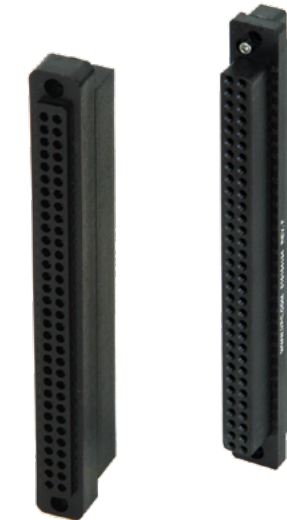
ITA • Part # 510 161 108

| Part #      | Description  | Contacts Used                   |
|-------------|--|---------------------------------|
| 510 160 108 | ICON RECEIVER TRIPADDLE SIGNAL MODULE<br>Signal Module, Receiver, TriPaddle, iCon, 96 Position | 610 110 101/104/128/167/177/179 |
| 510 161 108 | ICON ITA TRIPADDLE SIGNAL MODULE<br>Signal Module, ITA, TriPaddle, iCon, 96 Position           | 610 110 108/113/129/169         |

## TriPaddle Module • 90 Series insert

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Receiver Material                     | Black PPS  |
| Receiver Temperature                  | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| ITA Material                          | PBT  |
| ITA Temperature                       | Operating • -40° C to 125° C<br>Non-operating • -40° C to 140° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 64   |
| Module Positions Needed               | 1  |



Receiver • Part # 510 104 134

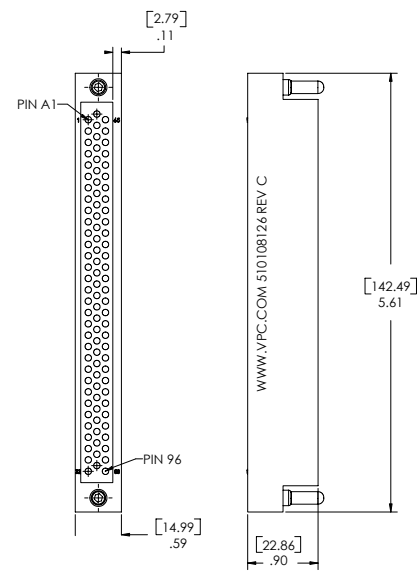
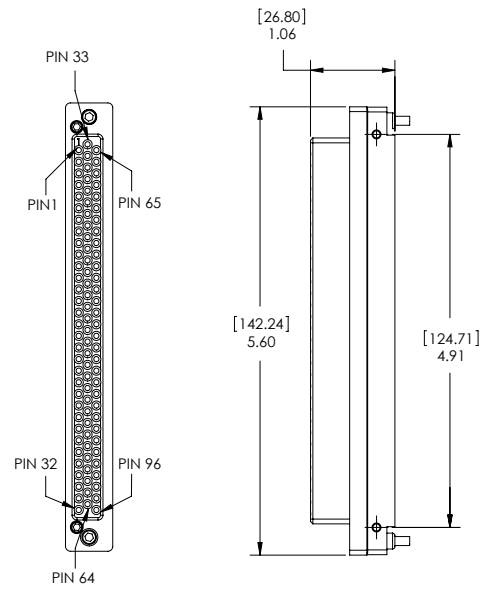
ITA • Part # 510 108 101

| Part #      | Description  | Contacts Used                   |
|-------------|--|---------------------------------|
| 510 104 134 | TRIPADDLE RECEIVER MODULES AND STRAIN RELIEFS<br>Signal Module, Receiver, TriPaddle, 64 Position | 610 110 101/104/128/167/177/179 |
| 510 109 116 | Strain Relief Plate for Select Receiver Modules  |                                 |
| 510 108 101 | TRIPADDLE ITA MODULES AND STRAIN RELIEFS<br>Signal Module, ITA, TriPaddle, 64 Position           | 610 110 108/113/129/169         |
| 510 109 296 | Strain Relief Plate for ITA Modules  |                                 |



## TriPaddle Module • 90 Series insert

| Module Specifications                 |  |
|---------------------------------------|--|
| Material                              | Black PPS  |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 96   |
| Module Positions Needed               | 1  |



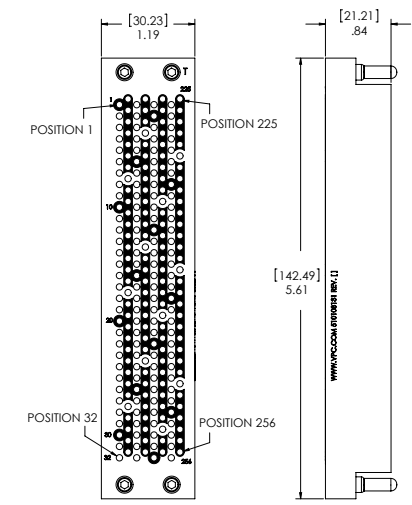
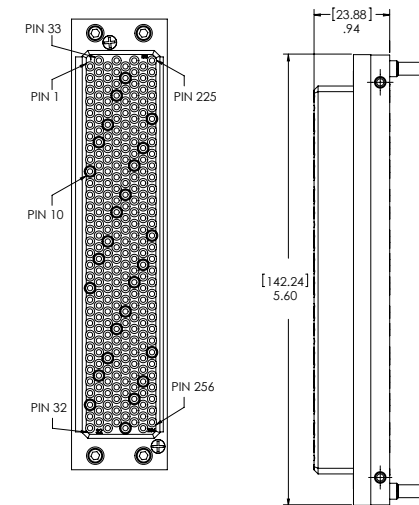
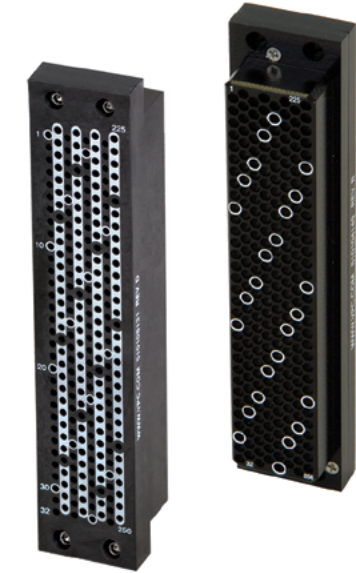
Receiver • Part # 510 104 136

ITA • Part # 510 108 126

| Part #      | Description                                     | Contacts Used                   |
|-------------|---|---------------------------------|
| 510 104 136 | TRIPADDLE RECEIVER MODULE AND STRAIN RELIEF     |                                 |
| 510 109 116 | Signal Module, Receiver, TriPaddle, 96 Position | 610 110 101/104/128/167/177/179 |
| 510 109 116 | Strain Relief Plate for Select Receiver Modules |                                 |
| 510 108 126 | TRIPADDLE ITA MODULE AND STRAIN RELIEF          |                                 |
| 510 109 296 | Signal Module, ITA, TriPaddle, 96 Position      | 610 110 108/113/129/169         |
| 510 109 296 | Strain Relief Plate for ITA Modules             |                                 |

## TriPaddle Module • 90 Series insert

| Module Specifications                 |  |
|---------------------------------------|--|
| Receiver Material                     | Black PPS  |
| Receiver Temperature                  | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| ITA Material                          | Black-LCP  |
| ITA Temperature                       | Operating • -55° C to 125° C<br>Non-operating • -65° C to 200° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 256  |
| Module Positions Needed               | 2  |



Receiver • Part # 510 104 149

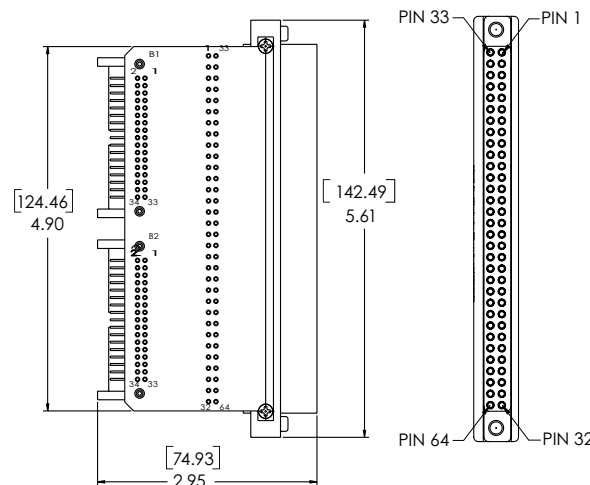
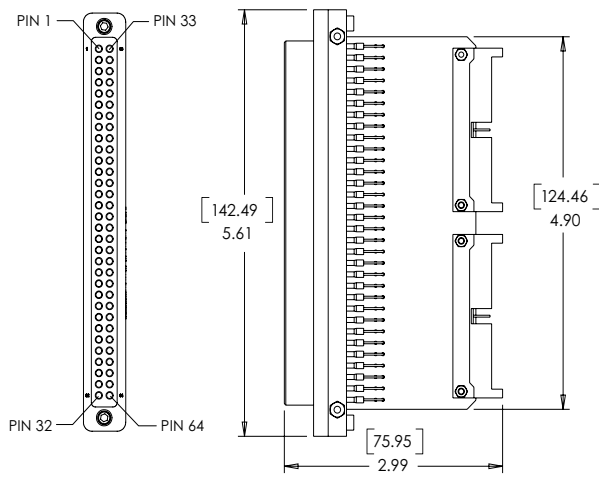
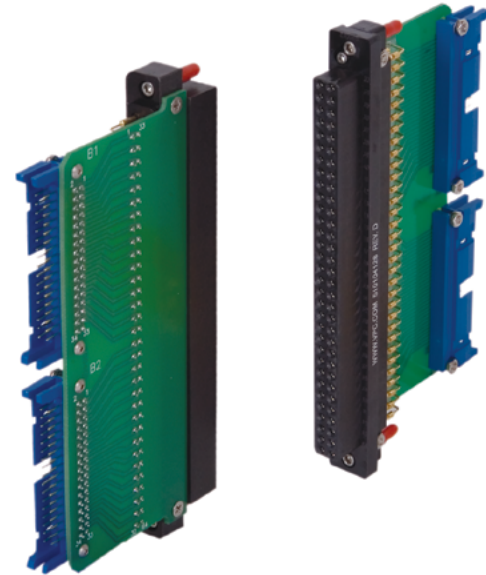
ITA • Part # 510 108 131

| Part #      | Description                                      | Contacts Used                   |
|-------------|--|---------------------------------|
| 510 104 149 | TRIPADDLE RECEIVER MODULE AND STRAIN RELIEF      |                                 |
| 510 109 116 | Signal Module, Receiver, TriPaddle, 256 Position | 610 110 101/104/128/167/177/179 |
| 510 109 116 | Strain Relief Plate for Select Receiver Modules  |                                 |
| 510 108 131 | TRIPADDLE ITA MODULE AND STRAIN RELIEF           |                                 |
| 510 109 296 | Signal Module, ITA, TriPaddle, 256 Position      | 610 110 108/113/129/169         |
| 510 109 296 | Strain Relief Plate for ITA Modules              |                                 |

## TriPaddle PCB Adapters

### Module Specifications

|                         |                       |
|-------------------------|-----------------------|
| Current Rating          | 1 amp @ 150 volts RMS |
| Temperature             | -55° C to 105° C      |
| Termination Resistance  | 50 mΩ typical         |
| Insulation Resistance   | 1000 MΩ min.          |
| DWV                     | 500 volts RMS         |
| Connector 1             | 34 pin ribbon cable   |
| Connector 2             | 34 pin ribbon cable   |
| Module Positions Needed | 1                     |



Receiver • Part # 510 104 128

ITA • Part # 510 108 140

| Part # | Description |
|--------|-------------|
|--------|-------------|

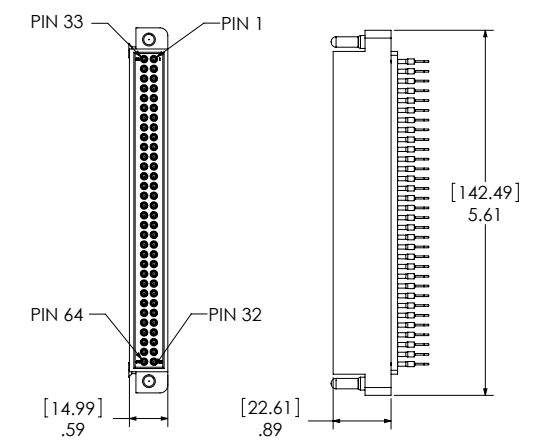
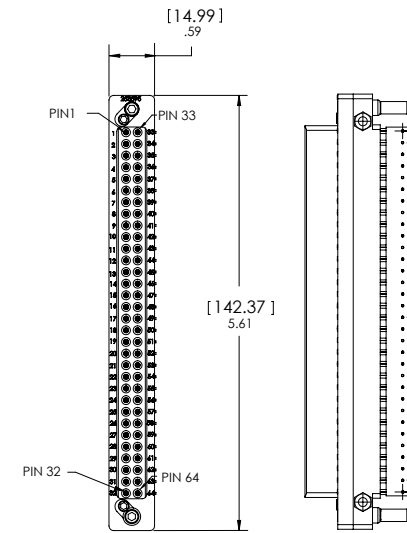
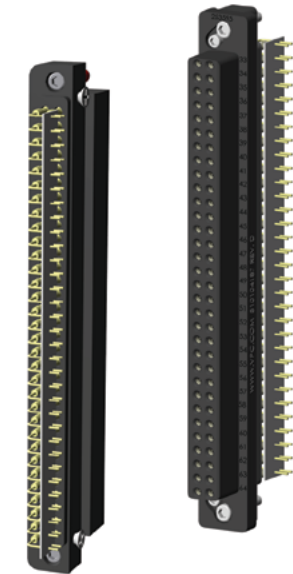
**RECEIVER PCB ADAPTER**  
510 104 128 PCB Adapter, Receiver, TriPaddle, 64 Position, to PCB-Mounted 2x34 pin (BERG 65496-019) Connectors

**ITA PCB ADAPTER**  
510 108 140 PCB Adapter, ITA, TriPaddle, 64 Position, to PCB-Mounted 2x34 pin (BERG 65496-019) Connectors

## TriPaddle Right Angle Contact Modules

### Module Specifications

|                             |  |
|-----------------------------|--|
| Material                    | Black PPS  |
| Temperature                 | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Available Contact Positions | 64   |
| Module Positions Needed     | 1  |



Receiver • Part # 510 104 187

ITA • Part # 510 108 112

| Part # | Description |
|--------|-------------|
|--------|-------------|

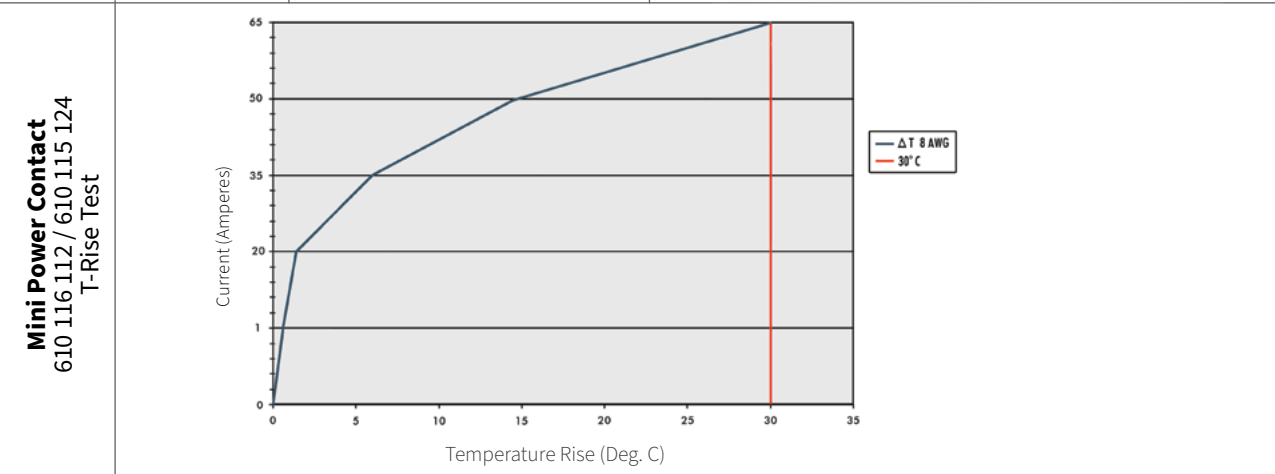
**RECEIVER RIGHT ANGLE CONTACT MODULE**  
510 104 187 Signal Module, Receiver, TriPaddle, 64 Position with Right Angle Contacts for Custom PCB Mounting

**ITA RIGHT ANGLE CONTACT MODULE**  
510 108 112 Signal Module, ITA, TriPaddle, 64 Position with Right Angle Contacts for Custom PCB Mounting



## Mini Power Patchcords, Contacts and Tools

| Contact Specifications                |   |  <p><b>Receiver Contact</b><br/><b>Part # 610 116 112</b></p> <p><b>ITA Contact</b><br/><b>Part # 610 115 124</b></p> |
|---------------------------------------|---|---|
| Operating Current                     | 65 amp max. continuous • 8 AWG<br>40 amp max. continuous • 12 AWG<br>30 amp max. continuous • 14 AWG<br>25 amp max. continuous • 16 AWG |   |
| Contact Resistance                    | 1 mΩ max.   |   |
| Mating Force                          | 5.7 lbs max. [2.58 kg]  |   |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.   |   |
| Insulation Resistance                 | 1000 MΩ min.  |   |
| Contact Body Material                 | Female (RCV) – brass<br>Male (ITA) – BeCu   |   |
| Contact Plating                       | 50μ" Au over 100μ" Ni   |   |
| Cycle Life                            | 20,000 cycles   |   |

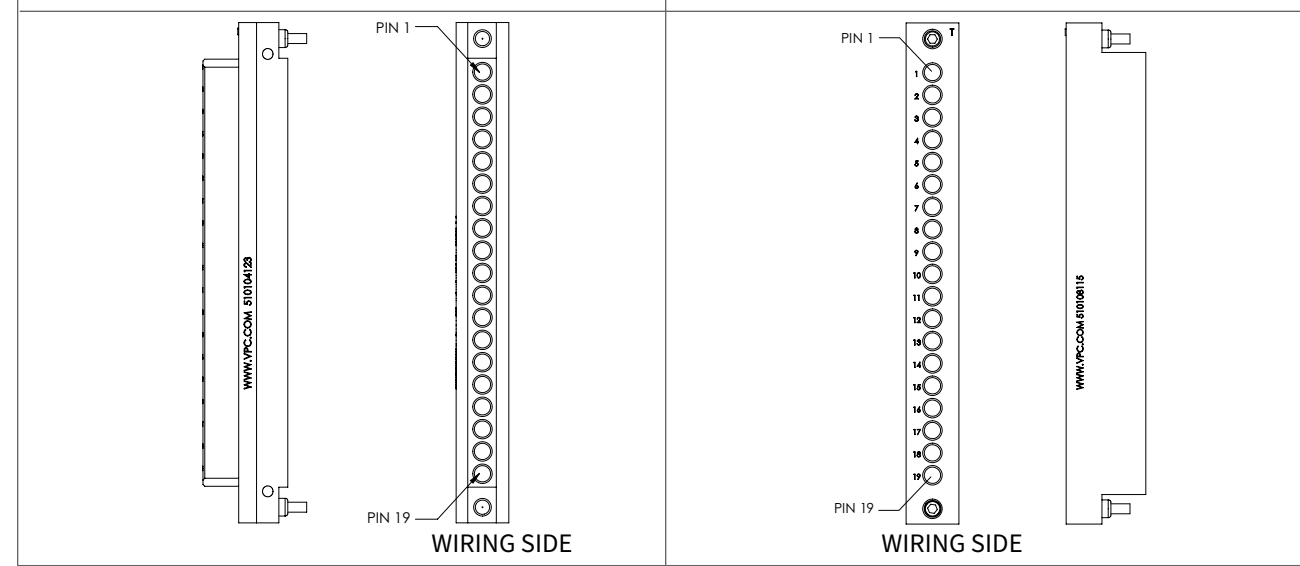
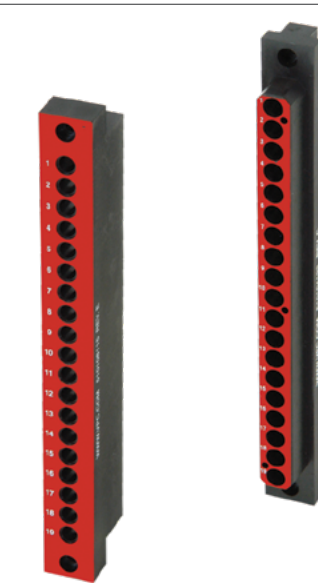


Mini Power Receiver Patchcord      Mini Power ITA Patchcord

| Part #  | Description   | Used in Module                         |
|---|---|--|
| <b>MINI POWER RECEIVER CONTACT</b>            |   |  |
| 610 116 112                                   | Mini Power Contact, Receiver, 8 AWG (max.), 50μ" Gold                               | 510 104 123/206<br>510 160 102/103/104 |
| <b>MINI POWER ITA CONTACTS</b>                |   |  |
| 610 115 124                                   | Mini Power Contact, ITA, 8 AWG (max.), 50μ" Gold                                    | 510 108 115/178<br>510 161 102/103/104 |
| 610 115 125                                   | Mini Power Contact, ITA, 8 AWG (max.), 30μ" Gold                                    | 510 108 115/178<br>510 161 102/103/104 |
| <b>Mini Power Receiver and ITA Patchcords</b> |   |  |
| 7-232 912 000-036                             | Mini Power Patchcord, Receiver, 40 Amp, 36", 12 AWG, White Wire, Single Ended       | 510 104 123/206<br>510 160 102/103/104 |
| 7-231 912 000-036                             | Mini Power Patchcord, ITA, 40 Amp, 36", 12 AWG, White Wire, Single Ended            | 510 108 115/178<br>510 160 102/103/104 |
| <b>EXTRACTION TOOL</b>                        |   |  |
| 910 112 104                                   | Tool, Extraction, Mini Power/Mini Coaxial/Mini Pneumatic Contacts, Receiver and ITA |  |

## Mini Power Module

| Module Specifications                 |  |
|---------------------------------------|--|
| Material                              | Ryton R-7  |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 19   |
| Module Positions Needed               | 1  |

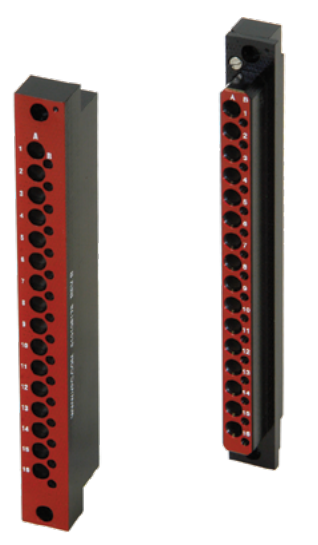
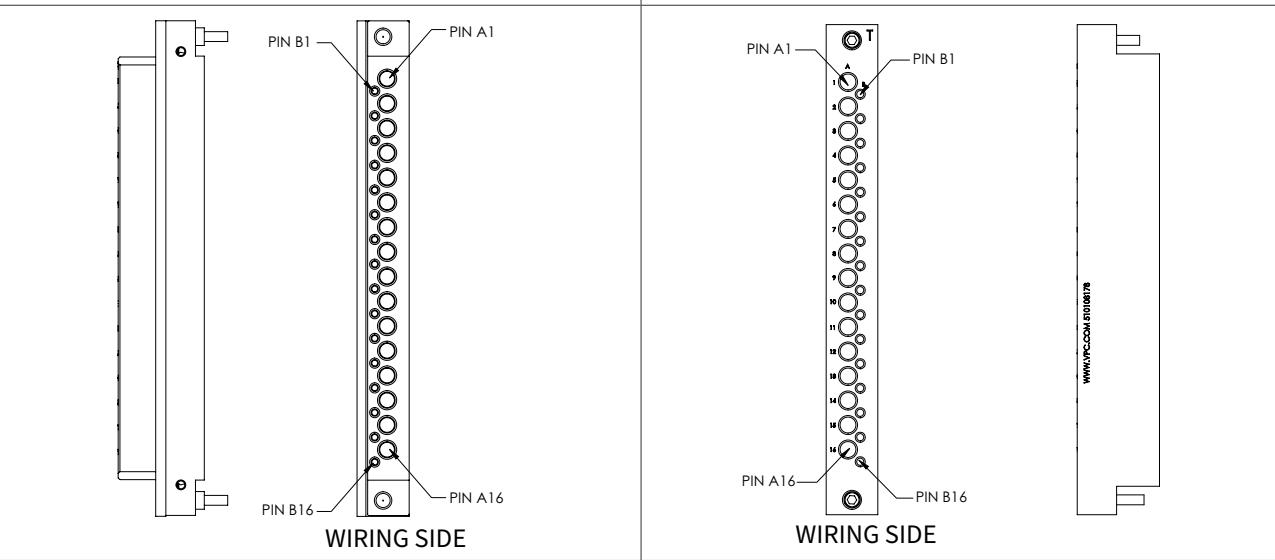


Receiver • Part # 510 104 123      ITA • Part # 510 108 115

| Part #  | Description                                     | Contacts Used  |
|---|---|----------------|
| <b>MINI POWER RECEIVER MODULES AND STRAIN RELIEFS</b> |   |                |
| 510 104 123   | Mini Power Module, Receiver, 19 Position        | 610 116 112    |
| 510 109 116   | Strain Relief Plate for Select Receiver Modules |                |
| <b>MINI POWER ITA MODULES AND STRAIN RELIEFS</b>      |   |                |
| 510 108 115   | Mini Power Module, ITA, 19 Position             | 610 115124/125 |
| 510 109 296   | Strain Relief Plate for ITA Modules             |                |

## TriPaddle/Mini Power Module

| Module Specifications                 |  |
|---------------------------------------|--|
| Material                              | Ryton R-7  |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -65° C to 225° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC Min.  |
| Available Contact Positions           | 16 Signal, 16 Mini Power   |
| Module Positions Needed               | 1  |

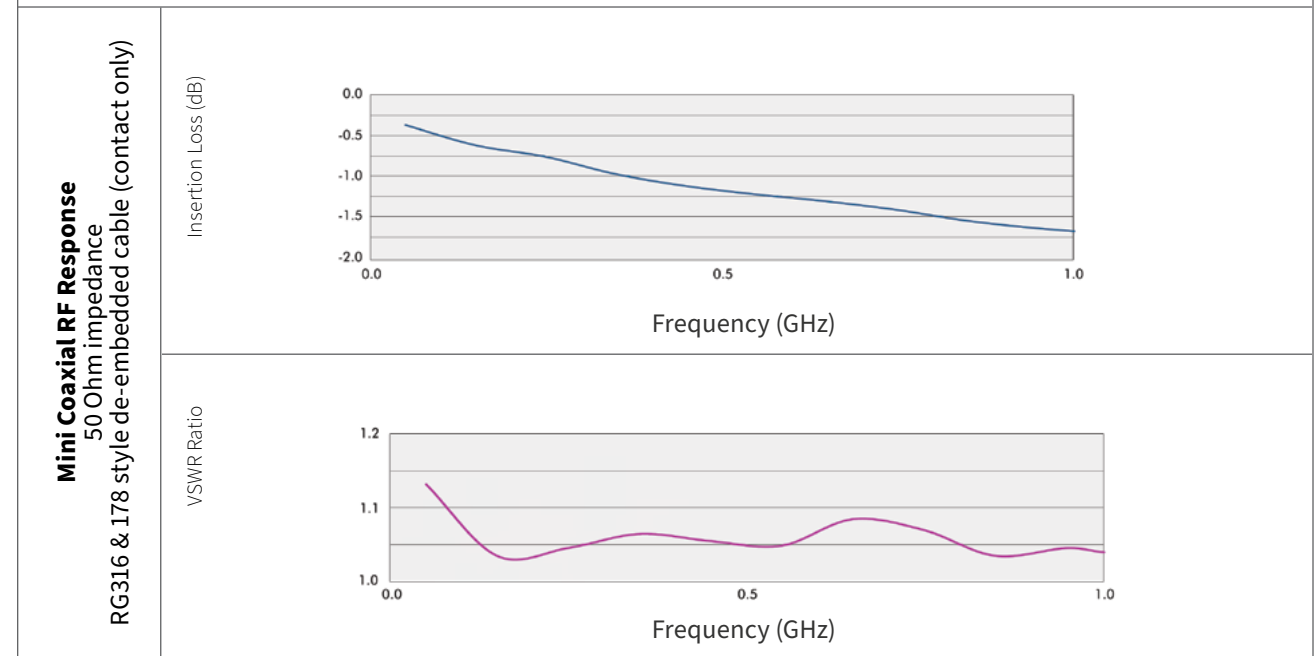



Receiver • **Part # 510 104 206**      ITA • **Part # 510 108 178**

| Part #      | Description   | Contacts Used                                    |                               |
|-------------|---|--|-------------------------------|
| 510 104 206 | TRIPADDLE SIGNAL/MINI POWER RECEIVER MODULES AND STRAIN RELIEFS<br>TriPaddle Signal/Mini Power Module, Receiver, 16/16 Position | TRIPADDLE<br>610 110 101/<br>128/167/<br>177/179 | MINI POWER<br>610 116 112     |
| 510 109 116 | Strain Relief Plate for Select Receiver Modules   |  |                               |
| 510 108 178 | TRIPADDLE SIGNAL/MINI POWER ITA MODULES AND STRAIN RELIEFS<br>TriPaddle Signal/Mini Power Module, ITA, 16/16 Position           | TRIPADDLE<br>610 110 108/<br>113/129/169         | MINI POWER<br>610 115 124/125 |
| 510 109 296 | Strain Relief Plate for ITA Modules   |  |                               |

## 50 Ohm Mini Coaxial Patchcords and Contacts

| Contact Specifications                |  |
|---------------------------------------|--|
| Characteristic Impedance              | 50 Ω   |
| Frequency Range                       | DC to 1 GHz  |
| Insertion Loss                        | 1.2 dB @ 1 GHz<br>1.02 dB @ 500 Mhz  |
| VSWR                                  | ≤ 1.06 @ 1 GHz   |
| Operating Current                     | 0.5 amps max. continuous   |
| Contact Resistance                    | 5 mΩ max.  |
| Mating Force                          | 1.5 lbs max. [.68 kg]  |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Insulation Resistance                 | 1000 MΩ min.   |
| Contact Body                          | Shield – brass<br>Center conductor – BeCu  |
| Contact Plating                       | Shield – 30μ" Au over 100μ" Ni<br>Shield (610 103 115/130/136) – 30μ" Au over 100μ" Ni<br>Center conductor – 60μ" Au over 100μ" Ni |
| Cycle Life                            | 20,000 cycles  |

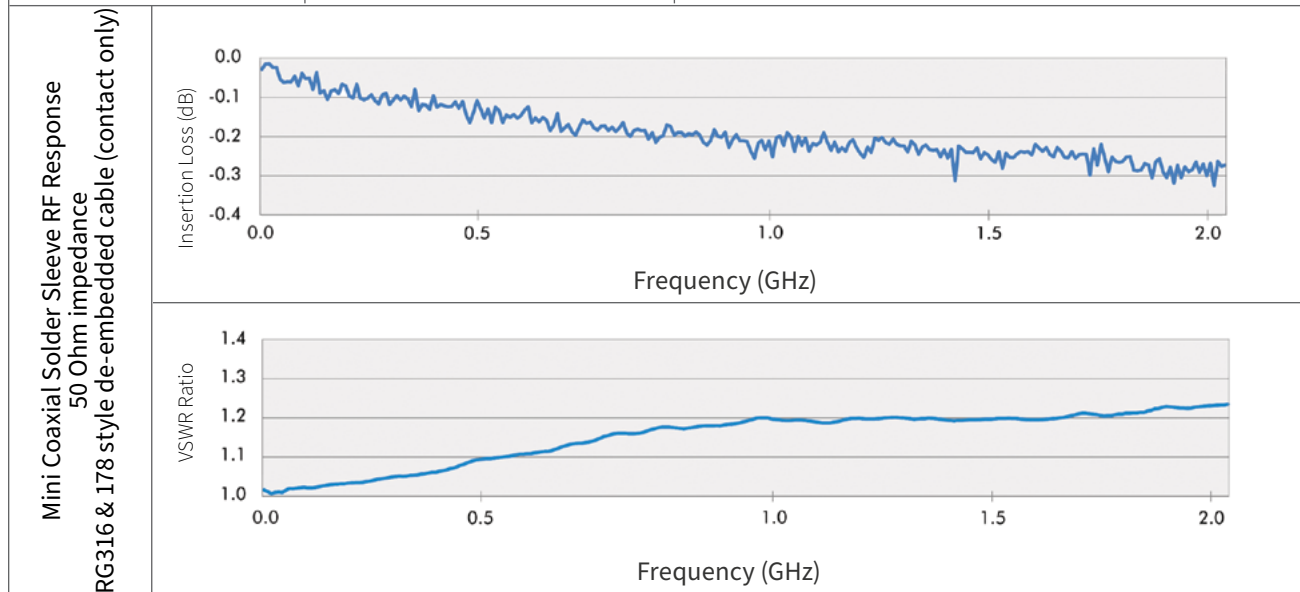
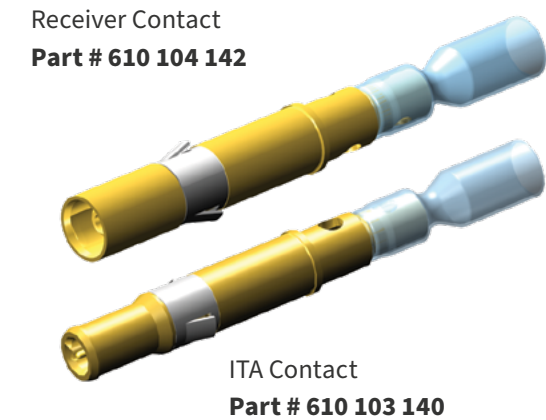
## 50 Ohm Mini Coaxial Patchcords & Contacts



| Mini Coaxial Receiver Patchcord                 |  | Mini Coaxial ITA Patchcord  |
|---|--|---|
| Part #  | Description  | Used in Module  |
| <b>MINI COAXIAL RECEIVER CONTACTS</b>           |  |   |
| 610 104 114                                     | Mini Coaxial Contact, Receiver, RG316  | 510 104 120/150/243/301   |
| 610 104 140                                     | Mini Coaxial Contact, Receiver, with Two .025" Square Posts for Wire Wrap                    | 510 160 102/103/104<br>510 104 120/150/243                        |
| 610 104 141                                     | Mini Coaxial Contact, Receiver, RG178  | 510 160 102/103/104<br>510 104 120/150/243/301                    |
| 610 104 160                                     | Mini Coaxial Contact, Receiver, Right Angle Posts for PCB Mount                              | 510 160 102/103/104<br>510 104 280                                |
| 610 104 149                                     | Mini Coaxial Contact, Receiver, RG316 Double Shield  | 510 104 120/150/243<br>510 160 102/103/104                        |
| <b>MINI COAXIAL ITA CONTACTS</b>                |  |   |
| 610 103 115                                     | Mini Coaxial Contact, ITA, RG316   | 510 108 111/132/210/276   |
| 610 103 129                                     | Mini Coaxial Contact, ITA, with Two .025" Square Posts for Wire Wrap                         | 510 161 102/103/104<br>510 108 111/132/210                        |
| 610 103 130                                     | Mini Coaxial Contact, ITA, RG178   | 510 161 102/103/104<br>510 108 111/132/210/276                    |
| 610 103 136                                     | Mini Coaxial Contact, ITA, 24 AWG  | 510 161 102/103/104<br>510 108 111/132/210/276                    |
| 610 103 150                                     | Mini Coaxial Contact, ITA, with One .025" Round Post and One .02" square post, .075" Spacing | 510 161 102/103/104<br>510 108 111/132/210                        |
| 610 103 152                                     | Mini Coaxial Contact, ITA, RG316 Double Shield   | 510 161 102/103/104<br>510 108 111/132/210                        |
| 610 103 161                                     | Mini Coaxial Contact, ITA, 24 & 26 AWG Twisted Pair  | 510 161 102/103/104<br>510 108 111/132/210/276                    |
| 610 103 172                                     | Mini Coaxial Contact, ITA, 22 AWG  | 510 161 102/103/104<br>510 108 111/132/210/276                    |
| 610 103 184                                     | Mini Coaxial Contact, ITA, 22 AWG, Twisted Pair  | 510 161 102/103/104<br>510 108 111/132/210<br>510 161 102/132/210 |
| <b>MINI COAXIAL RECEIVER AND ITA PATCHCORDS</b> |  |   |
| 7-332 116 000-036                               | Coaxial, Patchcord, Receiver, Mini Coaxial, 50 Ohm, 36", RG316 Tan, Single Ended             | 510 104 120/150/243/301<br>510 160 102/103/104                    |
| 7-334 178 000-036                               | Coaxial, Patchcord, Receiver, Mini Coaxial, 50 Ohm, 36", RG178 Tan, Single Ended             | 510 104 120/150/243/301<br>510 160 102/103/104                    |
| 7-331 116 000-036                               | Coaxial, Patchcord, ITA, Mini Coaxial, 50 Ohm, 36", RG316 Tan, Single Ended                  | 510 108 111/132/210/276<br>510 161 102/103/104                    |
| 7-333 178 000-036                               | Coaxial, Patchcord, ITA, Mini Coaxial, 50 Ohm, 36", RG178 Tan, Single Ended                  | 510 108 111/132/210/276<br>510 161 102/103/104                    |
| 7-335 924 000-036                               | Coaxial, Patchcord, ITA, Mini Coaxial, 50 Ohm, 36", 24 AWG, Single Ended                     | 510 108 111/132/210/276<br>510 161 102/103/104                    |

## 50 Ohm Mini Coaxial Solder Sleeve Patchcords & Contacts

| Contact Specifications                |   |
|---------------------------------------|---|
| Characteristic Impedance              | 50 Ω  |
| Frequency Range                       | DC to 2 GHz   |
| Insertion Loss                        | .05 dB @ 500 Mhz<br>≥ -0.3 dB @ 2 GHz   |
| VSWR                                  | ≤ 1.2 @ 2 GHz   |
| Operating Current                     | .5 amp max. continuous  |
| Contact Resistance                    | 5 mΩ max.   |
| Mating Force                          | 1.5 lbs max. [.68 kg]   |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.   |
| Insulation Resistance                 | 1000 MΩ min.  |
| Contact Body                          | Shield – brass<br>Center Conductor – BeCu   |
| Contact Plating                       | Shield – RCV • 30μ" Au over 100μ" Ni<br>ITA • 50μ" Au over 100μ" Ni<br>Center conductor – 60μ" Au over 100μ" Ni |
| Cycle Life                            | 20,000 cycles   |



| Part #   | Description  | Used in Module                             |
|--|--|--|
| <b>50 OHM MINI COAX SOLDER SLEEVE RECEIVER CONTACT</b> |  |  |
| 610 104 142  | Mini Coaxial Contact, Receiver, Solder Sleeve, RG316 & RG178 | 510 104 120/150/243<br>510 160 102/103/104 |
| <b>50 OHM MINI COAX SOLDER SLEEVE ITA CONTACT</b>      |  |  |
| 610 103 140  | Mini Coaxial Contact, ITA, Solder Sleeve, RG316 & RG178      | 510 108 111/132/210<br>510 161 102/103/104 |

## Mini Coaxial Solder Sleeve Patchcords & Mini Coaxial Tools



| Mini Coaxial Solder Sleeve Receiver Patchcord | Mini Coaxial Solder Sleeve ITA Patchcord |
|---|--|
|---|--|

| Part #  | Description  | Used in Module                             |
|---|--|--|
| <b>50 OHM MINI COAX SOLDER SLEEVE RECEIVER AND ITA PATCHCORDS</b> |  |  |
| 7-338 116 000-036   | Mini Coaxial Solder Sleeve Patchcord, Receiver, 50 Ohm, 36", RG316, Single Ended | 510 104 120/150/243<br>510 160 102/103/104 |
| 7-338 178 000-036   | Mini Coaxial Solder Sleeve Patchcord, Receiver, 50 Ohm, 36", RG178, Single Ended | 510 104 120/150/243<br>510 160 102/103/104 |
| 7-339 116 000-036   | Mini Coaxial Solder Sleeve Patchcord, ITA, 50 Ohm, 36", RG316, Single Ended      | 510 108 111/132/243<br>510 161 102/103/104 |
| 7-339 178 000-036   | Mini Coaxial Solder Sleeve Patchcord, ITA, 50 Ohm, 36", RG178, Single Ended      | 510 108 111/132/243<br>510 161 102/103/104 |

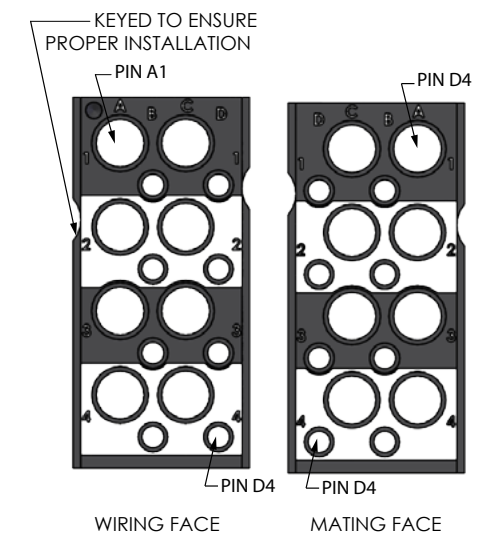
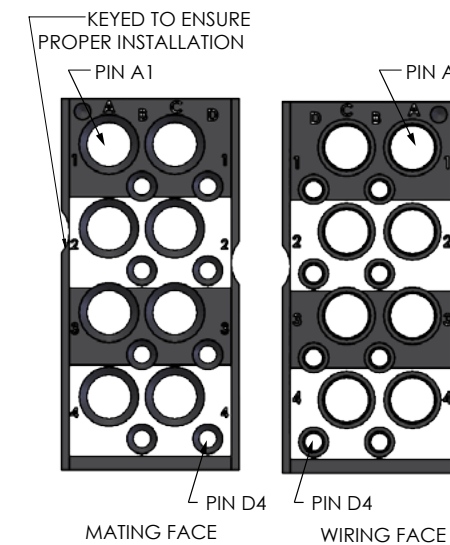
\* To instantly design patchcords online, use our Patchcord Designer at [vpc.com/patchcorderdesigner](http://vpc.com/patchcorderdesigner).

| Part # | Description | Used on Contact |
|--------|-------------|-----------------|
|--------|-------------|-----------------|

|                                      |   |   |
|--------------------------------------|---|---|
| <b>CRIMP TOOLS</b>                   |   |   |
| 910 101 115                          | Tool, Crimp, Coaxial Contacts   | 610 103 115/130/152/157/161<br>610 104 114/141/149                                    |
| 910 101 118                          | Tool, Crimp, Coaxial Contacts, ITA, 24 AWG Wire   | 610 103 136/161/172/184   |
| <b>LOCATOR</b>                       |   |   |
| 910 104 128                          | Tool, Locator, Coaxial Contacts, 24 AWG Wire  | 610 103 136/161/172/184   |
| <b>EXTRACTION TOOL</b>               |   |   |
| 910 112 104                          | Tool, Extraction, Mini Power/Mini Coaxial/Mini Pneumatic Contacts, Receiver and ITA                   | 610 103 115/129/130<br>610 103 136/140/150/152/161/172<br>610 104 114/140/141/142/149 |
| <b>MINI COAXIAL FORMING TOOLS</b>    |   |   |
| 910 121 119                          | Tool, Center Conductor Forming, Mini Coaxial, Receiver (used before assembly)                         | 610 104 114/141   |
| 910 121 126                          | Tool, Outer Shield Conductor Forming, Mini Coaxial, ITA   | 610 103 115/129/130/136<br>610 103 140/150/152/161                                    |
| 910 121 142                          | Tool, Outer Shield Conductor Expanding, Mini Coaxial, ITA   | 610 103 115/129/130/136<br>610 103 140/150/152/161<br>610 104 114/141/149             |
| 910 121 143                          | Tool, Center Conductor Enlarging, Mini Coaxial, Receiver  |   |
| <b>MINI COAXIAL INSPECTION TOOLS</b> |   |   |
| 910 121 131                          | Tool, Weight Gage Kit, Mini Coaxial, Receiver   | 610 104 114/140/141/142/149   |
| 910 121 155                          | Tool, Weight Gage Kit, Mini Coaxial, ITA  | 610 103 115/129/130/136/140<br>610 103 150/152/161                                    |
| 910 121 156                          | Tool, Inspection Depth Gauge, Mini Coaxial, Receiver  | 610 104 114/140/141/142/149   |
| 910 121 157                          | Tool, Inspection Depth Gauge, Mini Coaxial, ITA   | 610 103 115/129/130/136<br>610 103 140/150/152/161                                    |
| <b>MISCELLANEOUS TOOLS</b>           |   |   |
| 910 121 144                          | Tool, Solder Kit, Mini Coaxial Contacts with Solder Sleeve (includes Raychem Holding Fixture AD-1319) | 610 103 140/158<br>610 104 142  |
| 910 121 149                          | Tool, Adapter for Raychem Holding Fixture (AD-1319-29)  | 610 103 140/158<br>610 104 142  |
| 910 121 160                          | Tool, Steinel Heat Gun with Nozzle - 110V   | 610 103 140/158<br>610 104 142  |
| 910 121 167                          | Tool, Steinel Heat Gun with Nozzle - 220V   | 610 103 140/158<br>610 104 142  |

## TriPaddle/Mini Power & Mini Coaxial Module

| Specifications                        |                 |
|---------------------------------------|-----------------|
| Material                              | G10 epoxy glass |
| Operating Temperature                 | -40°C to 125°C  |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.   |
| Available Contact Positions           | 8/8             |
| Module Positions Needed               | 1               |



Receiver • Part # 510 143 005

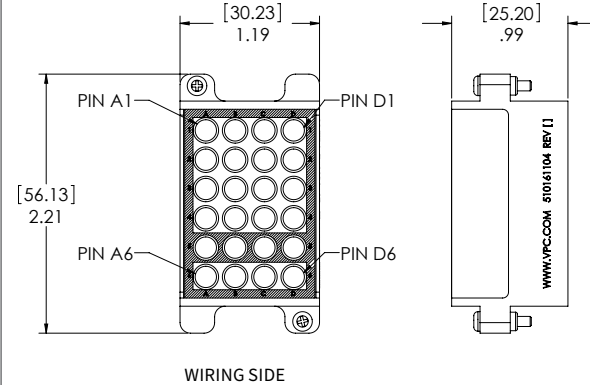
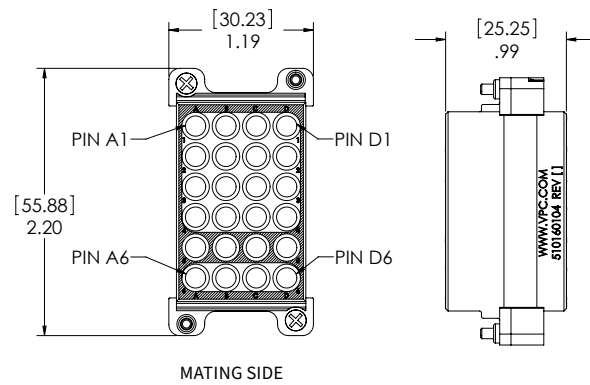
ITA • Part # 510 144 005

| Part #      | Description   | Contacts Used |                            |             |
|-------------|---|---------------|----------------------------|-------------|
| 510 143 005 | I2 MX RECEIVER TRIPADDLE SIGNAL/MINI POWER AND MINI COAXIAL MODULE INSERT TRIPADDLE Signal/Mini Power and Mini Coax, Module Insert, Receiver, i2 MX, 8/8 Position | MINI POWER    | MICRO COAX                 |             |
|             |   | 610 110 101   | 610 116 112                | 610 104 114 |
|             |   | 610 110 177   |                            | 610 104 140 |
|             |   | 610 110 128   |                            | 610 104 141 |
|             |   | 610 110 167   |                            |             |
| 510 144 005 | I2 MX ITA TRIPADDLE SIGNAL/MINI POWER AND MINI COAXIAL MODULE INSERT TRIPADDLE Signal/Mini Power and Mini Coax, Module Insert, ITA, i2 MX, 8/8 Position           | MINI POWER    | MICRO COAX                 |             |
|             |   | 610 110 108   | 610 115 124<br>610 115 125 | 610 103 115 |
|             |   | 610 110 129   |                            | 610 103 130 |
|             |   | 610 110 169   |                            | 610 103 136 |
|             |   |               |                            | 610 103 161 |

## Mini Power & Mini Coaxial Module

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Material                              | Black high-temp thermoplastic                                    |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC   |
| Available Contact Positions           | 24   |
| Module Positions Needed               | 1  |



Receiver • Part # 510 160 104

ITA • Part # 510 161 104

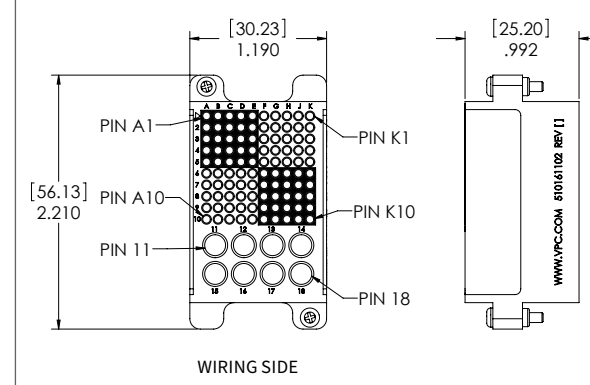
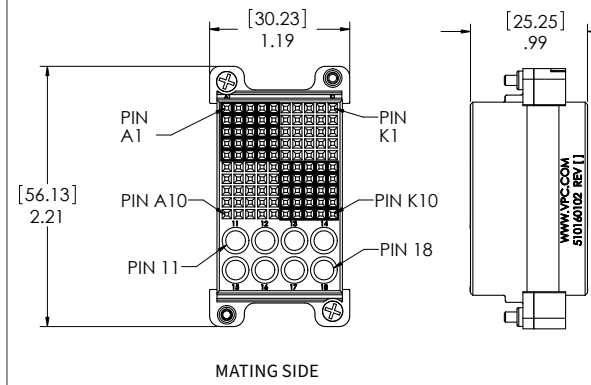
| Part #      | Description   | Contacts Used |             |
|-------------|---|---------------|-------------|
| 510 160 104 | ICON RECEIVER MINI POWER AND MINI COAXIAL MODULE<br>Mini Power and Mini Coaxial Module, Receiver, iCon, 24 Position | MINI POWER    | MINI COAX   |
|             |   | 610 116 112   | 610 104 114 |
|             |   |               | 610 104 140 |
|             |   |               | 610 104 141 |
|             |   |               | 610 104 142 |
| 510 161 104 | ICON ITA MINI POWER AND MINI COAXIAL MODULE<br>Mini Power and Mini Coaxial Module, ITA, iCon, 24 Position           | 610 115 124   | 610 103 115 |
|             |   | 610 115 125   | 610 103 129 |
|             |   |               | 610 103 130 |
|             |   |               | 610 103 136 |
|             |   |               | 610 103 140 |
|             |   |               | 610 103 150 |
|             |   |               | 610 103 152 |
|             |   |               | 610 103 161 |
|             |   |               | 610 103 172 |
|             |   |               | 610 103 189 |

NOTE: Mini Pneumatic contacts (610 132 106 and 610 131 108) and Fiber Optic patchcords can be used with these modules.  
NOTE: Refer to User's Manual for power applications with this module.

## QuadraPaddle/Mini Power & Mini Coaxial Module

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Material                              | Black high-temp thermoplastic                                    |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 100/8  |
| Module Positions Needed               | 1  |



Receiver • Part # 510 160 102

ITA • Part # 510 161 102

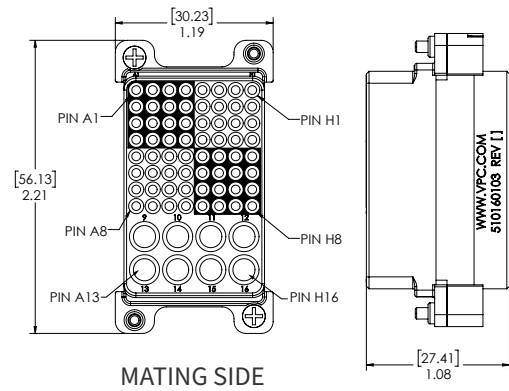
| Part #      | Description   | Contacts Used |             |             |
|-------------|---|---------------|-------------|-------------|
|             |   | QUADRAPADDLE  | MINI POWER  | MINI COAX   |
| 510 160 102 | ICON RECEIVER QUADRAPADDLE/MINI POWER AND MINI COAXIAL MODULE<br>QuadraPaddle Signal/Mini Power and Mini Coaxial Module, Receiver, iCon, 100/8 Position | 610 138 216   | 610 116 112 | 610 104 114 |
|             |   |               |             | 610 104 140 |
|             |   |               |             | 610 104 141 |
|             |   |               |             | 610 104 142 |
|             |   |               |             | 610 104 149 |
| 510 161 102 | ICON ITA QUADRAPADDLE/MINI POWER AND MINI COAXIAL MODULE<br>QuadraPaddle Signal/Mini Power and Mini Coaxial Module, ITA, iCon, 100/8 Position           | 610 138 109   | 610 115 124 | 610 103 115 |
|             |   | 610 138 122   | 610 115 125 | 610 103 129 |
|             |   | 610 138 112   |             | 610 103 130 |
|             |   | 610 138 115   |             | 610 103 136 |
|             |   |               |             | 610 103140  |
|             |   |               |             | 610 103 150 |
|             |   | 610 103 152   |             |             |
|             |   | 610 103 161   |             |             |
|             |   | 610 103 172   |             |             |
|             |   | 610 103 184   |             |             |

NOTE: Mini Pneumatic contacts (610 132 106 and 610 131 108) and Fiber Optic patchcords can be used with these modules.



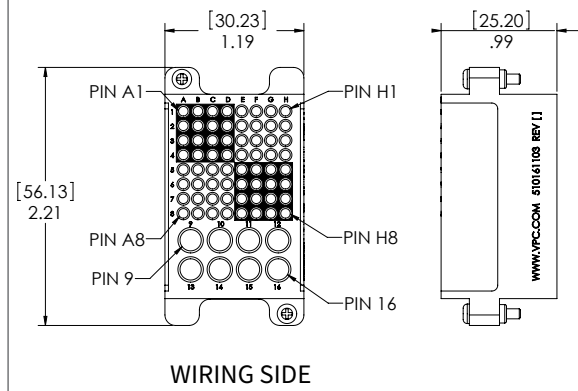
## TriPaddle/Mini Power & Mini Coaxial Modules

| Module Specifications                 |  |
|---------------------------------------|--|
| Material                              | Black high-temp thermoplastic                                    |
| ITA Material                          | Black filled black thermoplastic                                 |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| ITA Temperature                       | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 64/8   |
| Module Positions Needed               | 1  |



MATING SIDE

Receiver • Part # 510 160 103



WIRING SIDE

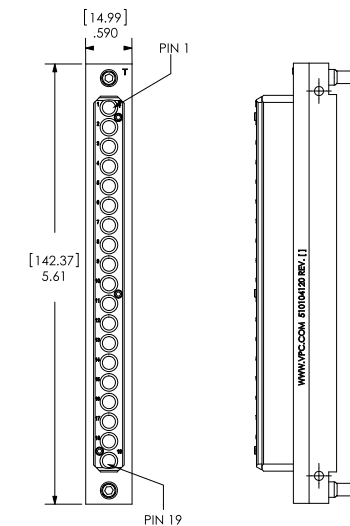
ITA • Part # 510 161 103

| Part #      | Description   | Contacts Used |             |             |
|-------------|---|---------------|-------------|-------------|
| 510 160 103 | ICON RECEIVER TRIPADDLE SIGNAL/Mini Power and Mini Coaxial Module<br>TriPaddle Signal/Mini Power and Mini Coaxial Module, Receiver, iCon, 64/8 Position | TRIPADDLE     | MINI POWER  | MINI COAX   |
|             |   | 610 110 101   | 610 116 112 | 610 104 114 |
|             |   | 610 110 128   |             | 610 104 140 |
|             |   | 610 110 167   |             | 610 104 141 |
|             |   | 610 110 177   |             | 610 104 142 |
| 510 161 103 | ICON ITA TRIPADDLE SIGNAL/Mini Power and Mini Coaxial Module, ITA, iCon, 64/8 Position  | 610 110 179   |             | 610 104 149 |
|             |   | 610 110 108   | 610 115 124 | 610 103 115 |
|             |   | 610 110 113   | 610 115 125 | 610 103 129 |
|             |   | 610 110 129   |             | 610 103 130 |
|             |   | 610 110 169   |             | 610 103 136 |
|             |   |               |             | 610 103 140 |
|             |   |               |             | 610 103 150 |
|             |   |               |             | 610 103 152 |
|             |   |               |             | 610 103 161 |
|             |   |               |             | 610 103 172 |
|             |   |               |             | 610 103 184 |

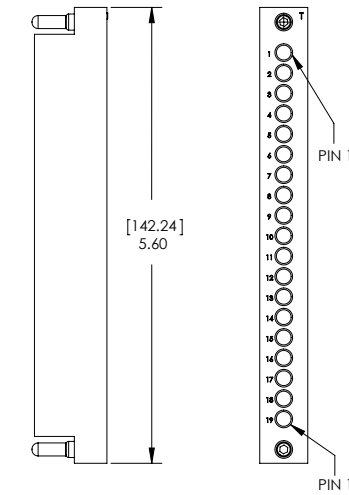
NOTE: Mini Pneumatic contacts (610 132 106 and 610 131 108) and Fiber Optic patchcords can be used with these modules.

## Mini Coaxial Module

| Module Specifications                 |  |
|---------------------------------------|--|
| Material                              | Black PPS  |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -65° C to 225° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 19   |
| Module Positions Needed               | 1  |



Receiver • Part # 510 104 120



ITA • Part # 510 108 111

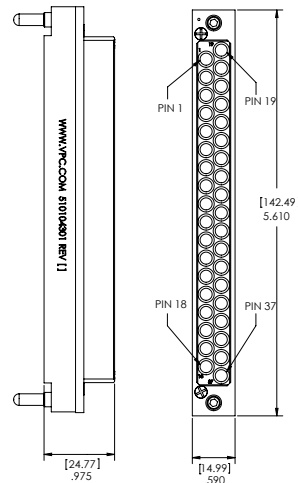
| Part #  | Description                                     | Contacts Used                                   |
|---|---|---|
| <b>MINI COAXIAL RECEIVER MODULES AND STRAIN RELIEFS</b> |   |   |
| 510 104 120   | Mini Coaxial Module, Receiver, 19 Position      | 610 104 114/140/141/142/149                     |
| 510 109 116   | Strain Relief Plate for Select Receiver Modules |   |
| <b>MINI COAXIAL ITA MODULES AND STRAIN RELIEFS</b>      |   |   |
| 510 108 111   | Mini Coaxial Module, ITA, 19 Position           | 610 103 115/129/130/136/140/150/152/161/172/184 |
| 510 109 296   | Strain Relief Plate for ITA Modules             |   |

NOTE: Mini Pneumatic contacts (610 132 106 and 610 131 108) and Fiber Optic patchcords can be used with these modules.

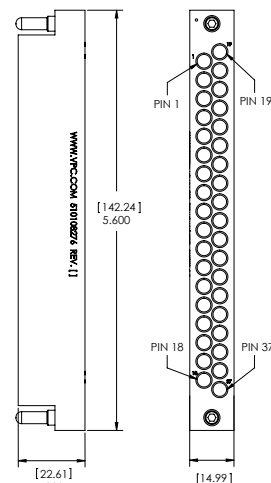
## Mini Coaxial Module

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Receiver Material                     | G10 epoxy glass  |
| Receiver Temperature                  | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| ITA Material                          | G10 epoxy glass  |
| ITA Temperature                       | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 37   |
| Module Positions Needed               | 1  |



Receiver • Part # 510 104 301



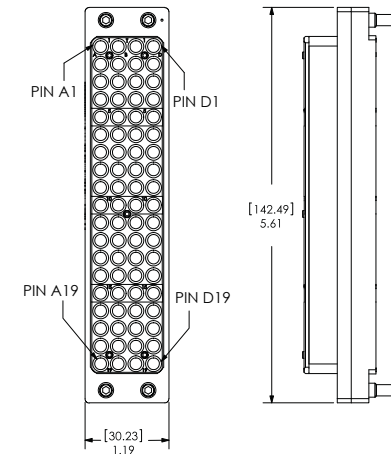
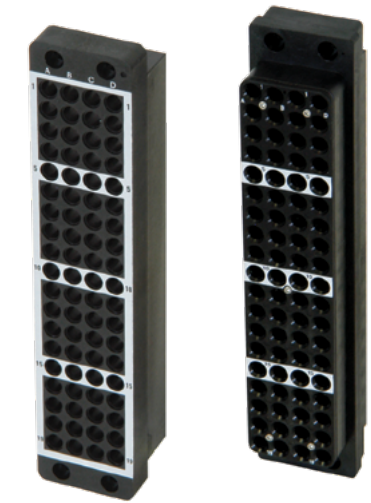
ITA • Part # 510 108 276

| Part #   | Description                                     | Contacts Used                   |
|--|---|---------------------------------|
| <b>MINI COAXIAL RECEIVER MODULES AND STRAIN RELIEFS</b>  |   |                                 |
| 510 104 301  | Mini Coaxial Module, Receiver, 37 Position      | 610 104 114/141                 |
| 510 109 298  | Strain Relief Plate for Select Receiver Modules |                                 |
| <b>MINI COAXIAL ITA MODULES AND STRAIN RELIEFS</b>   |   |                                 |
| 510 108 276  | Mini Coaxial Module, ITA, 37 Position           | 610 103 115/130/136/161/172/184 |
| 510 109 296  | Strain Relief Plate for ITA Modules             |                                 |
| NOTE: It is not recommended to use Mini Power contacts in a Mini Coax module, which can create performance issues and potentially damage contacts. |   |                                 |
| NOTE: Fiber Optic patchcords can be used with these modules.   |   |                                 |

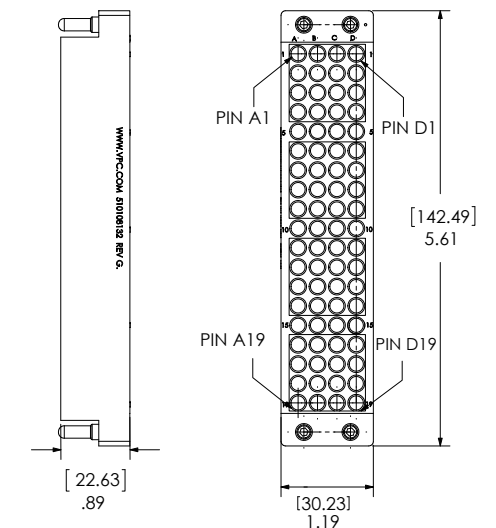
## Mini Coaxial Module

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Material                              | Black PPS  |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -65° C to 225° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 76   |
| Module Positions Needed               | 2  |



Receiver • Part # 510 104 150

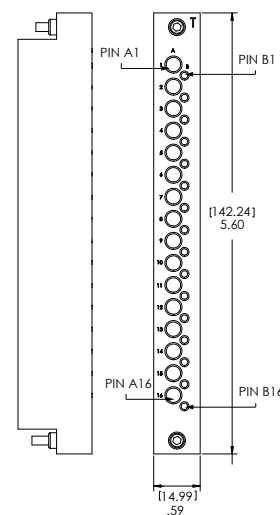
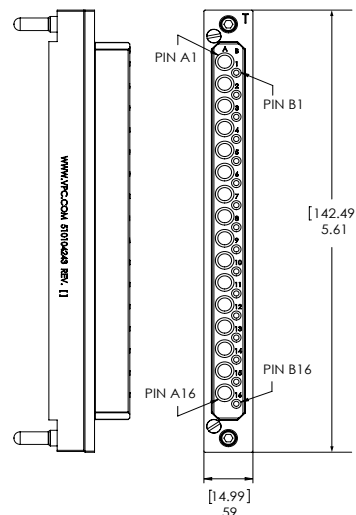
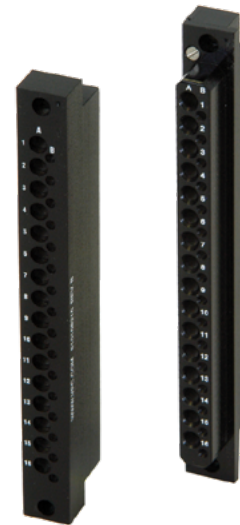


ITA • Part # 510 108 132

| Part #   | Description                                     | Contacts Used                                   |
|--|---|---|
| <b>MINI COAXIAL RECEIVER MODULES AND STRAIN RELIEFS</b>  |   |   |
| 510 104 150  | Mini Coaxial Module, Receiver, 76 Position      | 610 104 114/140/141/142/149                     |
| 510 109 298  | Strain Relief Plate for Select Receiver Modules |   |
| <b>MINI COAXIAL ITA MODULES AND STRAIN RELIEFS</b>   |   |   |
| 510 108 132  | Mini Coaxial Module, ITA, 76 Position           | 610 103 115/129/130/136/140/150/152/161/172/184 |
| 510 109 296  | Strain Relief Plate for ITA Modules             |   |
| NOTE: Mini Pneumatic contacts (610 132 106 and 610 131 108) and Fiber Optic patchcords can be used with these modules. |   |   |

## TriPaddle/Mini Coaxial Module

| Module Specifications                 |  |
|---------------------------------------|--|
| Material                              | Black PPS  |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 16 signal, 16 Mini Coax  |
| Module Positions Needed               | 1  |



Receiver • Part # 510 104 243

ITA • Part # 510 108 210

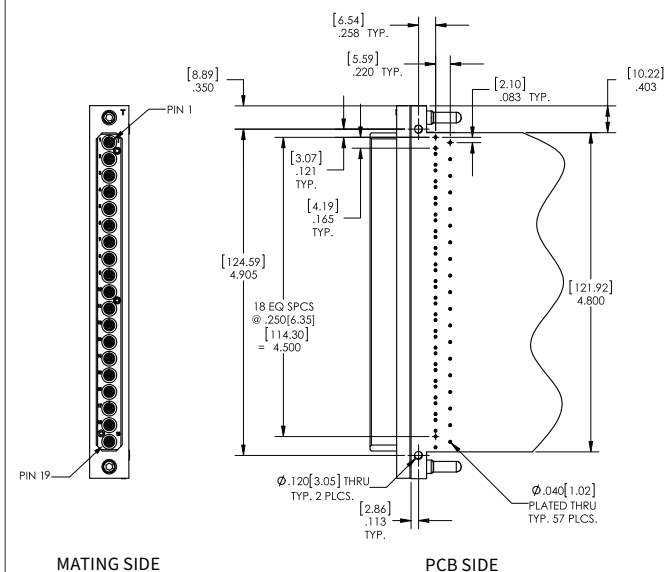
| Part #      | Description  | Contacts Used  |
|-------------|--|--|
| 510 104 243 | TRIPADDLE SIGNAL/MINI COAXIAL RECEIVER MODULES AND STRAIN RELIEFS<br>TriPaddle Signal/Mini Coax Module, Receiver, 16/16 Position | 610 104 114/140/141/142/149<br>610 110 101/104/128/167/177/179                 |
| 510 109 116 | Strain Relief Plate for Select Receiver Modules  |  |
| 510 108 210 | TRIPADDLE SIGNAL/MINI COAXIAL ITA MODULES AND STRAIN RELIEFS<br>TriPaddle Signal/Mini Coax Module, ITA, 16/16 Position           | 610 103 115/129/130/136/140/150/152/<br>161/172/184<br>610 110 108/113/129/169 |
| 510 109 296 | Strain Relief Plate for ITA Modules  |  |

## Right Angle Mini Coaxial Contact and Module

| Contact Specifications                |  |
|---------------------------------------|--|
| Characteristic Impedance              | 50 Ω   |
| Frequency Range                       | DC to 1 GHz  |
| Insertion Loss                        | -0.885 dB @ 1 GHz  |
| VSWR                                  | 1.445 @ 1 GHz  |
| Operating Voltage and Current         | 0.5 amps max. continuous   |
| Contact Resistance                    | 5 mΩ max.  |
| Mating Force                          | 1.5 lbs max. [.68 kg]  |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Insulation Resistance                 | 1000 MΩ min.   |
| Contact Body Material                 | Shield - brass<br>Center Conductor - BeCu                                  |
| Contact Plating                       | Shield - 50μ" Au over 100μ" Ni<br>Center Conductor - 60μ" Au over 100μ" Ni |
| Cycle Life                            | 20,000 cycles  |




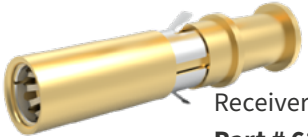
Right Angle Mini Coaxial Receiver Contact  
Part # 610 104 160



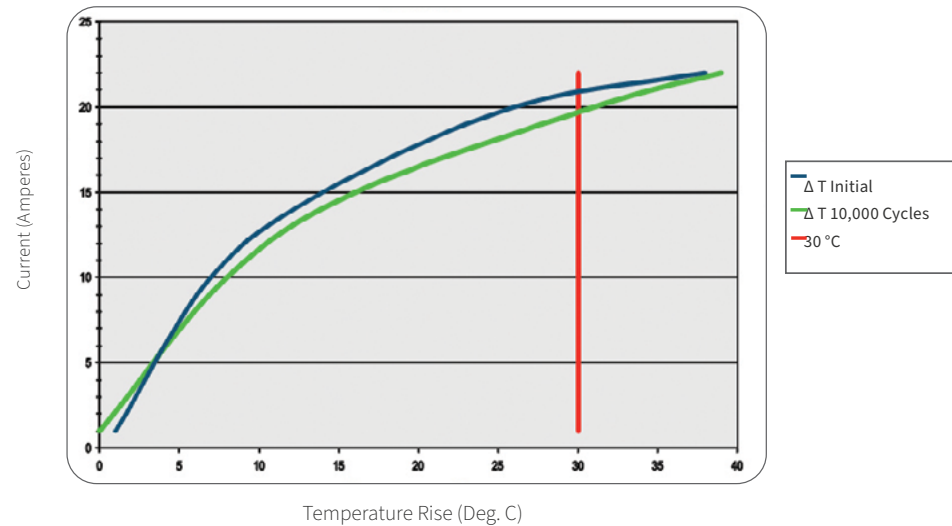
19 Position Right Angle Coaxial Module (Customer Supplied PCB) Part # 510 104 280

| Part #      | Description  | Used in Module |
|-------------|--|----------------|
| 610 104 160 | RIGHT ANGLE MINI COAXIAL CONTACT<br>Mini Coaxial Contact, Receiver, Right Angle Posts for PCB Mount                | 510 104 280    |
| 510 104 280 | MINI COAXIAL MODULE<br>Mini Coaxial Module, Receiver, 19 Positions, Loaded with Right Angle Contacts (610 104 160) |                |

## Micro Power Contacts and Patchcords

| Contact Specifications                |                       | <b>ITA Contact</b><br><b>Part # 610 143 101</b><br><br><br><b>Receiver Contact</b><br><b>Part # 610 142 101</b> |
|---------------------------------------|-----------------------|---|
| Operating Current                     | 21 amp continuous     |   |
| Contact Resistance                    | 1.5 mΩ max.           |   |
| Mating Force                          | 2.0 lbs max. [.91 kg] |   |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.         |   |
| Contact Body Material                 | Brass                 |   |
| Contact Plating                       | 30μ" Au over 100μ" Ni |   |
| Cycle Life                            | 10,000 cycles         |   |

Micro Power Contact 610 142 101/610 143 101  
T-Rise Test (12 AWG)



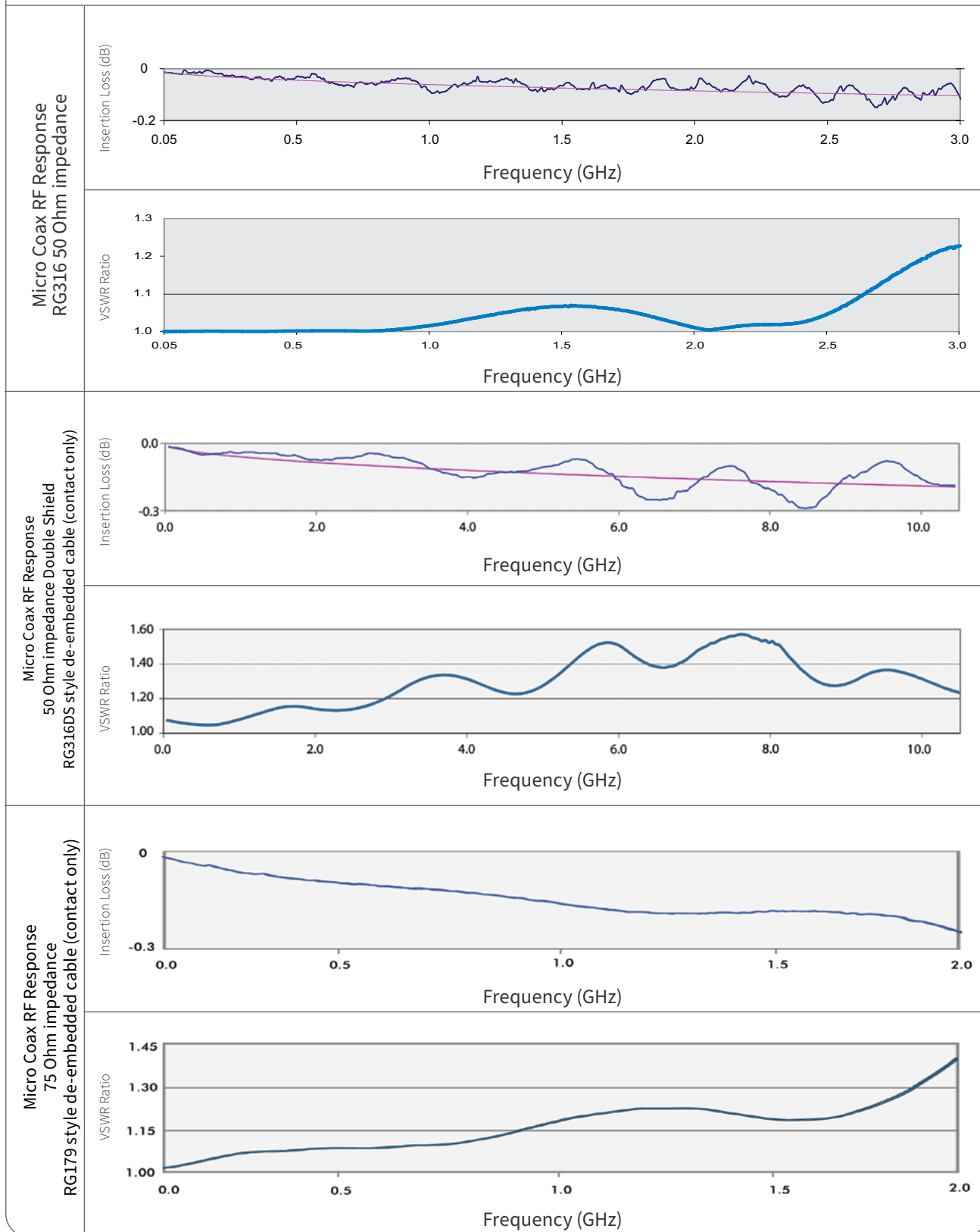
| Part #   | Description  | Used in Module                                     |
|--|--|--|
| <b>MICRO POWER RECEIVER CONTACTS</b>           |  |  |
| 610 142 101                                    | Micro Power Contact, Receiver, 12-14 AWG, Crimp  | 510 104 267/270/306<br>510 160 106/107/111/112/113 |
| 610 142 102                                    | Micro Power Contact, Receiver, PCB Mount   | 510 104 267/270/306<br>510 160 106/107/111/112/113 |
| <b>MICRO POWER ITA CONTACTS</b>                |  |  |
| 610 143 101                                    | Micro Power Contact, ITA, 12-14 AWG, Crimp   | 510 108 262/263<br>510 161 106/107/111             |
| <b>MICRO POWER RECEIVER AND ITA PATCHCORDS</b> |  |  |
| 7-252 912 000-036                              | Power Patchcord, Receiver, Micro Power, 36", 12 AWG White, Single Ended                      | 510 104 267/270/306<br>510 160 106/107/111/112/113 |
| 7-251 912 000-036                              | Power Patchcord, ITA, Micro Power, 36", 12 AWG White, Single Ended                           | 510 108 262/263<br>510 161 106/107/111             |
| <b>CRIMP TOOLS</b>                             |  |  |
| 910 101 102                                    | Tool, Crimp, 10 Amp TriPaddle, Thermocouple, Micro Power, Receiver and ITA, Locator Required |  |
| 910 104 144                                    | Tool, Locator, Micro Power, ITA  |  |
| 910 104 145                                    | Tool, Locator, Micro Power, Receiver   |  |
| <b>EXTRACTION TOOL</b>                         |  |  |
| 910 112 123                                    | Tool, Extraction, Micro Power/Micro Coaxial Contacts   |  |

## Micro Coaxial Contacts and Patchcords

| Contact Specifications                |   | <b>ITA Contact</b><br><b>Part # 610 141 XXX</b><br><br><br><b>Receiver Contact</b><br><b>Part # 610 140 XXX</b> |
|---------------------------------------|---|---|
| Characteristic Impedance              | 50 Ω<br>75 Ω • for RG179<br>50 Ω • for RG316 double shield                                      |   |
| Frequency Range                       | DC – 3 GHz • 50 Ω<br>DC – 2 GHz • for RG179<br>DC – 10.5 GHz • for RG316 double shield          |   |
| Contact Isolation                     | -90 dB minimum  |   |
| VSWR                                  | 1.22 @ 3 GHz • 50 Ω<br>1.39 @ 2 GHz • for RG179<br>1.0225 +.05 f(GHz) • for RG316 double shield |   |
| Mating Force                          | 1.5 lbs max. [.68 kg]   |   |
| Insertion Loss                        | - √f(GHz) x .06 dB  |   |
| Dielectric Withstanding Voltage (DWV) | 800 volts RMS   |   |
| Contact Plating                       | 50μ" Au over 100μ" Ni   |   |
| Cycle Life                            | 10,000 cycles   |   |

| Part #                                 | Description  | Used in Module                                     |
|--|--|--|
| <b>MICRO COAXIAL RECEIVER CONTACTS</b> |  |  |
| 610 140 101                            | Micro Coaxial Contact, Receiver, RG316, Crimp                | 510 104 267/270/306<br>510 160 106/107/111/112/113 |
| 610 140 102                            | Micro Coaxial Contact, Receiver, RG178, Crimp                | 510 104 267/270/306<br>510 160 106/107/111/112/113 |
| 610 140 103                            | Micro Coaxial Contact, Receiver, RG179, Crimp                | 510 104 267/270/306<br>510 160 106/107/111/112/113 |
| 610 140 104                            | Micro Coaxial Contact, Receiver, RG316 Double Shield, Solder | 510 104 267/270/306<br>510 160 106/107/111/112/113 |
| <b>MICRO COAXIAL ITA CONTACTS</b>      |  |  |
| 610 141 101                            | Micro Coaxial Contact, ITA, RG316, Crimp                     | 510 108 262/263<br>510 161 106/107/111             |
| 610 141 102                            | Micro Coaxial Contact, ITA, RG178, Crimp                     | 510 108 262/263<br>510 161 106/107/111             |
| 610 141 103                            | Micro Coaxial Contact, ITA, RG179, Crimp                     | 510 108 262/263<br>510 161 106/107/111             |
| 610 141 104                            | Micro Coaxial Contact, ITA, RG316 Double Shield, Solder      | 510 108 262/263<br>510 161 106/107/111             |

## Micro Coaxial Contacts and Patchcords



## Micro Coaxial Patchcords and Tools

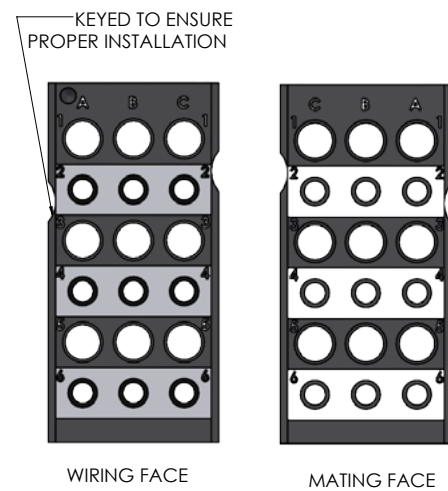
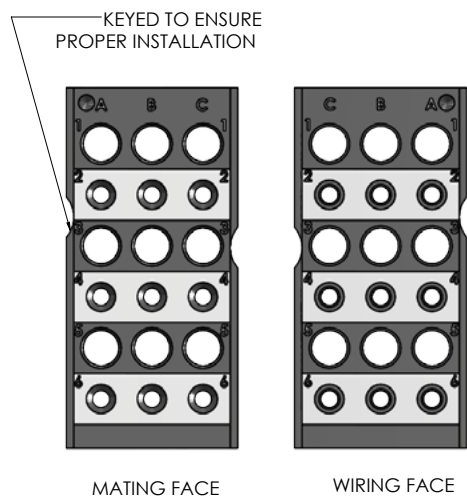
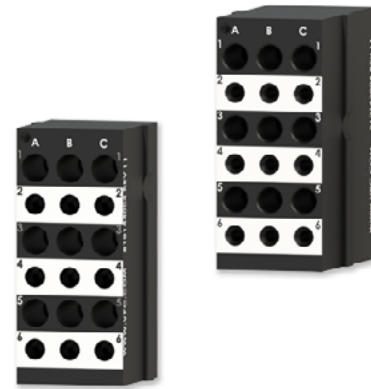


| Micro Coaxial Receiver Patchcord                 |  | Micro Coaxial ITA Patchcord                        |
|--|--|--|
| Part #   | Description  | Used in Module                                     |
| <b>MICRO COAXIAL RECEIVER AND ITA PATCHCORDS</b> |  |  |
| 7-362 116 000-036                                | Coaxial Patchcord, Receiver, Micro Coaxial, 50 Ohm, 36", RG316 Tan, Single Ended       | 510 104 267/270/306<br>510 160 106/107/111/112/113 |
| 7-364 178 000-036                                | Coaxial Patchcord, Receiver, Micro Coaxial, 36", RG178BU Tan, Single Ended             | 510 104 267/270/306<br>510 160 106/107/111/112/113 |
| 7-366 179 000-036                                | Coaxial Patchcord, Receiver, Micro Coaxial, 36", RG179U Tan, Single Ended              | 510 104 267/270/306<br>510 160 106/107/111/112/113 |
| 7-368 117 000-036                                | Coaxial Patchcord, Receiver, Micro Coaxial, 36", RG316 Double Shield Tan, Single Ended | 510 104 267/270/306<br>510 160 106/107/111/112/113 |
| 7-361 116 000-036                                | Coaxial Patchcord, ITA, Micro Coaxial, 36", RG316 Tan, Single Ended                    | 510 108 262/263<br>510 161 106/107/111             |
| 7-363 178 000-036                                | Coaxial Patchcord, ITA, Micro Coaxial, 36", RG178BU Tan, Single Ended                  | 510 108 262/263<br>510 161 106/107/111             |
| 7-365 179 000-036                                | Coaxial Patchcord, ITA, Micro Coaxial, 36", RG179U Tan, Single Ended                   | 510 108 262/263<br>510 161 106/107/111             |
| 7-367 117 000-036                                | Coaxial Patchcord, ITA, Micro Coaxial, 36", RG316 Double Shield Tan, Single Ended      | 510 108 262/263<br>510 161 106/107/111             |
| Part #   | Description  | Used on Contact                                    |
| <b>CRIMP TOOLS</b>                               |  |  |
| 910 101 131                                      | Tool, Crimp, Micro Coaxial RG178, Receiver and ITA                                     | 610 140 102 & 610 141 102                          |
| 910 101 132                                      | Tool, Crimp, Micro Coaxial RG179 & RG316, Receiver and ITA                             | 610 140 101/103<br>610 141 101/103                 |
| 910 101 135                                      | Tool, Locator, Micro Coaxial, Receiver   | 610 142 101/102                                    |
| 910 101 139                                      | Tool, Locator, Micro Coaxial, ITA  | 610 143 101  |
| <b>INSPECTION TOOLS</b>                          |  |  |
| 910 121 179                                      | Tool, Inspection Depth Gage, Micro Coaxial, Receiver                                   | 610 140 101/102/103/104                            |
| 910 121 180                                      | Tool, Inspection Depth Gage, Micro Coaxial, ITA  | 610 141 101/102/103/104                            |
| <b>EXTRACTION TOOL</b>                           |  |  |
| 910 112 123                                      | Tool, Extraction, Micro Power/Micro Coaxial Contacts                                   | 610 140 101/102/103/104<br>610 141 101/102/103/104 |
| <b>SOLDERING FIXTURE</b>                         |  |  |
| 910 121 178                                      | Tool, Soldering Fixture, Micro Coaxial, Receiver and ITA                               | 610 140 101/102/103/104<br>610 141 101/102/103/104 |

## TriPaddle/Micro Power and Micro Coax Module

### Specifications

|  |                 |
|--|-----------------|
| Material                                   | G10 epoxy glass |
| Operating Temperature                      | -40°C to 125°C  |
| Dielectric Withstanding Voltage (DWV)      | 1500 VDC min.   |
| Available TriPaddle Positions              | 9               |
| Available Micro Power/Micro Coax Positions | 9               |
| Module Positions Needed                    | 1               |



Receiver • Part # 510 143 004

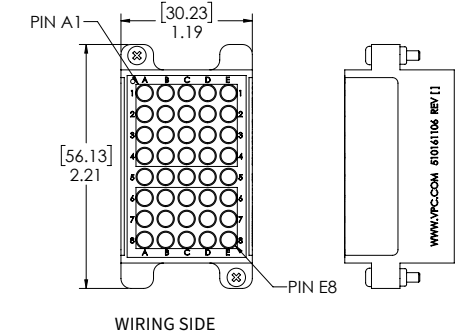
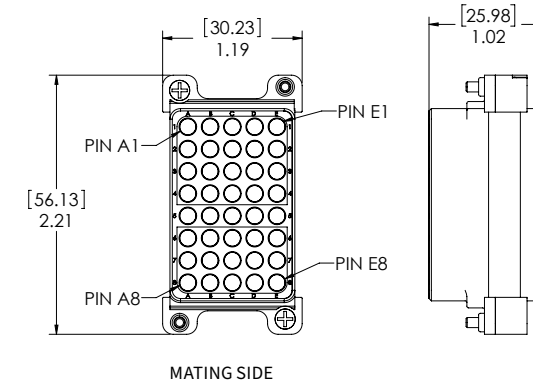
ITA • Part # 510 144 004

| Part #      | Description  | Contacts Used |             |             |
|-------------|--|---------------|-------------|-------------|
| 510 143 004 | I2 MX RECEIVER TRIPADDLE SIGNAL/MICRO POWER AND MICRO COAXIAL MODULE INSERT<br>TriPaddle Signal/Micro Power and Micro Coax, Module Insert, Receiver, i2 MX, 9/9 Position | TRIPADDLE     | MICRO POWER | MICRO COAX  |
|             |  | 610 110 101   | 610 142 101 | 610 140 101 |
|             |  | 610 110 177   |             | 610 140 102 |
|             |  | 610 110 128   |             | 610 140 103 |
|             |  | 610 110 167   |             | 610 140 104 |
| 510 144 004 | I2 MX ITA TRIPADDLE SIGNAL/MICRO POWER AND MICRO COAXIAL MODULE INSERT<br>TriPaddle Signal/Micro Power and Micro Coax, Module Insert, ITA, i2 MX, 9/9 Position           | TRIPADDLE     | MICRO POWER | MICRO COAX  |
|             |  | 610 110 108   | 610 143 101 | 610 141 101 |
|             |  | 610 110 129   |             | 610 141 102 |
|             |  | 610 110 169   |             | 610 141 103 |
|             |  |               |             | 610 141 104 |

## Micro Power and Micro Coaxial Module

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Material                              | Black high-temp thermoplastic                                    |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 40   |
| Module Positions Needed               | 1  |



Receiver • Part # 510 160 106

ITA • Part # 510 161 106

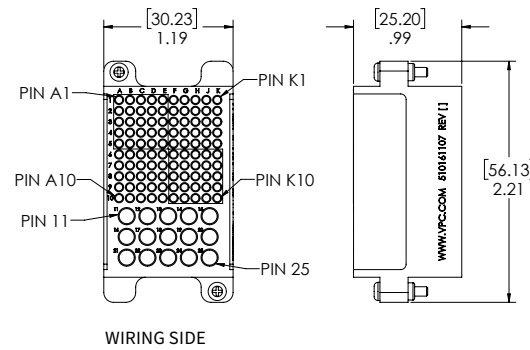
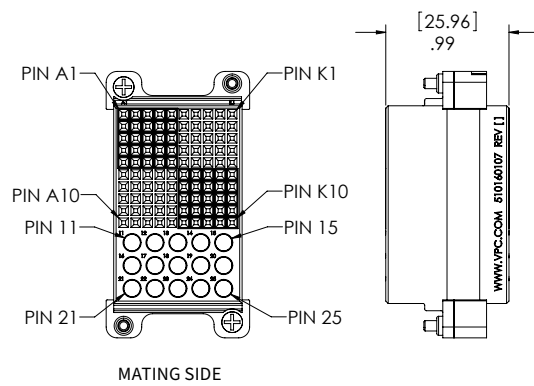
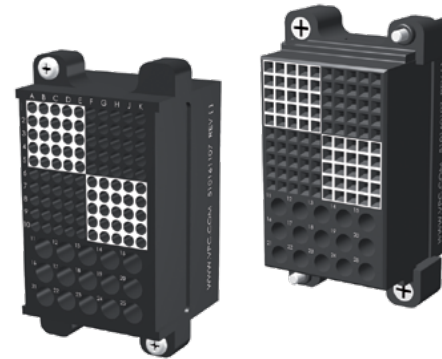
| Part #      | Description  | Contacts Used   |                                    |
|-------------|--|-----------------|------------------------------------|
|             |  | MICRO POWER     | MICRO COAX                         |
| 510 160 106 | ICON RECEIVER MICRO POWER AND MICRO COAX MODULE<br>Micro Power and Micro Coaxial Module, Receiver, iCon, 40 Position | 610 142 101/102 | 610 140 101/102<br>610 140 103/104 |
|             |  |                 |                                    |
| 510 161 106 | ICON ITA MICRO POWER AND MICRO COAX MODULE<br>Micro Power and Micro Coaxial Module, ITA, iCon, 40 Position           | 610 143 101     | 610 141 101/102<br>610 141 103/104 |
|             |  |                 |                                    |

NOTE: Refer to User's Manual for power applications with this module.

## QuadraPaddle/Micro Power and Micro Coaxial Module

### Module Specifications

|   |  |
|---|--|
| Receiver/ITA Module Material                  | Black high-temp thermoplastic                                    |
| Receiver/ITA Module Temperature               | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Dielectric Withstanding Voltage (DWV)         | 1500 VDC min.  |
| Available QuadraPaddle Positions              | 100  |
| Available Micro Power/Micro Coaxial Positions | 15   |
| Module Positions Needed                       | 1  |



Receiver • Part # 510 160 107

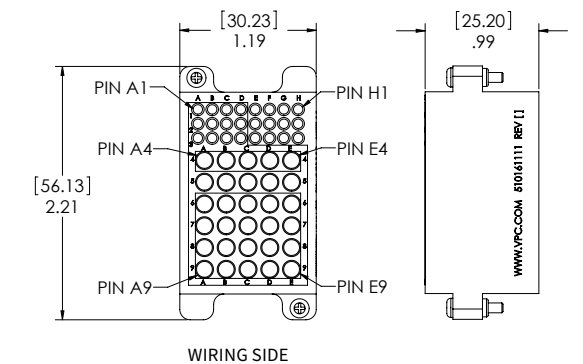
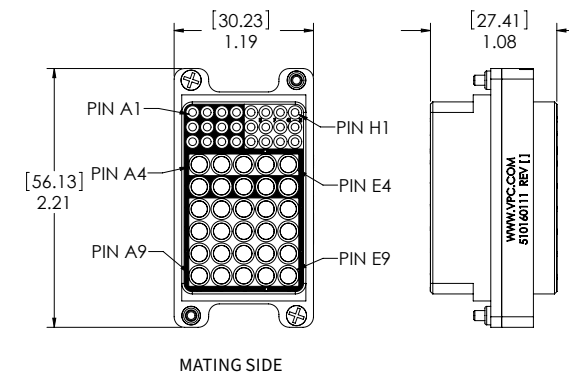
ITA • Part # 510 161 107

| Part #   | Description   | Contacts Used  |                            |  |
|--|---|--|----------------------------|--|
|  |   | QUADRAPADDLE   | MICRO POWER                | MICRO COAX   |
| <b>ICON RECEIVER QUADRAPADDLE/MICRO POWER AND MICRO COAXIAL MODULE</b> |   |  |                            |  |
| 510 160 107  | QuadraPaddle Signal / Micro Power and Micro Coaxial Module, Receiver, iCon, 100/15 Position, for Crimp Contacts   | 610 138 216<br>610 138 116                               | 610 142 101<br>610 142 102 | 610 140 101<br>610 140 102<br>610 140 103<br>610 140104  |
| 510 160 112  | QuadraPaddle Signal / Micro Power and Micro Coaxial Module, Receiver, iCon, 100/15 Position, with Twin Female Signal Contacts (610 138 200)                                   | 610 138 200<br>610 138 117<br>610 138 118<br>610 138 100 | 610 142 101<br>610 142 102 | 610 140 101<br>610 140 102<br>610 140 103<br>610 140 104 |
| 510 160 113  | QuadraPaddle Signal / Micro Power and Micro Coaxial Module, Receiver, iCon, 100/15 Position, Fully Loaded with Twin Female Contacts and Round Posts (610138200 and 610138117) | 610 138 200<br>610 138 117                               | 610 142 101<br>610 142 102 | 610 140 101<br>610 140 102<br>610 140 103<br>610 140 104 |
| <b>ICON ITA QUADRAPADDLE/MICRO POWER AND MICRO COAXIAL MODULE</b>      |   |  |                            |  |
| 510 161 107  | QuadraPaddle Signal / Micro Power and Micro Coaxial Module, ITA, iCon, 100/15 Position  | 610 138 109<br>610 138 122<br>610 138 112<br>610 138 115 | 610 143 101                | 610 141 101<br>610 141 102<br>610 141 103<br>610 141 104 |

## TriPaddle/Micro Power and Micro Coaxial Module

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Material                              | G10 epoxy glass  |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 24/30  |
| Module Positions Needed               | 1  |



Receiver • Part # 510 160 111


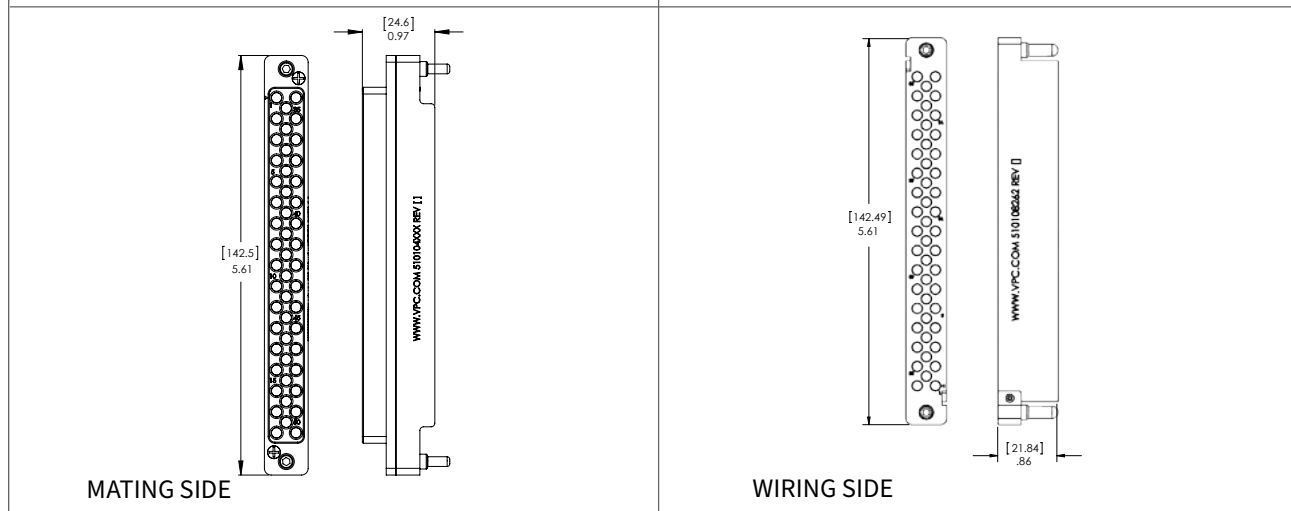
ITA • Part # 510 161 111

| Part #   | Description   | Contacts Used   |                            |   |
|--|---|---|----------------------------|---|
|  |   | TRIPADDLE   | MICRO POWER                | MICRO COAX  |
| <b>ICON RECEIVER TRIPADDLE SIGNAL/MICRO POWER AND MICRO COAXIAL MODULE</b> |   |   |                            |   |
| 510 160 111  | TriPaddle Signal/Micro Power and Micro Coaxial Module, Receiver, iCon, 24/30 Position | 610 110 101<br>610 110 128<br>610 110 167<br>610 110 177<br>610 110 179 | 610 142 101<br>610 142 102 | 610 140 101<br>610 140 102<br>610 140103<br>610 140 104 |
| <b>ICON ITA TRIPADDLE SIGNAL/MICRO POWER AND MICRO COAXIAL MODULE</b>      |   |   |                            |   |
| 510 161 111  | TriPaddle Signal/Micro Power and Micro Coaxial Module, ITA, iCon, 24/30 Position      | 610 110 108<br>610 110 113<br>610 110 129<br>610 110 169                | 610 143 101                | 610 141 101<br>610 141 102<br>610 141103<br>610 141 104 |

NOTE: Refer to User's Manual for power applications with this module.

## Micro Power and Micro Coaxial Module

| Module Specifications                 |  |
|---------------------------------------|--|
| Material                              | Black PPS  |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 50   |
| Module Positions Needed               | 1  |

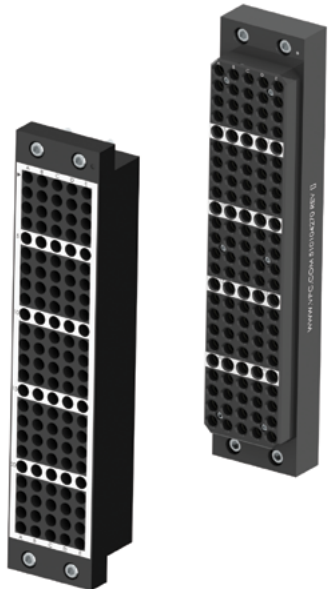
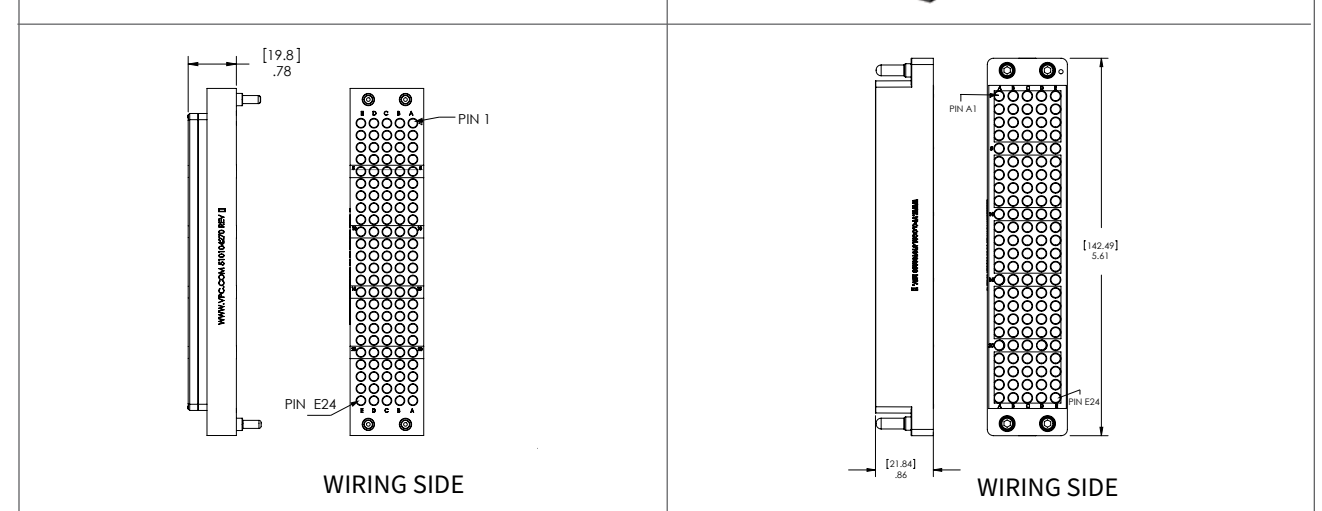



Receiver • Part # 510 104 267      ITA • Part # 510 108 262

| Part #  | Description  | Contacts Used                              |
|---|--|--|
| <b>MICRO POWER AND MICRO COAXIAL RECEIVER MODULES</b> |  |  |
| 510 104 267   | Micro Power and Micro Coaxial Module, Receiver, 50 Position                                | 610 140 101/102/103/104<br>610 142 101/102 |
| 510 109 282   | Strain Relief Plate 90 Series Receiver, Module, 50 Position, Micro Power and Micro Coaxial |  |
| 510 109 298   | Strain Relief Plate for Receiver Modules   |  |
| <b>MICRO POWER AND MICRO COAXIAL ITA MODULES</b>      |  |  |
| 510 108 262   | Micro Power and Micro Coaxial Module, ITA, 50 Position                                     | 610 141 101/102/103/104<br>610 143 101     |
| 510 109 548   | Strain Relief Plate for ITA Modules  |  |

## Micro Power and Micro Coaxial Module

| Module Specifications                 |  |
|---------------------------------------|--|
| Receiver Material                     | G10 epoxy glass  |
| ITA Material                          | Black PPS  |
| Receiver Temperature                  | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| ITA Temperature                       | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 120  |
| Module Positions Needed               | 2  |

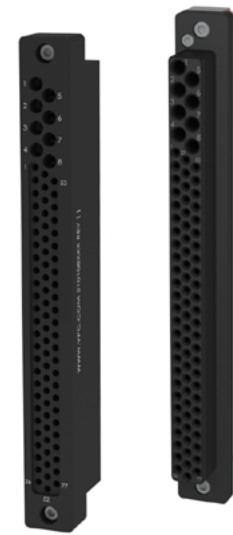
Receiver • Part # 510 104 270      ITA • Part # 510 108 263

| Part #  | Description  | Contacts Used                              |
|---|--|--|
| <b>MICRO POWER AND MICRO COAXIAL RECEIVER MODULES</b> |  |  |
| 510 104 270   | Micro Power and Micro Coaxial Module, Receiver, 120 Position | 610 140 101/102/103/104<br>610 142 101/102 |
| 510 109 298   | Strain Relief Plate for Receiver Modules                     |  |
| <b>MICRO POWER AND MICRO COAXIAL ITA MODULES</b>      |  |  |
| 510 108 263   | Micro Power and Micro Coaxial Module, ITA, 120 Position      | 610 141 101/102/103/104<br>610 143 101     |
| 510 109 296   | Strain Relief Plate for ITA Modules                          |  |

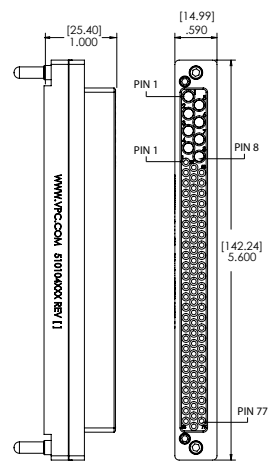


## TriPaddle / Micro Coax/Power Modules

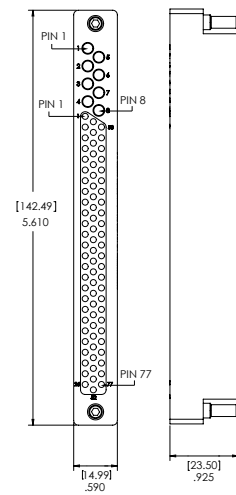
| Module Specifications                 |  |
|---------------------------------------|--|
| Receiver Material                     | G10 epoxy glass  |
| Receiver Temperature                  | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| ITA Material                          | G10 epoxy glass  |
| ITA Temperature                       | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 77 signal, 8 Micro Coax/Power                                    |
| Module Positions Needed               | 1  |



Micro Coax/Power contacts occupy the top 8 positions.



MATING SIDE



WIRING SIDE

|                                      |  |                                 |  |
|--------------------------------------|--|---------------------------------|--|
| Receiver • <b>Part # 510 104 306</b> |  | ITA • <b>Part # 510 108 278</b> |  |
|--------------------------------------|--|---------------------------------|--|

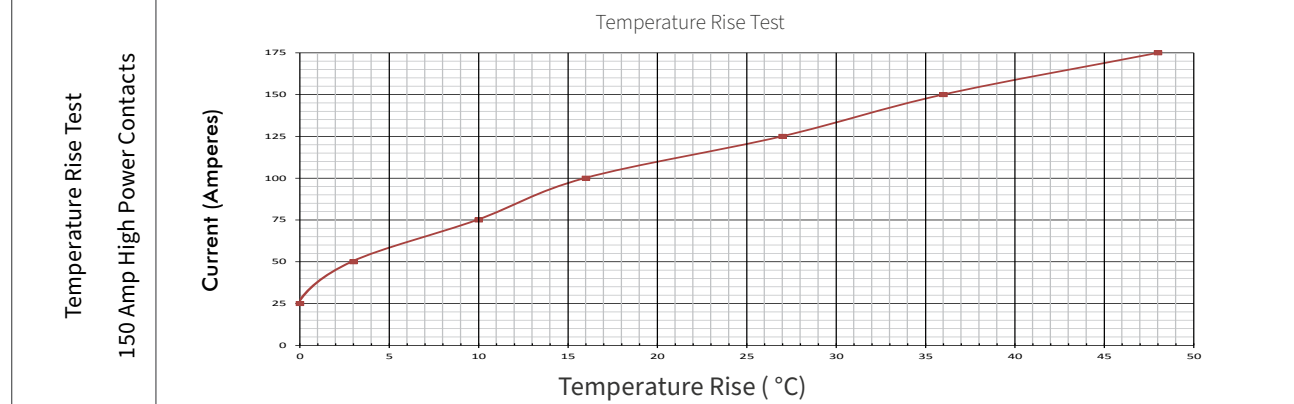
| Part #  | Description   | Contacts Used                                    |   |
|---|---|--|---|
| <b>TRIPADDLE SIGNAL/MICRO COAX RECEIVER MODULES</b> |   |  |   |
| 510 104 306   | TriPaddle Signal/Micro Coax Module, Receiver, 77/8 Position | TRIPADDLE<br>610 110 101/<br>128/167/177/<br>179 | MICO COAX/POWER<br>610 140 101/102/<br>103/104<br>610 142 101/102 |
| 510 109 116   | Strain Relief Plate for Select Receiver Modules             |  |   |
| <b>TRIPADDLE SIGNAL/MICRO COAX ITA MODULES</b>      |   |  |   |
| 510 108 278   | TriPaddle Signal/Micro Coax Module, ITA, 77/8 Position      | 610 110 108/<br>113/129/169                      | 610 141 101/102/<br>103/104<br>610 143 101/102                    |
| 510 109 296   | Strain Relief Plate for ITA Modules                         |  |   |

## High Power Contacts and Patchcords

| Contact Specifications |  | Receiver Contact<br><b>Part # 610 149 101</b> | ITA Contact<br><b>Part # 610 150 101</b> |
|------------------------|--|---|--|
| Operating Current      | 150 amp continuous (using 2 AWG wire)  |   |  |
| Contact Resistance     | .35 mΩ   |   |  |
| Mating Force           | 2.5 lbs max. [1.13 kg]   |   |  |
| Operating Voltage      | 600V   |   |  |
| Operating Temperature  | -40°C to 125° C  |   |  |
| T-Rise                 | +40°C at 150 amps<br>+30°C at 125 amps                                       |   |  |
| Contact Body Material  | Cu alloy<br>Internal contact beams - Cu alloy                                |   |  |
| Contact Plating        | Body - 30μ" Au over 100μ" Ni<br>Internal contact beams - 5μ" Ag over 50μ" Ni |   |  |
| Contact Termination    | Crimp  |   |  |
| Cycle Life             | 10,000 cycles  |   |  |



150 Amp High Power Receiver Patchcord      150 Amp High Power ITA Patchcord

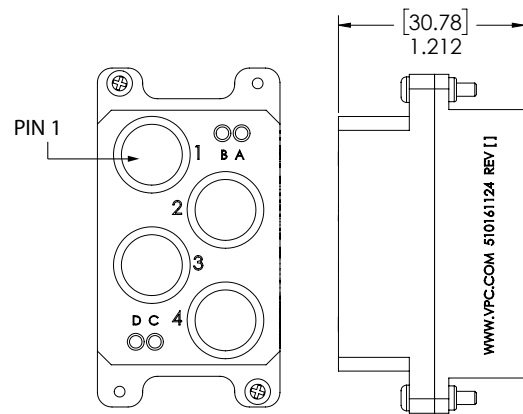
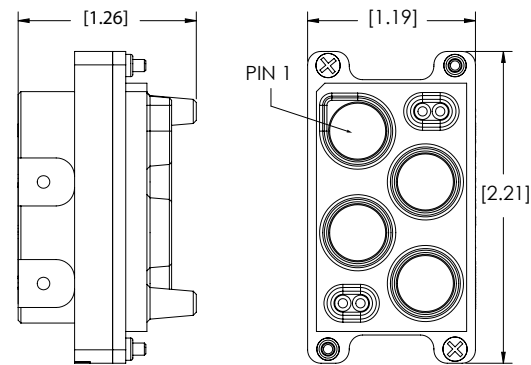


| Part #  | Description   | Used in Module             |
|---|---|----------------------------|
| <b>150 AMP HIGH POWER RECEIVER CONTACT</b>            |   |                            |
| 610 149 101   | High Power Contact, Receiver, 150 Amps, 2 AWG, 30μ" Gold                              | 510 104 307<br>510 160 124 |
| <b>150 AMP HIGH POWER ITA CONTACT</b>                 |   |                            |
| 610 150 101   | High Power Contact, ITA, 150 Amps, 2 AWG, 30μ" Gold                                   | 510 108 281<br>510 161 124 |
| <b>150 AMP HIGH POWER RECEIVER AND ITA PATCHCORDS</b> |   |                            |
| 7-221 902 000-036                                     | High Power Contact, Receiver, 150 Amps, 36", 2 AWG, Single Ended                      | 510 104 307<br>510 160 307 |
| 7-222 902 000-036                                     | High Power Contact, ITA, 150 Amps, 36", 2 AWG, Single Ended                           | 510 108 281<br>510 161 124 |
| <b>CRIMP TOOLS</b>                                    |   |                            |
| 910 102 116   | Tool, Crimp Kit (Pneumatic Crimp Tool, Locator and Die), High Power, Receiver and ITA |                            |
| 910 102 117   | Tool, Crimp Kit (Locator and Die), High Power, Receiver and ITA                       |                            |
| <b>EXTRACTION TOOL</b>                                |   |                            |
| 910 112 129   | Tool, Extraction, High Power, Receiver and ITA  |                            |

## High Power iCon Module

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Receiver Material                     | G10 epoxy glass  |
| Receiver Temperature                  | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| ITA Material                          | G10 epoxy glass  |
| ITA Temperature                       | Operating • -55° C to 125° C<br>Non-operating • -65° C to 140° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 4 signal/4 high power  |
| Module Positions Needed               | 1  |



Receiver • Part # 510 160 124

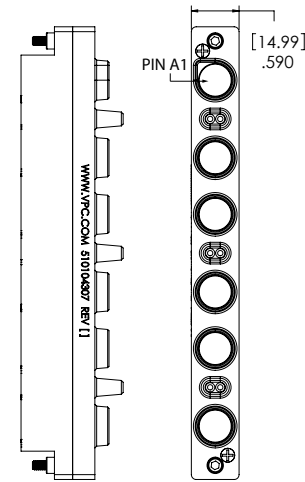
ITA • Part # 510 161 124

| Part #                                  | Description  | Contacts Used |
|---|--|---------------|
| <b>HIGH POWER ICON RECEIVER MODULES</b> |  |               |
| 510 160 124                             | TriPaddle Signal/High Power Module, Receiver, iCon, 4/4 Position | 610 149 101   |
| 510 109 572                             | Strain Relief Plate, iCon High Power, Receiver                   |               |
| <b>HIGH POWER ICON ITA MODULE</b>       |  |               |
| 510 161 124                             | TriPaddle Signal/High Power Module, ITA, iCon, 4/4 Position      | 610 150 101   |

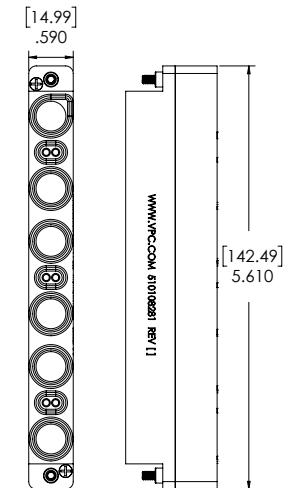
## High Power Module

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Receiver Material                     | G10 epoxy glass  |
| Receiver Temperature                  | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| ITA Material                          | G10 epoxy glass  |
| ITA Temperature                       | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 6 signal/6 high power  |
| Module Positions Needed               | 1  |



MATING SIDE



MATING SIDE

Receiver • Part # 510 104 307

ITA • Part # 510 108 281

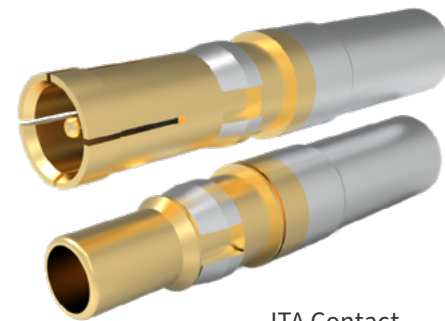
| Part #                            | Description  | Contacts Used |
|-----------------------------------|--|---------------|
| <b>HIGH POWER RECEIVER MODULE</b> |  |               |
| 510 104 307                       | TriPaddle Signal/High Power Module, Receiver, 6/6 Position, Strain Relief Plate Included | 610 149 101   |
| <b>HIGH POWER ITA MODULES</b>     |  |               |
| 510 108 281                       | TriPaddle Signal/High Power Module, ITA, 6/6 Position                                    | 610 150 101   |
| 510 109 549                       | Strain Relief Plate for High Power 90 Series ITA and Receiver Modules                    |               |

## 75 Ohm Coaxial Contacts and Patchcords

### Contact Specifications

|                                       |   |
|---------------------------------------|---|
| Characteristic Impedance              | 75 Ω  |
| Frequency Range                       | DC to 3 GHz   |
| Insertion Loss                        | -1.64 dB @ 3 GHz                                      |
| VSWR                                  | < 2.95 @ 3 GHz  |
| Operating Current                     | 3.0 amp DC max. continuous                            |
| Contact Resistance                    | Center contact - 5 mΩ<br>Outer shield - 3 mΩ          |
| Mating Force                          | 4.0 lbs max. [1.81 kg]                                |
| Dielectric Withstanding Voltage (DWV) | 800 volts RMS   |
| Insulation Resistance                 | 1000 MΩ min.  |
| Contact Body Material                 | Female & male shield - brass<br>Center contact - BeCu |
| Contact Plating                       | Center conductor shield - 30μ" Au over 100μ" Ni       |
| Cycle Life                            | 20,000 cycles   |

Receiver Contact  
Part # 610 104 157

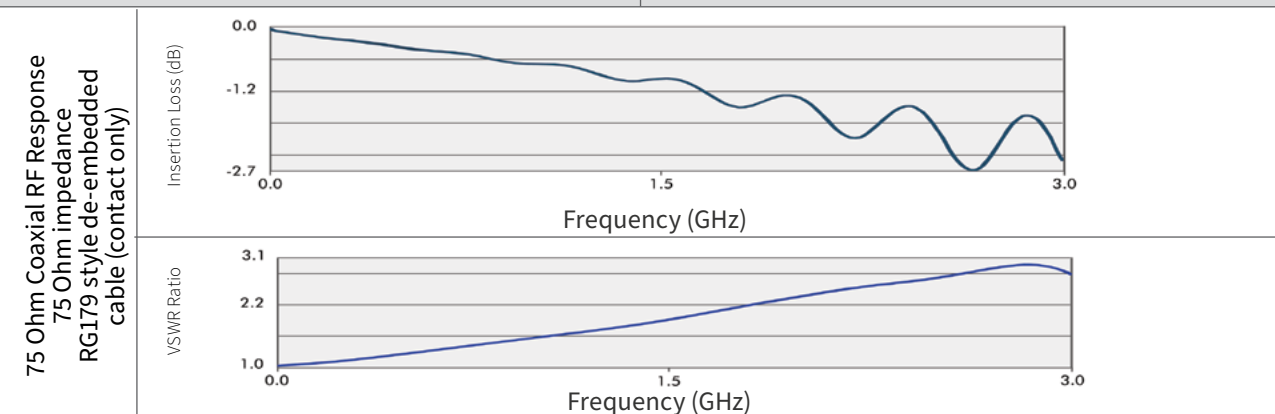


ITA Contact  
Part # 610 103 169



75 Ohm Coaxial Receiver Patchcord

75 Ohm Coaxial ITA Patchcord

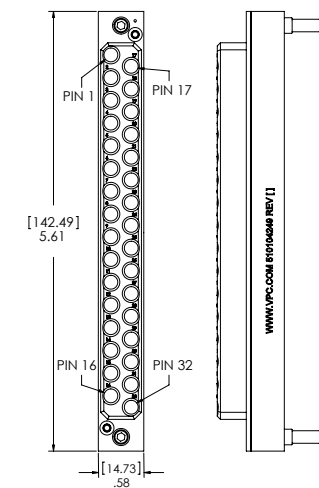


| Part #   | Description   | Used in Module |
|--|---|----------------|
| 75 OHM COAXIAL RECEIVER CONTACT<br>610 104 157 | Coaxial Contact, Receiver, 75 Ohm, RG179, Crimp                             | 510 104 249    |
| 75 OHM COAXIAL ITA CONTACT<br>610 103 169      | Coaxial Contact, ITA, 75 Ohm, RG179, Crimp                                  | 510 108 179    |
| 75 OHM COAXIAL RECEIVER AND ITA PATCHCORDS     |   |                |
| 7-382 179 000-036                              | Coaxial Patchcord, Receiver, 75 Ohm, 36", RG179, Single Ended               | 510 104 249    |
| 7-381 179 000-036                              | Coaxial Patchcord, ITA, 75 Ohm, 36", RG179, Single Ended                    | 510 108 179    |
| CRIMP TOOLS                                    |   |                |
| 910 102 106                                    | Tool Kit, 75 Ohm Coaxial Contacts, Receiver                                 |                |
| 910 102 107                                    | Tool Kit, 75 Ohm Coaxial, ITA   |                |
| 910 104 139                                    | Tool, Hex Crimp for Outer Shield, 75 Ohm Coaxial, Receiver and ITA Contacts |                |
| EXTRACTION TOOL                                |   |                |
| 910 112 117                                    | Tool, Extraction, for 75 Ohm and 20/26 GHz Receiver and ITA Contacts        |                |

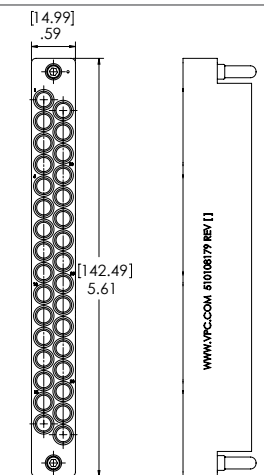
## 75 Ohm Coaxial Module

### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Receiver Material                     | G10 epoxy glass  |
| Receiver Temperature                  | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| ITA Material                          | Black-PPS  |
| ITA Temperature                       | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 32   |
| Module Positions Needed               | 1  |



MATING SIDE



WIRING SIDE

Receiver • Part # 510 104 249

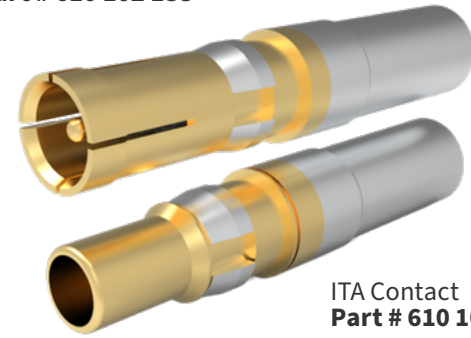
ITA • Part # 510 108 179

| Part #                            | Description   | Contacts Used |
|-----------------------------------|---|---------------|
| 75 OHM COAXIAL RECEIVER MODULES   |   |               |
| 510 104 249                       | Coaxial Module, Receiver, 75 Ohm, 32 Position                     | 610 104 157   |
| 510 109 298                       | Strain Relief Plate for Receiver Modules                          |               |
| 20 GHZ/75 OHM COAXIAL ITA MODULES |   |               |
| 510 108 179                       | Coaxial Module, ITA, 20/26 GHz, 75 Ohm and 75 Ohm HD, 32 Position | 610 103 169   |
| 510 109 296                       | Strain Relief Plate for ITA Modules                               |               |

## 75 Ohm High Definition (HD) Coaxial Patchcords and Contacts

| Contact Specifications                |   |
|---------------------------------------|---|
| Characteristic Impedance              | 75 Ω  |
| Frequency Range                       | DC to 3 GHz   |
| Insertion Loss                        | -.86 dB @ 3 GHz                                       |
| VSWR                                  | < 2.26 @ 3 GHz  |
| Operating Current                     | 3.0 amp DC max. continuous                            |
| Contact Resistance                    | Center contact – 5 mΩ<br>Outer shield – 3 mΩ          |
| Mating Force                          |   |
| Dielectric Withstanding Voltage (DWV) | 800 VDC min.  |
| Insulation Resistance                 | 1000 MΩ min.  |
| Contact Body Material                 | Female & male shield • brass<br>Center contact • BeCu |
| Contact Plating                       | Center conductor shield • 30μ" Au over 100μ" Ni       |
| Cycle Life                            | 20,000 cycles   |

Receiver Contact  
Part # 610 102 133

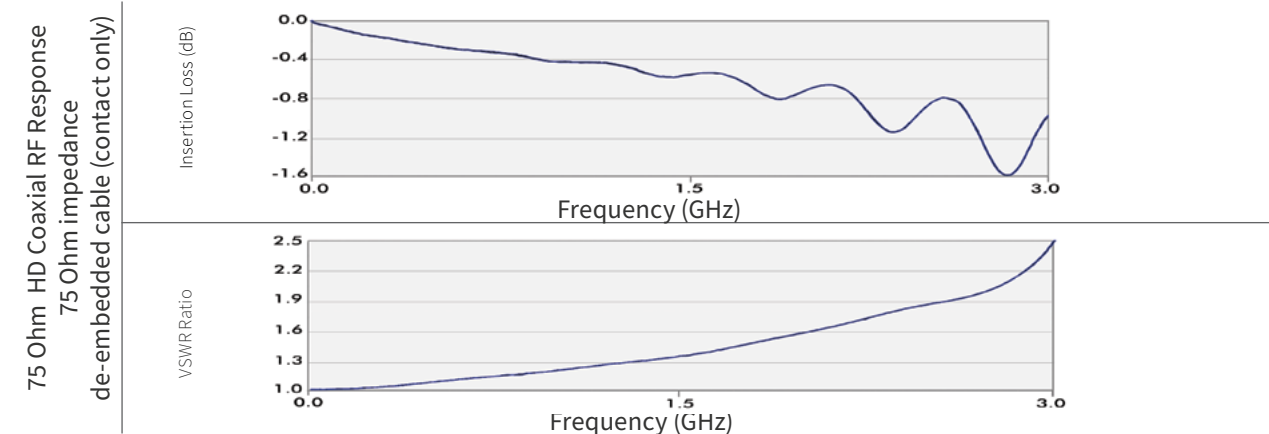


ITA Contact  
Part # 610 102 132



75 Ohm HD Coaxial Receiver Patchcord

75 Ohm HD Coaxial ITA Patchcord



| Part #            | Description  | Used in Module                 |
|-------------------|--|--------------------------------|
| 610 102 133       | 75 OHM HD COAXIAL RECEIVER CONTACT<br>Coaxial Contact, Receiver, 75 Ohm HD, sm59/U Belden 1855A, 3 GHz, Crimp                  | 510 104 251<br>510 160 114/115 |
| 610 102 132       | 75 OHM HD COAXIAL ITA CONTACT<br>Coaxial Contact, ITA, 75 Ohm HD, sm59/U Belden 1855A, 3 GHz, Crimp                            | 510 108 179<br>510 161 114/115 |
| 7-412 873 000-036 | 75 OHM HD COAXIAL RECEIVER AND ITA PATCHCORDS<br>Coaxial Patchcord, Receiver, 75 Ohm HD, 36" sm59/U Belden 1855A, Single Ended | 510 104 251<br>510 160 114/115 |
| 7-411 873 000-036 | Coaxial Patchcord, ITA, 75 Ohm HD, 36", sm59/U Belden 1855A, Single Ended  | 510 108 179<br>510 161 114/115 |
| 910 104 139       | CRIMP TOOL<br>Tool, Hex Crimp for Outer Shield, 75 Ohm Coaxial, Receiver and ITA   |                                |
| 910 112 117       | EXTRACTION TOOL<br>Tool, Extraction, 75 Ohm and 20/26 GHz Coaxial, Receiver and ITA  |                                |

## 20/26 GHz Coaxial Contacts and Patchcords

| Contact Specifications                |   |
|---------------------------------------|---|
| Characteristic Impedance              | 50 Ω  |
| Frequency Range                       | DC to 26 GHz  |
| Insertion Loss                        | .06 x√f(GHz) dB   |
| VSWR                                  | 1.15 + .01 (f) GHz (w/ SF142 [20 GHz])<br>1.25 for 2 – 18 GHz (w/ TF402)<br>1.30 for 18 – 26 GHz (w/ TF402) |
| Operating Current                     | 5 Amps DC max. continuous   |
| Contact Isolation                     | > -90 dB over frequency range   |
| Contact Resistance                    | 4 mΩ max. center conductor<br>2 mΩ max. shield  |
| Mating Force                          | 4.0 lbs max. [1.81 kg]  |
| Dielectric Withstanding Voltage (DWV) | 800 volts RMS shield to center contact<br>1000 volts RMS contact to contact                                 |
| Insulation Resistance                 | 2000 MΩ min.  |
| Contact Body Material                 | Female & male plug (RCV & ITA)<br>Shield – brass<br>Center conductor – BeCu                                 |
| Contact Plating                       | 30μ" Au over 100μ" Ni   |
| Cycle Life                            | 20,000 cycles   |

ITA Crimp Contact  
Part # 610 102 110



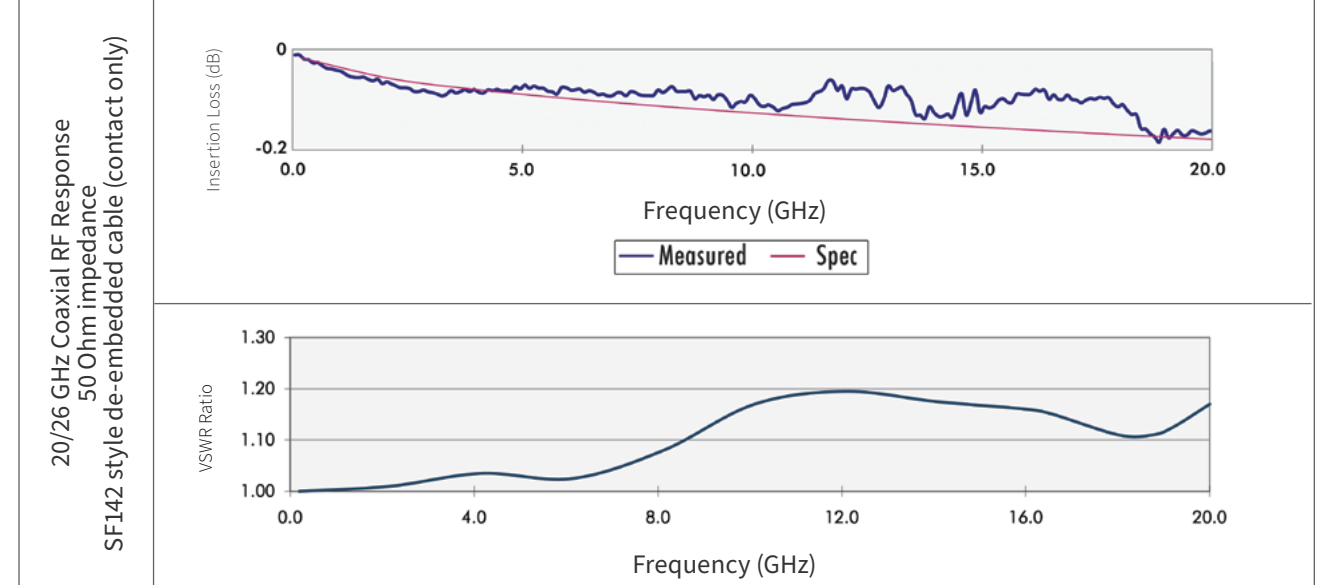
Receiver Crimp Contact  
Part # 610 102 109

ITA Solder Contact  
Part # 610 102 118



Receiver Solder Contact  
Part # 610 102 119

For applications in which a more flexible cable is needed, use Flex 402 patchcords. Flex 402 cable has half the minimum bend radius as SF142. When flexibility is not as important, use VPC's crimp contact with SF142 cable.



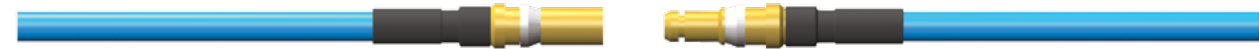
| Part #      | Description                               | Used in Module |
|-------------|---|----------------|
| 610 102 110 | 20/26 GHz COAXIAL ITA CRIMP CONTACT       |                |
| 610 102 109 | 20/26 GHz COAXIAL RECEIVER CRIMP CONTACT  |                |
| 610 102 118 | 20/26 GHz COAXIAL ITA SOLDER CONTACT      |                |
| 610 102 119 | 20/26 GHz COAXIAL RECEIVER SOLDER CONTACT |                |

## 20/26 GHz Coaxial Contacts and Patchcords



20/26 GHz Coaxial Receiver Patchcord • SF142B

20/26 GHz Coaxial ITA Patchcord • SF142B



20/26 GHz Coaxial Receiver Patchcord • Flex 402

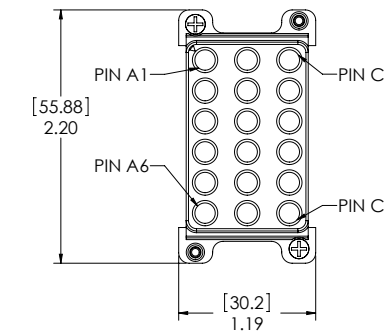
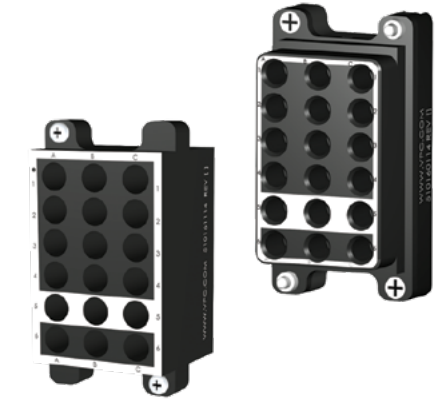
20/26 GHz Coaxial ITA Patchcord • Flex 402

| Part #   | Description   | Used in Module                     |
|--|---|------------------------------------|
| <b>20/26 GHZ COAXIAL RECEIVER CONTACTS</b>           |   |                                    |
| 610 102 109  | Coaxial Contact, Receiver, 20/26 GHz, SF142B, Crimp/Clamp                             | 510 104 251                        |
| 610 102 119  | Coaxial Contact, Receiver, 20/26 GHz, Flex 402, Solder (available only in patchcords) | 510 104 251/289<br>510 160 114/115 |
| <b>20/26 GHZ COAXIAL ITA CONTACTS</b>                |   |                                    |
| 610 102 110  | Coaxial Contact, ITA, 20/26 GHz, SF142B, Crimp/Clamp                                  | 510 108 179<br>510 161 114/115     |
| 610 102 118  | Coaxial Contact, ITA, 20/26 GHz, Flex 402, Solder (available only in patchcords)      | 510 108 179<br>510 161 114/115     |
| <b>20/26 GHZ COAXIAL RECEIVER AND ITA PATCHCORDS</b> |   |                                    |
| 7-384 143 000-036                                    | 20/26 GHz Coaxial Patchcord, Receiver, 50 Ohm, 36", SF142B, Single Ended              | 510 104 251                        |
| 7-388 102 000-036                                    | 20/26 GHz Coaxial Patchcord, Receiver, 50 Ohm, 36", Flex 402, Single Ended            | 510 104 251<br>510 160 114/115     |
| 7-383 143 000-036                                    | 20/26 GHz Coaxial Patchcord, ITA, 50 Ohm, 36", SF142B, Single Ended                   | 510 108 179                        |
| 7-387 102 000-036                                    | 20/26 GHz Coaxial Patchcord, ITA, 50 Ohm, 36", Flex 402, Single Ended                 | 510 108 179<br>510 161 114/115     |
| <b>CRIMP TOOL</b>                                    |   |                                    |
| 910 101 124  | Tool, Crimp, 20/26 GHz Coaxial Contacts, Receiver and ITA                             |                                    |
| <b>EXTRACTION TOOL</b>                               |   |                                    |
| 910 112 117  | Tool, Extraction, 75 Ohm and 20/26 GHz Coaxial Contacts, Receiver and ITA             |                                    |

## 20/26 GHz and 75 Ohm HD Coaxial Module

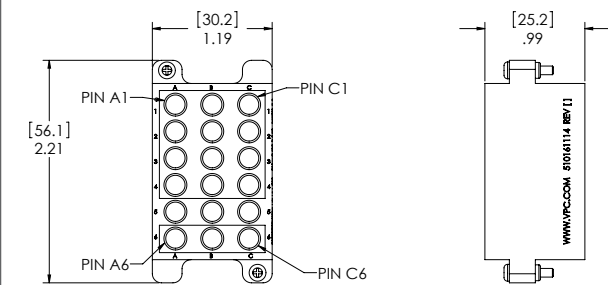
### Module Specifications

|                                       |  |
|---------------------------------------|--|
| Material                              | G10 epoxy glass  |
| Temperature                           | Operating • -55°C to 125°C<br>Non-operating • -55°C to 140°C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 18   |
| Module Positions Needed               | 1  |



MATING SIDE

Receiver • Part # 510 160 114



WIRING SIDE

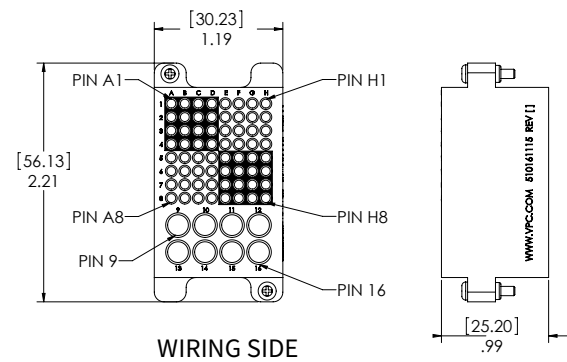
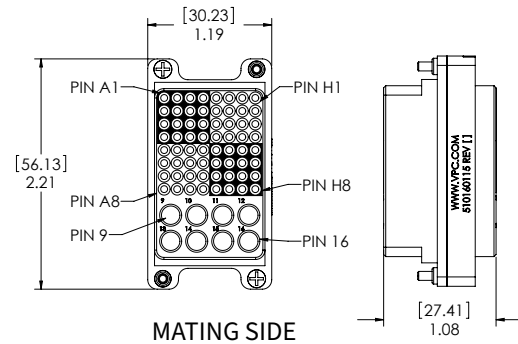
ITA • Part # 510 161 114

| Part #  | Description  | Contacts Used                   |             |
|---|--|---------------------------------|-------------|
|   |  | 20/26 GHz                       | 75 OHM HD   |
| <b>ICON RECEIVER 20/26 GHZ AND 75 OHM HD COAXIAL MODULE</b> |  |                                 |             |
| 510 160 114   | Coaxial Module, Receiver, iCon, 20/26 GHz/75 Ohm HD, 18 Position | 610 102 119<br>(patchcord only) | 610 102 133 |
| <b>ICON ITA 20/26 GHZ AND 75 OHM HD COAXIAL MODULE</b>      |  |                                 |             |
| 510 161 114   | Coaxial Module, ITA, iCon, 20/26 GHz/75 Ohm HD, 18 Position      | 610 102 118<br>(patchcord only) | 610 102 132 |

NOTE: Refer to User's Manual for power applications with this module.

## TriPaddle / 20/26 GHz & 75 Ohm HD Coaxial Module

| Module Specifications                 |  |
|---------------------------------------|--|
| Material                              | G10 epoxy glass  |
| Temperature                           | Operating • -55°C to 125°C<br>Non-operating • -55°C to 140°C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 64/8   |
| Module Positions Needed               | 1  |



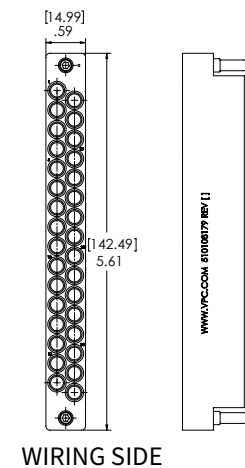
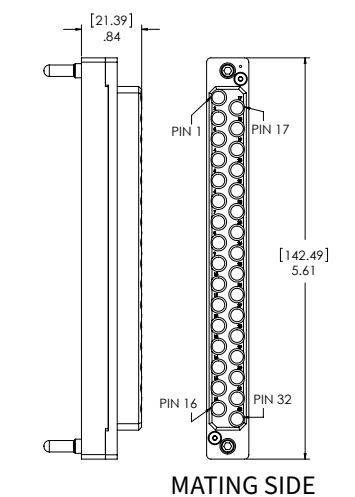
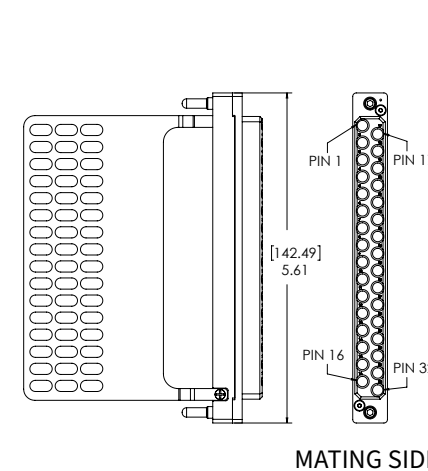
Receiver • **Part # 510 160 115**

ITA • **Part # 510 161 115**

| Part #      | Description   | Contacts Used   |                                 |             |
|-------------|---|---|---------------------------------|-------------|
|             |   | TRIPADDLE   | 20/26 GHz                       | 75 OHM HD   |
| 510 160 115 | ICON RECEIVER TRIPADDLE SIGNAL / 20/26 GHz & 75 OHM HD COAXIAL MODULE<br>TriPaddle Signal / 20/26 GHz & 75 Ohm HD Coaxial Module, Receiver, iCon, 64/8 Position | 610 110 101<br>610 110 128<br>610 110 167<br>610 110 177<br>610 110 179 | 610 102 119<br>(patchcord only) | 610 102 133 |
| 510 161 115 | ICON ITA TRIPADDLE SIGNAL / 20/26 GHz COAXIAL MODULE<br>TriPaddle Signal / 20/26 GHz & 75 Ohm HD Coaxial Module, ITA, iCon, 64/8 Position                       | 610 110 108<br>610 110 113<br>610 110 129<br>610 110 169                | 610 102 118<br>(patchcord only) | 610 102 132 |

## 20/26 GHz or 75 Ohm High Definition (HD) Coaxial Module

| Module Specifications                 |  |
|---------------------------------------|--|
| Material                              | Black PPS  |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Module with Strain Relief Material    | Black PPS  |
| Module with Strain Relief Temperature | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Strain Relief Material                | Aluminum   |
| Strain Relief Finish                  | Powder coat  |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 32   |
| Module Positions Needed               | 1  |



Receiver • **Part # 510 104 289**

Receiver • **Part # 510 104 251**

ITA • **Part # 510 108 179**

| Part #   | Description  | Contacts Used           |
|--|--|-------------------------|
| <b>20/26 GHz OR 75 OHM HD COAXIAL RECEIVER MODULES</b> |  |                         |
| 510 104 251  | Coaxial Module, Receiver, 20/26 GHz and 75 Ohm HD, 32 Position                               | 610 102 109/119/133     |
| 510 104 289  | Coaxial Module, Receiver, 20/26 GHz and 75 Ohm HD, 32 Position, Includes Strain Relief Plate | 610 102 109/119         |
| 510 109 298  | Strain Relief Plate for Receiver Modules   |                         |
| <b>20/26 GHz OR 75 OHM HD COAXIAL ITA MODULES</b>      |  |                         |
| 510 108 179  | Coaxial Module, ITA, 20/26 GHz, 75 Ohm and 75 Ohm HD, 32 Position                            | 610 102 110/117/118/132 |
| 510 109 296  | Strain Relief Plate for ITA Modules  | 610 103 169             |

## 20/26 GHz Coaxial SMA Contacts

| Contact Specifications                |   |
|---------------------------------------|---|
| Characteristic Impedance              | 50 Ω  |
| Frequency Range                       | DC to 26 GHz  |
| Insertion Loss                        | .06 x/f(GHz) dB   |
| VSWR                                  | 1.15 + .01 (f) GHz  |
| Operating Current                     | 5 Amp DC max. continuous  |
| Contact Isolation                     | > -90 dB over frequency range   |
| Mating Force                          | 4.0 lbs max. [1.81 kg]  |
| Contact Resistance                    | 5 mΩ max. center conductor<br>3 mΩ max. shield                              |
| Dielectric Withstanding Voltage (DWV) | 800 volts RMS shield to center contact<br>1000 volts RMS contact to contact |
| Insulation Resistance                 | 2000 MΩ min.  |
| Contact Body Material                 | Shield – brass<br>Center conductor – BeCu                                   |
| Contact Plating                       | 30μ" Au over 100μ" Ni   |
| Cycle Life                            | 20,000 cycles   |

**ITA Contact**  
**Part # 610 102 134**



**Receiver Contact**  
**Part # 610 102 135**

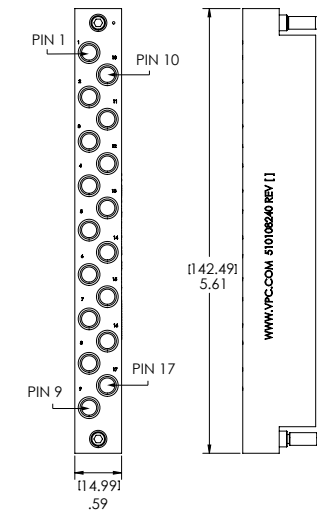
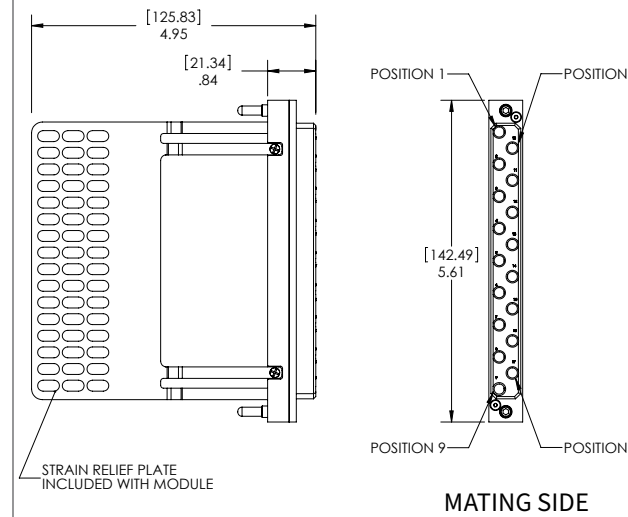
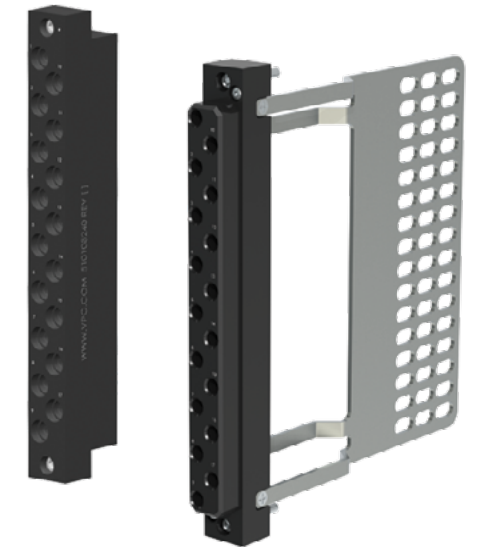


20/26 GHz Coaxial SMA Receiver Patchcord      20/26 GHz Coaxial SMA ITA Patchcord

| Part #                                    | Description   | Used in Module |
|---|---|----------------|
| <b>20/26 GHZ COAXIAL RECEIVER CONTACT</b> |   |                |
| 610 102 135                               | Coaxial Contact, Receiver, 20/26 GHz with SMA Adapter         | 510 104 287    |
| <b>20/26 GHZ COAXIAL ITA CONTACT</b>      |   |                |
| 610 102 134                               | Coaxial Contact, ITA, 20/26 GHz with SMA Adapter              | 510 108 240    |
| <b>20/26 GHZ COAXIAL SMA PATCHCORDS</b>   |   |                |
| 7-528 143 000-036                         | Coaxial Patchcord, SMA Plug, 36", SF142B Tan, Single Ended    |                |
| 7-531 102 000-036                         | Coaxial Patchcord, SMA Plug, 36", Flex 402 Blue, Single Ended |                |

## 20/26 GHz SMA Coaxial Module

| Module Specifications                 |  |
|---------------------------------------|--|
| Module Material                       | G10 epoxy glass  |
| Module Temperature                    | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Receiver Strain Relief Material       | Aluminum   |
| Receiver Strain Relief Finish         | Clear anodize  |
| Available Contact Positions           | 17   |
| Module Positions Needed               | 1  |



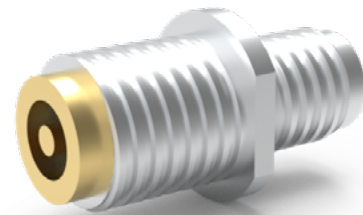
Receiver • **Part # 510 104 287**      ITA • **Part # 510 108 240**

| Part #      | Description   | Contacts Used |
|-------------|---|---------------|
| 510 104 287 | <b>18 GHZ COAXIAL RECEIVER MODULE AND STRAIN RELIEF</b><br>Coaxial Module, Receiver, 20/26 GHz, 17 Position | 610 102 135   |
| 510 108 240 | <b>18 GHZ COAXIAL ITA MODULE</b><br>Coaxial Module, ITA, 20/26 GHz, 17 Position                             | 610 102 134   |

## 40 GHz Coaxial Contact

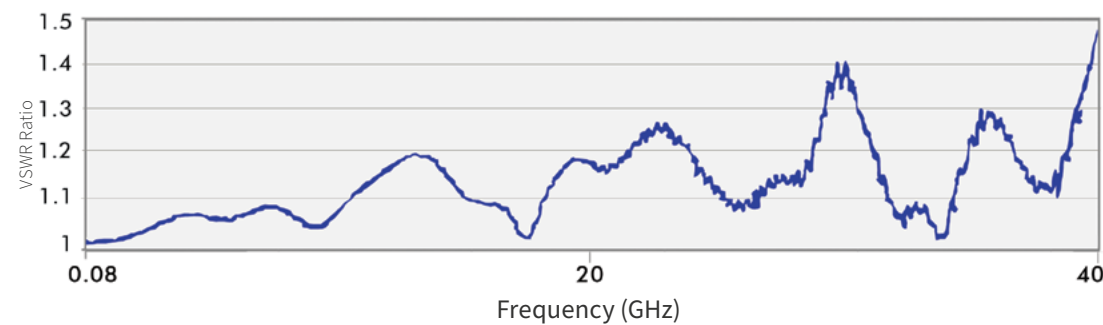
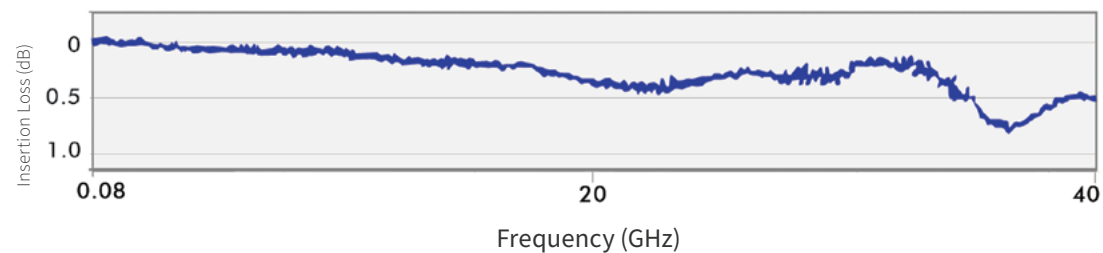
### Contact Specifications

|                          |   |
|--------------------------|---|
| Characteristic Impedance | 50 Ω  |
| Frequency Range          | DC – 40 GHz   |
| Temperature              | -50° C to 125° C  |
| Insertion Loss           | ≤ -0.3 dB @ DC - 18 GHz<br>≤ -1.5 dB @ 18 - 40 GHz                        |
| VSWR                     | 1.35 DC to 18 GHz<br>1.55 18 to 40 GHz                                    |
| Mating Force             | 1.5 lbs max. [.68 kg]   |
| Contact Body             | Passivated stainless steel body<br>Beryllium copper contacts<br>Au plated |
| Contact Isolation        | > -85 dB  |
| Cycle Life               | 20,000 cycles   |



**Part # 610 102 114**

40 GHz Coaxial RF Response  
50 Ohm impedance  
PE-LL095P style de-embedded cable (contact only)



| Part # | Description | Used in Module |
|--------|-------------|----------------|
|--------|-------------|----------------|

|  |                                       |                            |
|--|---------------------------------------|----------------------------|
| 40 GHZ COAXIAL RECEIVER/ITA CONTACT<br>610 102 114 | Coaxial Contact, Receiver/ITA, 40 GHz | 510 108 169<br>510 104 224 |
|--|---------------------------------------|----------------------------|

NOTE: The 40 GHz Connector is a blind mate connector that mates with 3.5 mm and 2.92 mm connectors. 2.92 mm connectors are recommended for frequencies above 26 GHz.

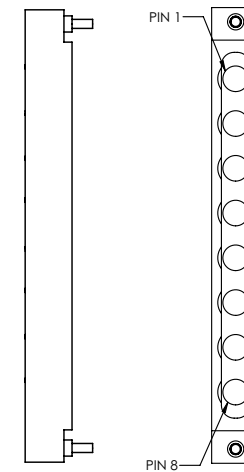
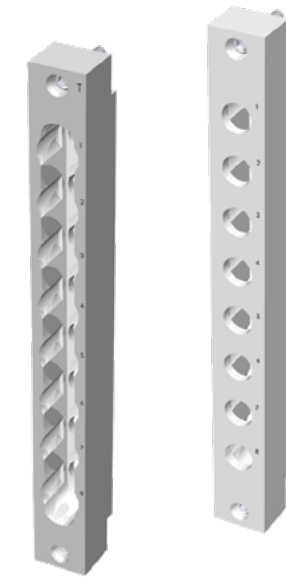
\* VPC recommends the 40 GHz modules be placed in module slots near the outside edges of the receiver.

|   |   |
|---|---|
| 40 GHZ COAXIAL PATCHCORD<br>7-632 195 632-036 | Coaxial Patchcord, 2.92 mm Plug, 36", Double Ended (40 GHz) |
|---|---|

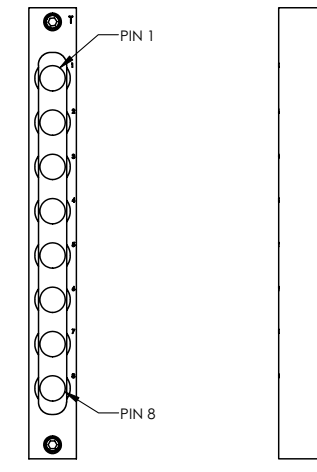
## 40 GHz Coaxial Module

### Module Specifications

|                                       |                  |
|---------------------------------------|------------------|
| Material                              | Aluminum         |
| Finish                                | Clear chromate   |
| Temperature                           | -55° C to 125° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.    |
| Available Contact Positions           | 8                |
| Module Positions Needed               | 1                |



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Receiver • **Part # 510 104 224**

ITA • **Part # 510 108 169**

| Part # | Description | Contacts Used |
|--------|-------------|---------------|
|--------|-------------|---------------|

|  |  |             |
|--|--|-------------|
| 40 GHZ COAXIAL RECEIVER MODULE AND STRAIN RELIEF<br>510 104 224<br>510 109 298 | Coaxial Module, Receiver, 40 GHz, 8 Position<br>Strain Relief Plate for Receiver Modules | 610 102 114 |
|--|--|-------------|

|   |  |             |
|---|--|-------------|
| 40 GHZ COAXIAL ITA MODULE AND STRAIN RELIEF<br>510 108 169<br>510 109 296 | Coaxial Module, ITA, 40 GHz, 8 Position<br>Strain Relief Plate for ITA Modules | 610 102 114 |
|---|--|-------------|

\* VPC recommends the 40 GHz modules be placed in module slots near the outside edges of the receiver.



## Twinaxial Contacts and Patchcords

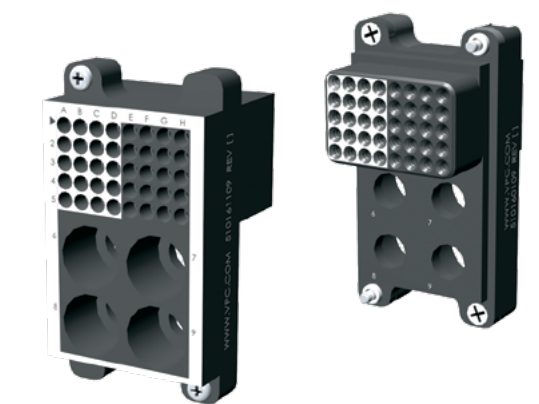
| Contact Specifications        |   |  <p><b>ITA Contact</b><br/>Part # 610 113 145</p> <p><b>Receiver Contact</b><br/>Part # 610 113 144</p> |
|-------------------------------|---|---|
| Operating Current and Voltage | 3 amp max. continuous<br>480 RMS  |   |
| Contact Resistance            | Center contact is < 6.5 mΩ; Intermediate contact is < 3 mΩ; Outer contact is < 3.5 mΩ |   |
| Insertion Loss                | -0.044 dB @ 0.2 GHz   |   |
| VSWR                          | Approximately 1.1:1 @ 100 MHz   |   |
| Insulation Resistance         | 106 MΩ min.   |   |
| Mating Force                  | 3.5 lbs max. [1.59 kg]  |   |
| Contact Body Material         | Outer shell • brass<br>Inner shield • bronze<br>Male contact • brass                  |   |
| Contact Plating               | 40μ" Au over 130μ" Ni   |   |
| Cycle Life                    | 20,000 cycles   |   |

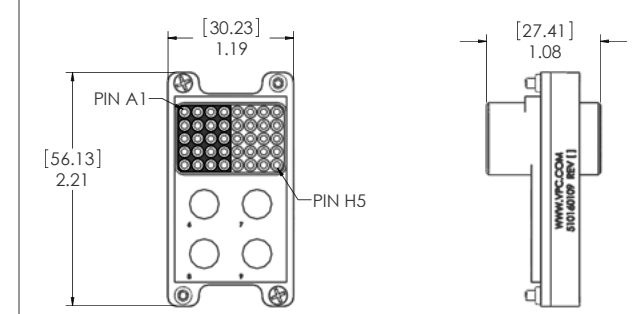


Twinaxial Receiver Patchcord      Twinaxial ITA Patchcord

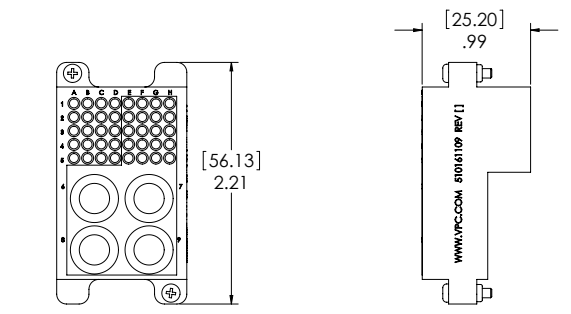
| Part #                                       | Description   | Used in Module             |
|--|---|----------------------------|
| <b>TWINAXIAL RECEIVER CONTACT</b>            |   |                            |
| 610 113 144                                  | Twinaxial Contact, Receiver   | 510 104 155<br>510 160 109 |
| <b>TWINAXIAL ITA CONTACT</b>                 |   |                            |
| 610 113 145                                  | Twinaxial Contact, ITA  | 510 108 138<br>510 161 109 |
| <b>TWINAXIAL RECEIVER AND ITA PATCHCORDS</b> |   |                            |
| 7-402 423 000-036                            | Twinaxial Patchcord, Receiver, 3 Amp, 36", 22 AWG Shielded Twisted Pair, Single Ended | 510 104 155<br>510 160 109 |
| 7-401 423 000-036                            | Twinaxial Patchcord, ITA, 3 Amp, 36", 22 AWG Shielded Twisted Pair, Single Ended      | 510 108 138<br>510 161 109 |

## Position TriPaddle/Twinaxial Module

| Module Specifications                 |  |  |
|---------------------------------------|--|---|
| Material                              | G10 epoxy glass  |   |
| Temperature                           | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |   |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |   |
| Available Contact Positions           | 40/4   |   |
| Module Positions Needed               | 1  |   |



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Receiver • Part # 510 160 109      ITA • Part # 510 161 109

| Part #  | Description  | Contacts Used  |             |
|---|--|--|-------------|
|   |  | TRIPADDLE  | TWINAXIAL   |
| <b>ICON RECEIVER TRIPADDLE/TWINAXIAL MODULE</b> |  |  |             |
| 510 160 109                                     | TriPaddle Signal/Twinaxial Module, Receiver, iCon, 40/4 Position | 610 110 101<br>610 110 104<br>610 110 128<br>610 110 167 | 610 113 144 |
| <b>ICON ITA TRIPADDLE/TWINAXIAL MODULE</b>      |  |  |             |
| 510 161 109                                     | TriPaddle Signal/Twinaxial Module, ITA, iCon, 40/4 Position      | 610 110 108<br>610 110 113<br>610 110 129<br>610 110 169 | 610 113 145 |

## Twinaxial Module

| Module Specifications       |  |
|-----------------------------|--|
| Material                    | G10 epoxy glass  |
| Temperature                 | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| Available Contact Positions | 8  |
| Module Positions Needed     | 1  |

**MATING SIDE**

Receiver • **Part # 510 104 155**

**MATING SIDE**

ITA • **Part # 510 108 138**

| Part #      | Description   | Contacts Used |
|-------------|---|---------------|
| 510 104 155 | Twinaxial Receiver Module<br>Twinaxial Module, Receiver, 8 Position | 610 113 144   |
| 510 108 138 | Twinaxial ITA Module<br>Twinaxial Module, ITA, 8 Position           | 610 113 145   |

## Thermocouple Patchcords and Contacts

| Contact Specifications      |  |
|-----------------------------|--|
| ANSI Type                   | K  |
| Thermocouple Pair Materials | Chromel®<br>Alumel®                      |
| Polarity                    | Chromel® +<br>Alumel® -                  |
| Material Type               | Base                                     |
| TC Temperature Range        | Chromel® & Alumel®<br>-200° C to 1250° C |
| EMF (mV)                    | -5.97 to +50.63                          |
| Cycle Life                  | 20,000 cycles                            |

**ITA Contact**  
**Part # 610 113 133**

**Receiver Contact**  
**Part # 610 113 131**

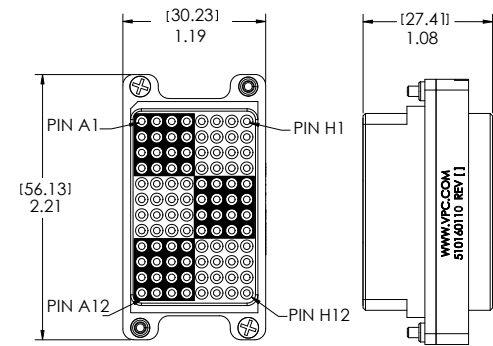
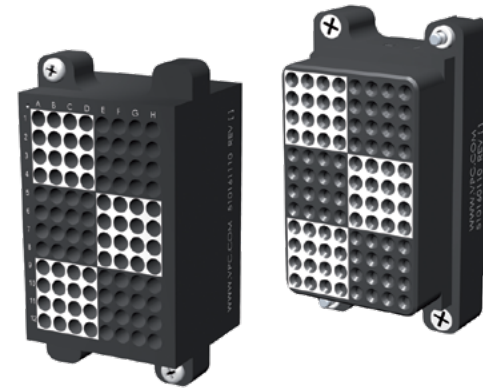
  
  

| Thermocouple Receiver Patchcord  |  | Thermocouple ITA Patchcord     |
|--|--|--------------------------------|
| Part #   | Description  | Used in Module                 |
| <b>THERMOCOUPLE RECEIVER CONTACTS</b>  |  |                                |
| 610 113 131  | Thermocouple Contact, Receiver, Chromel  | 510 104 133/261<br>510 160 110 |
| 610 113 132  | Thermocouple Contact, Receiver, Alumel   | 510 104 133/261<br>510 160 110 |
| <b>THERMOCOUPLE ITA CONTACTS</b>   |  |                                |
| 610 113 133  | Thermocouple Contact, ITA, Chromel   | 510 108 124/245<br>510 161 110 |
| 610 113 134  | Thermocouple Contact, ITA, Alumel  | 510 108 124/245<br>510 161 110 |
| NOTE: The Chromel-Alumel thermocouple is composed of a positive Chromel wire and a negative Alumel wire. |  |                                |
| <b>THERMOCOUPLE RECEIVER AND ITA PATCHCORDS</b>  |  |                                |
| 7-410 803 000-036  | Thermocouple Patchcord, Receiver, 36", 24 AWG, Chromel and Alumel, Single Ended              | 510 104 133/261<br>510 160 110 |
| 7-409 803 000-036  | Thermocouple Patchcord, ITA, 36", 24 AWG, Chromel and Alumel, Single Ended                   | 510 108 124/245<br>510 161 110 |
| <b>TOOLS AND LOCATORS</b>  |  |                                |
| 910 101 102  | Tool, Crimp, 10 Amp TriPaddle, Thermocouple, Micro Power, Receiver and ITA, Locator Required |                                |
| 910 104 134  | Tool, Locator, Thermocouple, Receiver  |                                |
| 910 104 135  | Tool, Locator, Thermocouple, ITA   |                                |
| 910 110 102  | Tool, Extraction, TriPaddle and Thermocouple, Receiver and ITA                               |                                |

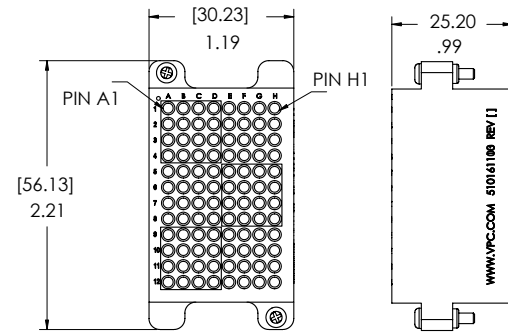
## Thermocouple Module

### Module Specifications

|                             |  |
|-----------------------------|--|
| Material                    | G10 epoxy glass  |
| Temperature                 | Operating • -55° C to 125° C<br>Non-operating • -55° C to 140° C |
| Available Contact Positions | 96   |
| Module Positions Needed     | 1  |



MATING SIDE



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Receiver • **Part # 510 160 110**

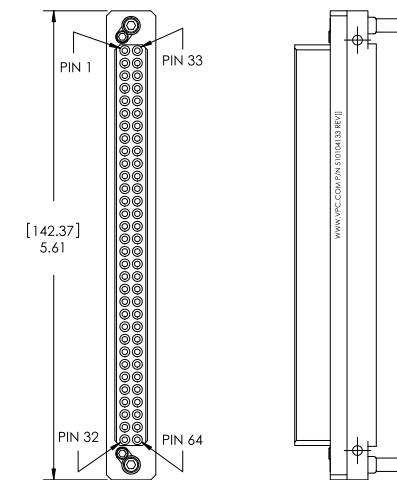
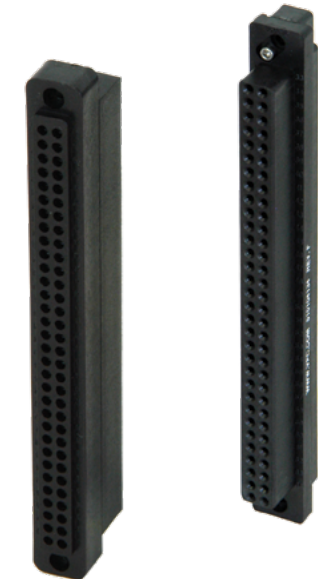
ITA • **Part # 510 161 110**

| Part #      | Description   | Contacts Used |             |
|-------------|---|---------------|-------------|
|             |   | CHROMEL       | ALUMEL      |
| 510 160 110 | ICON RECEIVER THERMOCOUPLE MODULE<br>THERMOCOUPLE MODULE, RECEIVER, ICON, 96 POSITION | 610 113 131   | 610 113 132 |
| 510 161 110 | ICON ITA THERMOCOUPLE MODULE<br>THERMOCOUPLE MODULE, ITA, ICON, 96 POSITION           | 610 113 133   | 610 113 134 |

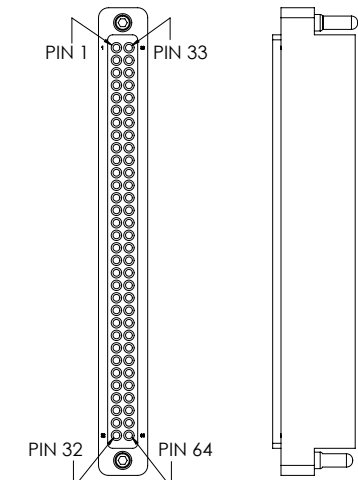
## Thermocouple Module

### Module Specifications

|                             |  |
|-----------------------------|--|
| Material                    | Black PPS  |
| Temperature                 | Operating • -55° C to 125° C<br>Non-operating • -65° C to 220° C |
| Available Contact Positions | 64   |
| Module Positions Needed     | 1  |



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Receiver • **Part # 510 104 133**

ITA • **Part # 510 108 124**

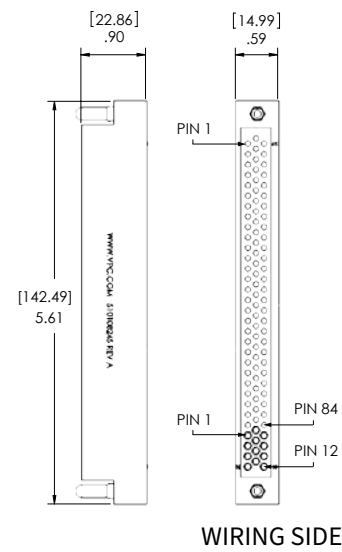
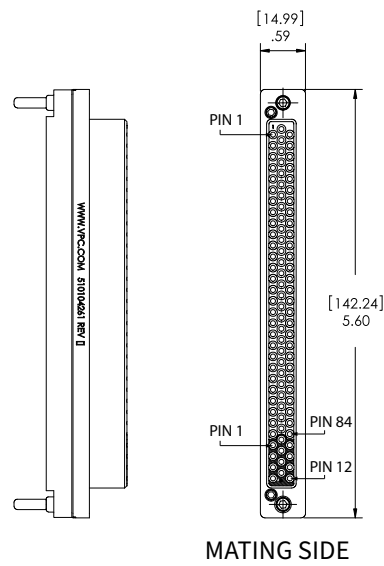
| Part #      | Description  | Contacts Used   |
|-------------|--|-----------------|
| 510 104 133 | THERMOCOUPLE RECEIVER MODULES AND STRAIN RELIEFS<br>Thermocouple Module, Receiver, 64 Position | 610 113 131/132 |
| 510 109 116 | Strain Relief Plate for Select Receiver Modules  |                 |
| 510 108 124 | THERMOCOUPLE ITA MODULES AND STRAIN RELIEFS<br>Thermocouple Module, ITA, 64 Position           | 610 113 133/134 |
| 510 109 296 | Strain Relief Plate for ITA Modules  |                 |

## TriPaddle Thermocouple Module

| Module Specifications                 |  |
|---------------------------------------|--|
| Receiver Material                     | G10 epoxy  |
| Receiver Temperature                  | Operating • -55° C to 125° C<br>Non-operating • -65° C to 140° C |
| ITA Material                          | Black PPS  |
| ITA Temperature                       | Operating • -55° C to 125° C<br>Non-operating • -65° C to 225° C |
| Dielectric Withstanding Voltage (DWV) | 1500 VDC min.  |
| Available Contact Positions           | 84 signal, 12 thermocouple                                       |
| Module Positions Needed               | 1  |



Thermocouple Contacts occupy the bottom 12 positions.

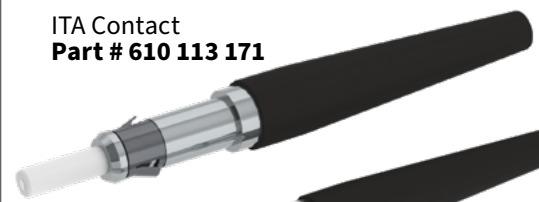


Receiver • **Part # 510 104 261**

ITA • **Part # 510 108 245**

| Part #   | Description  | Contacts Used                                    |                                 |
|--|--|--|---------------------------------|
| <b>TRIPADDLE/THERMOCOUPLE RECEIVER MODULES</b> |  |  |                                 |
| 510 104 261                                    | TriPaddle Signal/Thermocouple Module, Receiver, 84/12 Position | TRIPADDLE<br>610 110 101/<br>128/167/177/<br>179 | THERMOCOUPLE<br>610 113 131/132 |
| 510 109 116                                    | Strain Relief Plate for Select Receiver Modules                |  |                                 |
| <b>TRIPADDLE/THERMOCOUPLE ITA MODULES</b>      |  |  |                                 |
| 510 108 245                                    | TriPaddle Signal/Thermocouple Module, ITA, 84/12 Position      | 610 110 108/<br>113/129/169                      | 610 113 133/134                 |
| 510 109 296                                    | Strain Relief Plate for ITA Modules                            |  |                                 |

## Mini Fiber Optic Patchcords - POF

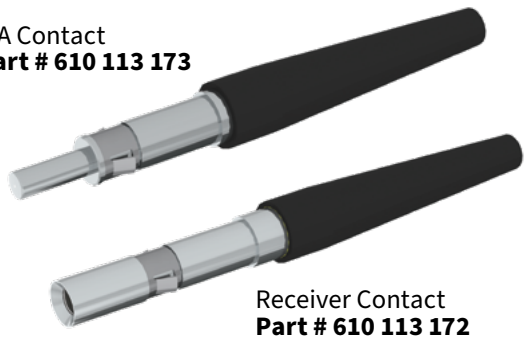
| Contact Specifications      |                           | <br><b>ITA Contact<br/>Part # 610 113 171</b> |
|-----------------------------|---------------------------|--|
| Insertion Loss              | -4.0 dB max. / mated pair |  |
| Mating Force                | 1.5 lbs [.68 kg]          |  |
| Polymer Optical Fiber (POF) | 980/1000 μ"               |  |
| Contact Body Material       | Nickel silver             |  |
| Cycle Life                  | 5,000 cycles              |  |

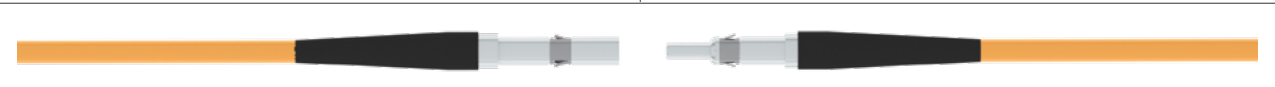


| Fiber POF Receiver Patchcord |  | Fiber POF ITA Patchcord |
|------------------------------|--|-------------------------|
|------------------------------|--|-------------------------|

| Part #   | Description   | Used in Module                                 |
|--|---|--|
| <b>POLYMER OPTICAL FIBER RECEIVER PATCHCORDS</b> |   |  |
| 7-414 845 000-036                                | Fiber Optic Patchcord, Receiver, Mini Fiber Optic, 36", Polymer Optic Fiber, Single Ended         | 510 104 120/150/243/301<br>510 160 102/103/104 |
| 7-414 845 504-036                                | Fiber Optic Patchcord, Receiver, Mini Fiber Optic, 36", Polymer Optic Fiber, to FC with PC Polish | 510 104 120/150/243/301<br>510 160 102/103/104 |
| 7-414 845 510-036                                | Fiber Optic Patchcord, Receiver, Mini Fiber Optic, 36", Polymer Optic Fiber, to SC with PC Polish | 510 104 120/150/243/301<br>510 160 102/103/104 |
| <b>POLYMER OPTICAL FIBER ITA PATCHCORDS</b>      |   |  |
| 7-413 845 000-036                                | Fiber Optic Patchcord, ITA, Mini Fiber Optic, 36", Polymer Optic Fiber, Single Ended              | 510 108 111/132/210/276<br>510 161 102/103/104 |
| 7-413 845 504-036                                | Fiber Optic Patchcord, ITA, Mini Fiber Optic, 36", Polymer Optic Fiber, to FC with PC Polish      | 510 108 111/132/210/276<br>510 161 102/103/104 |
| 7-413 845 510-036                                | Fiber Optic Patchcord, ITA, Mini Fiber Optic, 36", Polymer Optic Fiber, to SC with PC Finish      | 510 108 111/132/210/276<br>510 161 102/103/104 |
| <b>FIBER OPTIC ACCESSORIES</b>                   |   |  |
| 910 112 125                                      | Tool, Extraction, Mini Fiber Optic, Receiver and ITA  |  |

## Mini Fiber Optic Patchcords - Multimode


| Contact Specifications |                           |  <p>ITA Contact<br/>Part # 610 113 173</p> <p>Receiver Contact<br/>Part # 610 113 172</p> |
|------------------------|---------------------------|---|
| Insertion Loss         | -1.5 dB max / mated pair  |   |
| Mating Force           | 2.8 lbs [1.3 kg]          |   |
| Glass Fiber            | Multimode 62.5/125        |   |
| Contact Body Material  | Ceramic and nickel silver |   |
| Cycle Life             | 5,000 cycles              |   |

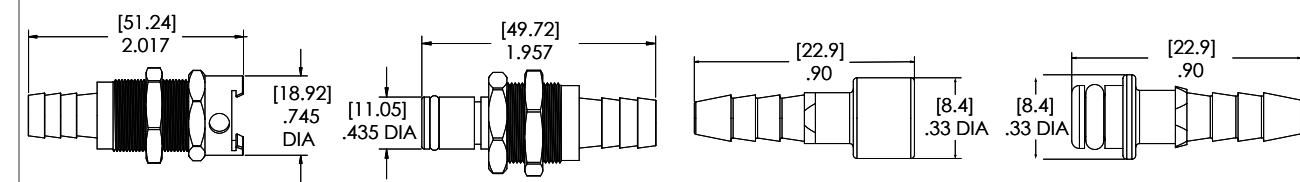


| Fiber Mini Multimode Receiver Patchcord |  | Fiber Mini Multimode ITA Patchcord |
|---|--|------------------------------------|
|---|--|------------------------------------|

| Part #  | Description   | Used in Module                                 |
|---|---|--|
| <b>MINI MULTIMODE FIBER RECEIVER PATCHCORDS</b> |   |  |
| 7-416 804 000-036                               | Fiber Optic Patchcord, Receiver, Mini Fiber Optic, 36", Multimode Glass Fiber, Single Ended             | 510 104 120/150/243/301<br>510 160 102/103/104 |
| 7-416 804 503-036                               | Fiber Optic Patchcord, Receiver, Mini Fiber Optic, 36", Multimode Glass Fiber, to FC with SPC Polish    | 510 104 120/150/243/301<br>510 160 102/103/104 |
| 7-416 804 506-036                               | Fiber Optic Patchcord, Receiver, Mini Fiber Optic, 36", Multimode Glass Fiber, to ST with SPC Polish    | 510 104 120/150/243/301<br>510 160 102/103/104 |
| 7-416 804 509-036                               | Fiber Optic Patchcord, Receiver, Mini Fiber Optic, 36", Multimode Glass Fiber, to SC with SPC Polish    | 510 104 120/150/243/301<br>510 160 102/103/104 |
| 7-416 804 512-036                               | Fiber Optic Patchcord, Receiver, Mini Fiber Optic, 36", Multimode Glass Fiber, to LC with SPC Polish    | 510 104 120/150/243/301<br>510 160 102/103/104 |
| 7-416 804 663-036                               | Fiber Optic Patchcord, Receiver, Mini Fiber Optic, 36", Multimode Glass Fiber, to SMA-F with SPC Polish | 510 104 120/150/243/301<br>510 160 102/103/104 |
| <b>MINI MULTIMODE FIBER ITA PATCHCORDS</b>      |   |  |
| 7-415 804 000-036                               | Fiber Optic Patchcord, ITA, Mini Fiber Optic, 36", Multimode Glass Fiber, Single Ended                  | 510 108 111/132/210/276<br>510 161 102/103/104 |
| 7-415 804 503-036                               | Fiber Optic Patchcord, ITA, Mini Fiber Optic, 36", Multimode Glass Fiber, to FC with SPC Polish         | 510 108 111/132/210/276<br>510 161 102/103/104 |
| 7-415 804 506-036                               | Fiber Optic Patchcord, ITA, Mini Fiber Optic, 36", Multimode Glass Fiber, to ST with SPC Polish         | 510 108 111/132/210/276<br>510 161 102/103/104 |
| 7-415 804 509-036                               | Fiber Optic Patchcord, ITA, Mini Fiber Optic, 36", Multimode Glass Fiber, to SC with SPC Polish         | 510 108 111/132/210/276<br>510 161 102/103/104 |
| 7-415 804 512-036                               | Fiber Optic Patchcord, ITA, Mini Fiber Optic, 36", Multimode Glass Fiber, to LC with SPC Polish         | 510 108 111/132/210/276<br>510 161 102/103/104 |
| 7-415 804 663-036                               | Fiber Optic Patchcord, ITA, Mini Fiber Optic, 36", Multimode Glass Fiber, to SMA-F with SPC Polish      | 510 108 111/132/210/276<br>510 161 102/103/104 |
| <b>FIBER OPTIC ACCESSORIES</b>                  |   |  |
| 910 112 125                                     | Tool, Extraction, Mini Fiber Optic, Receiver and ITA  |  |
| 910 121 192                                     | Tool, Fiber Optic Cleaning Pen, Multimode Glass Fiber, Receiver/ITA                                     |  |

## Pneumatic Contacts

| Contact Specifications • 1/4" Flow [6.4 mm] |                                |  |
|---|--------------------------------|---|
| Pressure/Vacuum Rated                       | 250 psi (17.3 Bar)             |   |
| Temperature                                 | -40°F to 180°F (-40°C to 82°C) |   |
| Contact Body Material                       | Chrome-plated brass            |   |
| Mating Force                                | 9.4 lbs typical [4.26 kg]      |   |
| Cycle Life                                  | 20,000 cycles                  |   |
| Contact Specifications • 1/8" Flow [3.2 mm] |                                |   |
| Pressure/Vacuum Rated                       | 100 psi (6.9 Bar)              |   |
| Temperature                                 | -40°F to 180°F (-40°C to 82°C) |   |
| Contact Body Material                       | Delrin®                        |   |
| Mating Force                                | 1.5 lbs typical [.68 kg]       |   |
| Cycle Life                                  | 20,000 cycles                  |   |



| Part # 610 131 104 | Part # 610 132 104 | Part # 610 132 105<br>Part # 610 131 107 | Part # 610 131 106 |
|--------------------|--------------------|--|--------------------|
|--------------------|--------------------|--|--------------------|

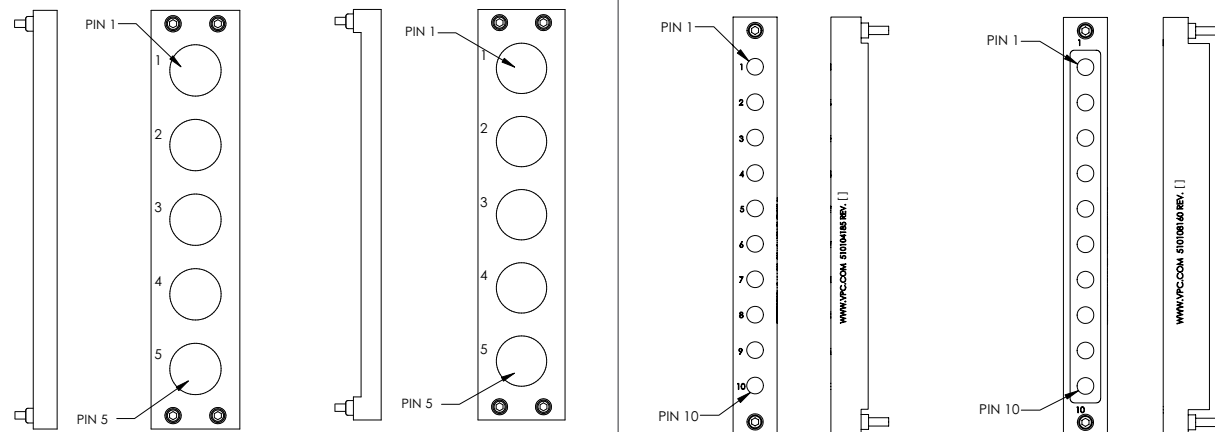
| Part #                              | Description   | Used in Module             |
|-------------------------------------|---|----------------------------|
| <b>PNEUMATIC RECEIVER CONTACTS</b>  |   |                            |
| 610 131 101                         | Pneumatic Contact, Receiver, Ferruleless Fitting, for 3/8" OD, .250" ID [9.5 x 6 mm] Tubing | 510 104 160/276            |
| 610 131 104                         | Pneumatic Contact, Receiver, Hose Barb, for 3/8" ID [9.5 mm] Tubing                         | 510 104 160/276            |
| 610 131 106                         | Pneumatic Contact, Receiver, Hose Barb, for 1/8" ID [3.2 mm] Tubing                         | 510 104 185                |
| <b>PNEUMATIC ITA CONTACTS</b>       |   |                            |
| 610 132 101                         | Pneumatic Contact, ITA, Ferruleless Fitting, for 3/8" OD, .250" ID [9.5 x 6 mm] Tubing      | 510 108 144/264            |
| 610 132 104                         | Pneumatic Contact, ITA, Hose Barb, for 3/8" ID [9.5 mm] Tubing                              | 510 108 144/264            |
| 610 132 105                         | Pneumatic Contact, ITA, Hose Barb, for 1/8" ID [3.2 mm] Tubing                              | 510 108 160                |
| <b>PNEUMATIC CONTACT WITH VALVE</b> |   |                            |
| 610 131 107*                        | Pneumatic Contact (with valve), Hose Barb, for 1/8" ID [4 mm] Tubing                        | 510 104 185<br>510 108 160 |

\* This contact mates with contact Part # 610 131 106. It can be used in either the ITA or receiver module, however the mating module must be the opposite.

## Pneumatic Modules

### Module Specifications

|                             |  |
|-----------------------------|--|
| Material                    | G10 epoxy glass  |
| Temperature                 | Operating • -55° C to 125° C<br>Non-operating • -65° C to 140° C |
| Available Contact Positions | 5 (3/8" ID)<br>10 (1/8" ID)                                      |
| Module Positions Needed     | 2 (3/8" ID), 1 (1/8" ID)   |

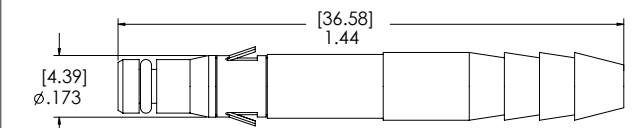
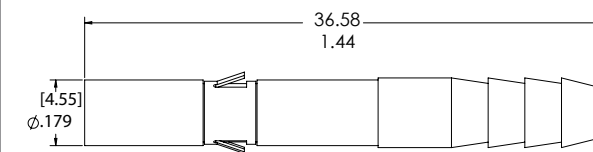
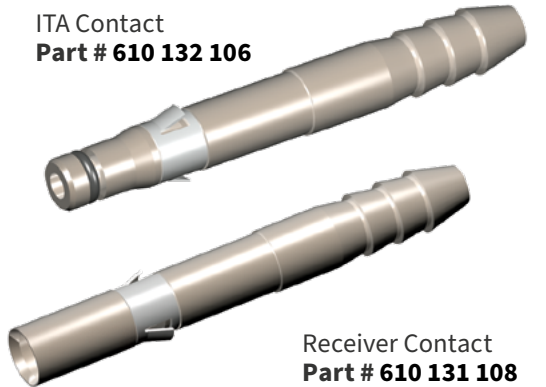


| Part #                                 | Description   | Contacts Used                             |
|--|---|---|
| <b>Receiver<br/>Part # 510 104 160</b> | <b>ITA<br/>Part # 510 108 144</b>                   | <b>Receiver<br/>Part # 510 104 185</b>    |
| <b>ITA<br/>Part # 510 108 160</b>      |   |   |
| <b>PNEUMATIC RECEIVER MODULES</b>      |   |   |
| 510 104 160                            | Pneumatic Module, Receiver, 5 Position (3/8" Flow)  | 610 131 101/104                           |
| 510 104 185                            | Pneumatic Module, Receiver, 10 Position (1/8" Flow) | 610 131 106/107                           |
| <b>PNEUMATIC ITA MODULES</b>           |   |   |
| 510 108 144                            | Pneumatic Module, ITA, 5 Position (3/8" Flow)       | 610 132 101/104                           |
| 510 108 160                            | Pneumatic Module, ITA, 10 Position (1/8" Flow)      | 610 132 105<br>610 131 106<br>610 131 107 |

## Mini Pneumatic Contacts

### Contact Specifications • .075" Flow [1.9 mm]

|                       |                     |
|-----------------------|---------------------|
| Pressure/Vacuum Rated | 100 psi (6.9 bar)   |
| Contact Body Material | Nickel plated brass |
| Cycle Life            | 20,000 cycles       |



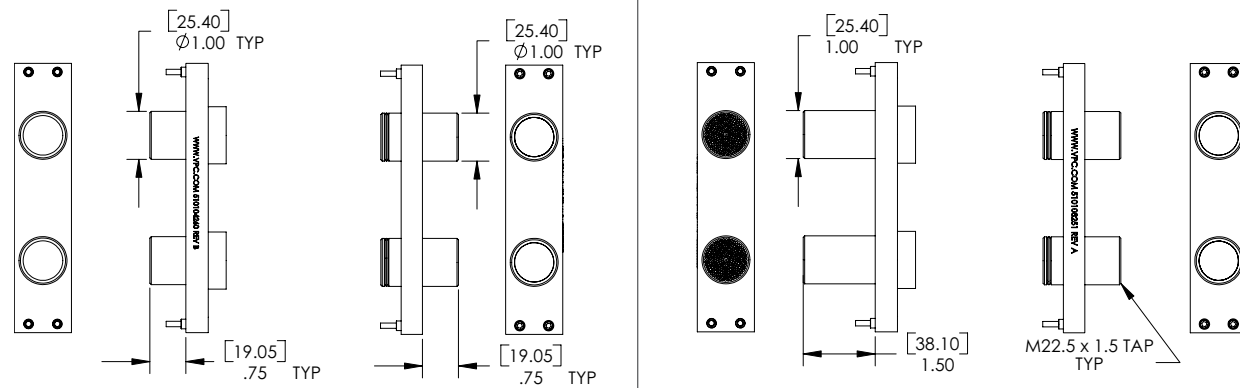
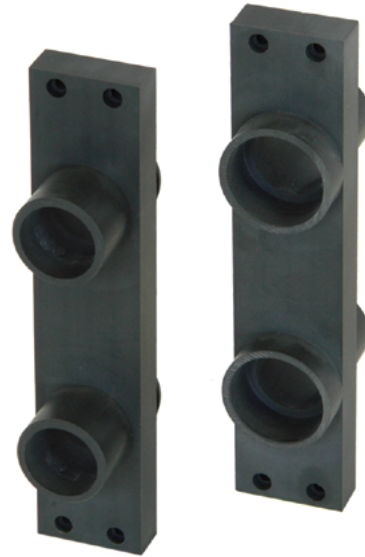
Receiver • Part # 610 131 108      ITA • Part # 610 132 106

| Part #                                 | Description   | Used in Module   |
|--|---|--|
| <b>MINI PNEUMATIC RECEIVER CONTACT</b> |   |  |
| 610 131 108                            | Mini Pneumatic Contact, Receiver, Hose Barb for 0.125" [3.2mm] ID Tubing, Fits Mini Coaxial or Mini Power Modules | 510 104 123<br>510 104 206<br>510 104 120<br>510 104 150<br>510 104 243<br>510 160 102/103/104 |
| <b>MINI PNEUMATIC ITA CONTACT</b>      |   |  |
| 610 132 106                            | Mini Pneumatic Contact, ITA, Hose Barb for 0.125" [3.2mm] ID Tubing, Fits Mini Coaxial or Mini Power Modules      | 510 108 115<br>510 108 178<br>510 108 111<br>510 108 132<br>510 108 210<br>510 161 102/103/104 |
| <b>EXTRACTION TOOL</b>                 |   |  |
| 910 112 104                            | Tool, Extraction, Mini Power/Mini Coaxial Contacts, Receiver and ITA  |  |

## Vacuum Module

### Module Specifications

|                            |                         |
|----------------------------|-------------------------|
| Material                   | Black anodized aluminum |
| Temperature                | -65° C to 200° C        |
| Available Vacuum Positions | 2                       |
| Module Positions Needed    | 2                       |



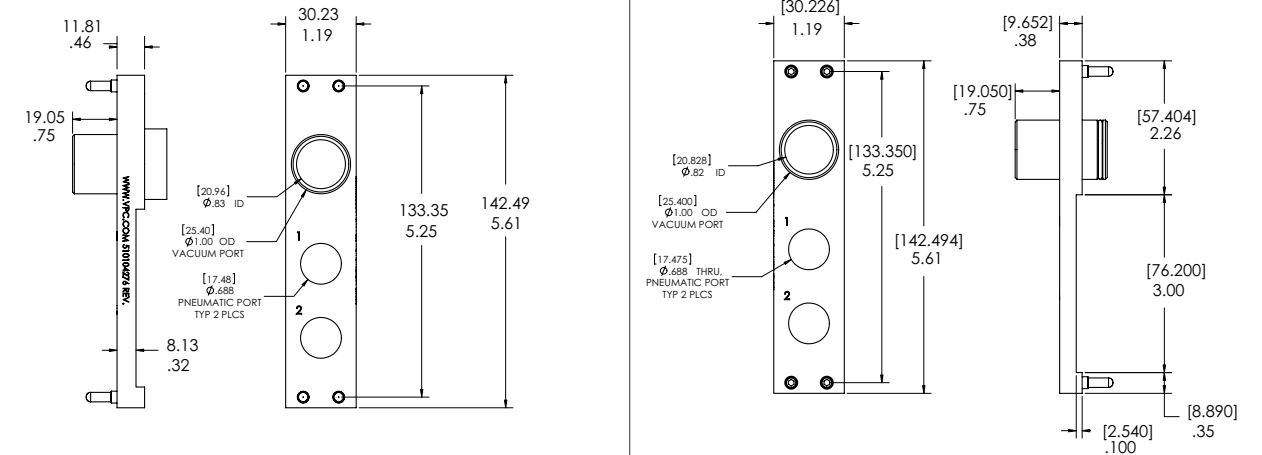
|                                       |                                  |                                       |                                  |
|---------------------------------------|----------------------------------|---------------------------------------|----------------------------------|
| Receiver<br><b>Part # 510 104 260</b> | ITA<br><b>Part # 510 108 242</b> | Receiver<br><b>Part # 510 104 266</b> | ITA<br><b>Part # 510 108 251</b> |
|---------------------------------------|----------------------------------|---------------------------------------|----------------------------------|

| Part #                         | Description   |
|--------------------------------|---|
| <b>VACUUM RECEIVER MODULES</b> |   |
| 510 104 260                    | Vacuum Module, Receiver, 2 Port Positions                 |
| 510 104 266                    | Vacuum Module, Receiver, 2 Port Positions with Filter     |
| <b>VACUUM ITA MODULES</b>      |   |
| 510 108 242                    | Vacuum Module, ITA, 2 Port Positions                      |
| 510 108 251                    | Vacuum Module, ITA, 2 Port Positions with M22.5 x 1.5 Tap |

## Vacuum-Pneumatic Module

### Module Specifications

|                               |                         |
|-------------------------------|-------------------------|
| Material                      | Black anodized aluminum |
| Temperature                   | -65° C to 200° C        |
| Available Vacuum Positions    | 1                       |
| Available Pneumatic Positions | 2                       |
| Module Positions Needed       | 2                       |



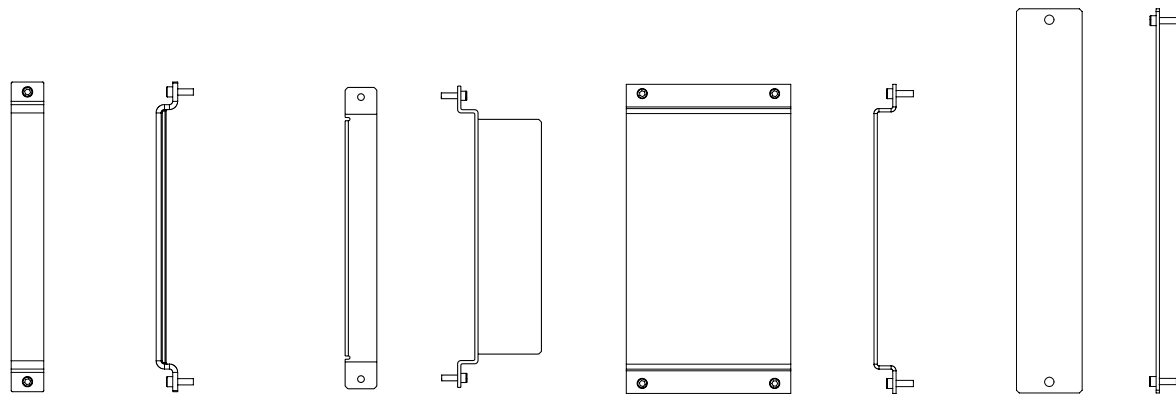
|                                      |  |                                 |
|--------------------------------------|--|---------------------------------|
| <b>Receiver • Part # 510 104 276</b> |  | <b>ITA • Part # 510 108 264</b> |
|--------------------------------------|--|---------------------------------|

| Part #      | Description  | Contacts Used   |
|-------------|--|-----------------|
| 510 104 276 | <b>VACUUM-PNEUMATIC RECEIVER MODULE</b><br>Vacuum-Pneumatic Module, Receiver, 1-2 Position | 610 131 101/104 |
| 510 108 264 | <b>VACUUM-PNEUMATIC ITA MODULE</b><br>Vacuum-Pneumatic Module, ITA, 1-2 Position           | 610 132 101/104 |

## Blank Modules

### Module Specifications

|             |  |
|-------------|--|
| Material    | Black-PEI (Part # 510 104 118)<br>Black anodized aluminum  |
| Temperature | Black-PEI: operating • -65° C to 125° C<br>Black anodized aluminum: operating • -55° C to 125° C |



|                           |                           |                           |                           |
|---------------------------|---------------------------|---------------------------|---------------------------|
| <b>Part # 510 104 118</b> | <b>Part # 510 104 129</b> | <b>Part # 510 104 144</b> | <b>Part # 510 104 178</b> |
|---------------------------|---------------------------|---------------------------|---------------------------|

| Part # | Description |
|--------|-------------|
|--------|-------------|

#### BLANK RECEIVER/ITA MODULES

|             |   |
|-------------|---|
| 510 104 118 | Blank Module, Receiver/ITA, 1 Module Position           |
| 510 104 129 | Blank Shielding Module, Receiver/ITA, 1 Module Position |
| 510 104 144 | Blank Module, Receiver/ITA, 5 Module Positions          |
| 510 104 178 | Blank Module, VXI Receiver, 2 Module Positions*         |

\* Part # 510 104 178 does not require VXI module retainer blocks to mount to the inner frame of the VXI receiver.

## Cable Management

VPC solutions are designed to accommodate an array of ATE chassis sizes/configurations, including PXI, SCXI, GPIB, LXI, PCI, VXI and AXIe applications. These solutions are available in various wired configurations, including direct panel mount, slide mount, and Vertical Hinged Mounting Frame. Regardless of the type of configuration you choose, cable routing and strain relief are important considerations to make in managing your cabling.



### Strain Relief

With any configuration type, strain relief is critical in developing a reliable and consistent tester. VPC offers several strain relief options.

**Module Strain Relief:** The most common method is to attach strain relief plates directly to the modules (Figure 1). Wire or cable bundles are secured to the plate with wire ties, preventing forces exerted on the cables from transferring directly to the contact termination which can cause damage and loss of signal integrity.



Figure 1 Module Strain Relief

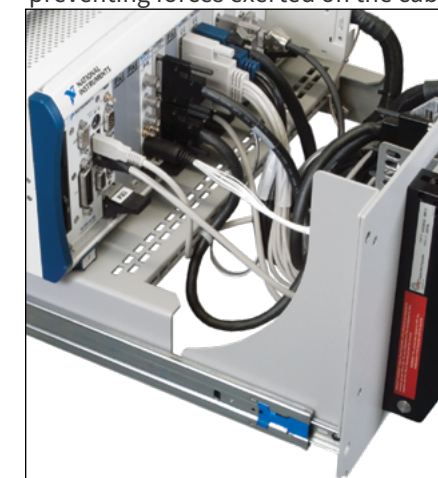


Figure 2 Cable Tie Down Bar on Instrument Bracket

**Cable Tie Down Bar:** A second method is to use cable tie-down bars on the receiver side. These bars are included with the Vertical Hinged Mounting Frames and are designed into the instrument bracket or cable tray kits used with slide mount receivers (Figure 2).

When slide mounting your receiver, cables connecting to the receiver should be secured to the strain relief on the instrument bracket. This prevents the cables from being damaged when the slides are extended. Cables routed to instrumentation not placed on the instrument bracket should be secured to the strain relief on the instrument bracket.



## Cable Management

### Measuring and Routing Cable

#### Direct Panel Mount

Direct panel mount systems enable the instrument chassis to be placed directly behind the VPC receiver. When using the direct panel mount method, keep a space of 8-10" from the front of the chassis to prevent tight bends in the cable. To determine the proper cable length required, measure the distance from the front face of the instrument to the module location in the receiver, allowing for bends in the cable for proper cable routing.

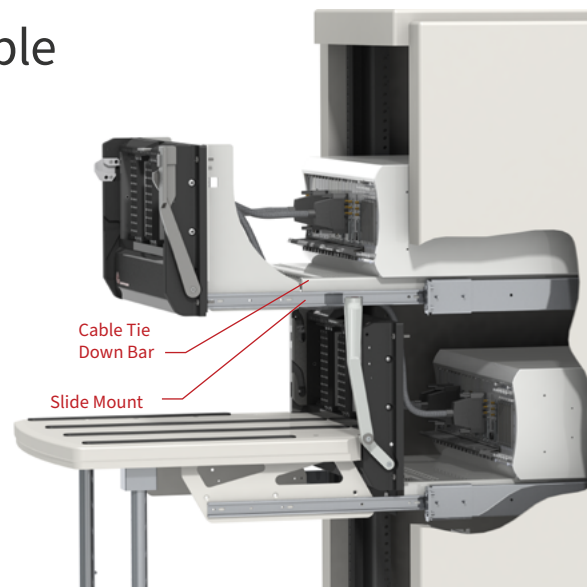


Figure 3 Slide Mount Configuration Routing.

#### Slide Mount

Slide mount configurations, popular for use with PXI-based testers, offer short cable lengths, easy access to instrumentation, and the ability to connect to secondary instrumentation. In addition, the cabling remains static and electrically consistent when accessing instrumentation.

When slide mounting your receiver, consider whether or not the instrument chassis will be placed on an instrument bracket. The recommended cable length is 20" when the instrument bracket is used with a slide mounted receiver. This length can change if the instrument is being wired to a receiver module on the opposite side of the tester (Figure 3).

The cables used to connect the instrumentation located somewhere other than the instrument bracket to the receiver must be long enough to allow the slides to extend fully without putting

tension on the cables (Figure 3). To determine the appropriate cable length, measure the vertical distance from the receiver to the instrument, then measure the distance from the front of the rack to the receiver with the slides fully extended, taking any bends and special routing into consideration.

#### Vertical Hinged Mounting Frame

Vertical Hinged Mounting Frames (VHMF) enable the instrument chassis to be placed directly behind the VHMF. When using a VHMF, keep a space of 8-10" from the front of the chassis to prevent tight bends in the cables when the VHMF is closed. To determine the proper cable length required, measure the distance from the front face of the instrument to the module location in the receiver with the VHMF in the "open" position (Figure 4), allowing for bends in the cable for proper cable routing and allowing extra length in the cable to prevent tight bends when the VHMF is closed.

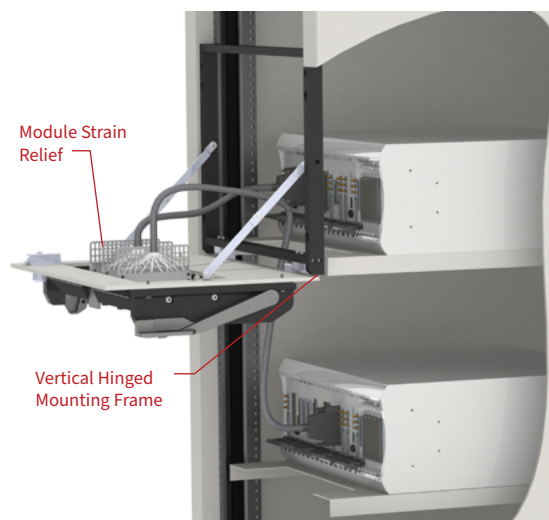
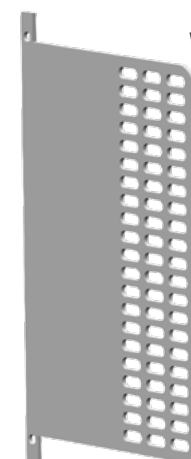


Figure 4 Vertical Hinged Mounting Frame Configuration.



Works with receiver modules:  
 510 104 102  
 510 104 120  
 510 104 123  
 510 104 133  
 510 104 134  
 510 104 136  
 510 104 149  
 510 104 206  
 510 104 243  
 510 104 261  
 510 104 306

Strain Relief Plate for Select Receiver Modules  
**Part # 510 109 116**



Designed to support the Racal "Adapt-a-Switch" and the VTI Instruments SMIP II instrumentation cards

Strain Relief Plate for 160 Pin DIN VXI Connectors  
**Part # 510 109 338**

Works with QuadraPaddle receiver modules:  
 510 150 130  
 510 150 115

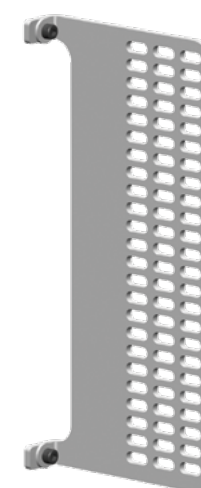


Strain Relief Plate for QuadraPaddle 192 Position Receiver Modules • **Part # 510 109 349**

Works with QuadraPaddle receiver modules:  
 510 150 131  
 510 150 116

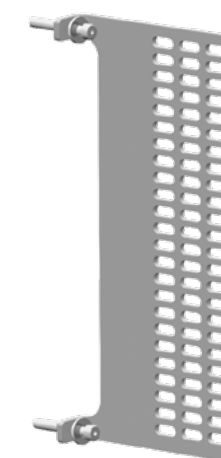


Strain Relief Plate for QuadraPaddle 480 Position Receiver Modules • **Part # 510 109 348**



Works with all receiver modules

Strain Relief Plate for Receiver Modules  
**Part # 510 109 298**



Works with all ITA modules

NOTE: Plate is not needed for ITAs with cable clamps

Strain Relief Plate for ITA Modules  
**Part # 510 109 296**

### Cross Reference for Receivers with Platforms Accessories

|  | S6 RECEIVER<br>310 122 100 | 15" S6 RECEIVER<br>310 122 101 | 20" S6 RECEIVER<br>310 122 108 | 15" G12 RECEIVER<br>310 104 325 | 20" G12 RECEIVER<br>310 104 334 | 15" G12X RECEIVER<br>310 104 386 | 20" G12X RECEIVER<br>310 104 385 | G20 RECEIVER<br>310 120 188(193) | G20X RECEIVER<br>310 120 186(183) | 20" 9025TR<br>310 104 435 | 20" 9050TR<br>310 104 369 |
|--|----------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------------------|---------------------------|---------------------------|
| ACCESSORIES  |                            |                                |                                |                                 |                                 |                                  |                                  |                                  |                                   |                           |                           |
| CABLE TRAY - 310 113 424                                     |                            | X                              | X                              | X                               | X                               | X                                | X                                |                                  |                                   | X                         |                           |
| KEYBOARD TRAY KIT<br>310 113 439                             |                            | X                              | X                              | X                               | X                               | X                                | X                                |                                  |                                   | X                         | X                         |
| ADJUSTABLE LEG KIT<br>310 113 566                            |                            |                                | X                              |                                 | X                               |                                  | X                                |                                  |                                   | X                         | X                         |
| INSTRUMENT BRACKET KIT WITH STRAIN RELIEF<br>* - 310 113 453 |                            | X                              | X                              | X                               | X                               | X                                | X                                |                                  |                                   | X                         |                           |
| RACK EXTENDER KIT, S6<br>310 113 430                         | X                          | X                              | X                              |                                 |                                 |                                  |                                  |                                  |                                   |                           |                           |
| RACK EXTENDER KIT, G12<br>310 113 406                        |                            |                                |                                | X                               | X                               |                                  |                                  |                                  |                                   |                           |                           |
| RACK EXTENDER KIT, G12X<br>310 113 519                       |                            |                                |                                |                                 |                                 | X                                | X                                |                                  |                                   |                           |                           |
| GAP COVER ** - 310 113 433                                   |                            |                                |                                | X                               | X                               | X                                | X                                |                                  |                                   |                           |                           |
| 15" PLATFORM KIT - 310 113 435                               | X                          |                                |                                |                                 |                                 |                                  |                                  |                                  |                                   |                           |                           |
| 20" PLATFORM KIT - 310 113 525                               | X                          |                                |                                |                                 |                                 |                                  |                                  |                                  |                                   |                           |                           |
| RACK EXTENDER KIT, 9025TR<br>310 113 494                     |                            |                                |                                |                                 |                                 |                                  |                                  |                                  |                                   | X                         |                           |
| 24" SLIDE KIT - 310 113 410                                  |                            | X                              | X                              | X                               | X                               | X                                | X                                | X                                | X                                 |                           |                           |
| 28" SLIDE KIT - 310 113 451                                  |                            | X                              | X                              | X                               | X                               | X                                | X                                | X                                | X                                 | X                         | X                         |
| 30" SLIDE KIT - 310 113 411                                  |                            | X                              | X                              | X                               | X                               | X                                | X                                | X                                | X                                 | X                         | X                         |
| 36" SLIDE KIT - 310 113 500                                  |                            | X                              | X                              | X                               | X                               | X                                | X                                | X                                | X                                 | X                         | X                         |
| ADAPTER PLATE FOR ICON MODULES - 310 113 606                 |                            |                                |                                |                                 |                                 |                                  |                                  |                                  | X                                 |                           |                           |
| MOUNTING FLANGE KIT,<br>NI PXI-1045 - 310 113 622            |                            |                                |                                |                                 |                                 |                                  |                                  | X                                | X                                 |                           |                           |
| MOUNTING FLANGE KIT, PICKERING<br>40-923 - 310 113 644       |                            |                                |                                |                                 |                                 |                                  |                                  | X                                | X                                 |                           |                           |
| MOUNTING FLANGE KIT, KEYSIGHT M9018A - 310<br>113 622        |                            |                                |                                |                                 |                                 |                                  |                                  | X                                | X                                 |                           |                           |

NOTES:  
 \* The instrument bracket kit is incompatible with the cable tray.  
 \*\*The gap cover is incompatible when using a rack extender kit.

### Cross Reference for Module Screw Sizes

| Module Part # | SOCKETHEAD<br>4-40 X .56 SST | SOCKETHEAD<br>4-40 X .625 SST | SOCKETHEAD<br>4-40 X .750 SST | SOCKETHEAD CAP-<br>TIVE 4-40 X .562 SS | FLATHEAD<br>2-56 X .5 SST |
|---------------|------------------------------|-------------------------------|-------------------------------|--|---------------------------|
| 510 104 109   |                              | X                             |                               |  |                           |
| 510 104 118   |                              |                               |                               |  |                           |
| 510 104 120   |                              |                               |                               |  |                           |
| 510 104 123   |                              |                               |                               |  |                           |
| 510 104 128   |                              | X                             |                               |  | X                         |
| 510 104 133   |                              | X                             |                               |  |                           |
| 510 104 134   |                              | X                             |                               |  |                           |
| 510 104 135   |                              | X                             |                               |  |                           |
| 510 104 136   |                              | X                             |                               |  |                           |
| 510 104 139   |                              | X                             |                               |  |                           |
| 510 104 149   |                              | X                             |                               |  |                           |
| 510 104 150   | X                            |                               |                               |  |                           |
| 510 104 155   | X                            |                               |                               |  |                           |
| 510 104 160   | X                            |                               |                               |  |                           |
| 510 104 185   |                              | X                             |                               |  |                           |
| 510 104 187   |                              | X                             |                               |  |                           |
| 510 104 206   |                              | X                             |                               |  |                           |
| 510 104 224   |                              | X                             |                               |  |                           |
| 510 104 243   |                              | X                             |                               |  |                           |
| 510 104 249   |                              |                               | X                             |  |                           |
| 510 104 251   |                              |                               | X                             |  |                           |
| 510 104 260   |                              |                               | X                             |  |                           |
| 510 104 261   |                              | X                             |                               |  |                           |
| 510 104 266   |                              |                               | X                             |  |                           |
| 510 104 267   | X                            |                               |                               |  |                           |
| 510 104 270   | X                            |                               |                               |  |                           |
| 510 104 307   |                              |                               |                               | X                                      |                           |
| 510 108 101   | X                            |                               |                               |  |                           |
| 510 108 111   | X                            |                               |                               |  |                           |
| 510 108 112   | X                            |                               |                               |  |                           |
| 510 108 115   | X                            |                               |                               |  |                           |
| 510 108 124   | X                            |                               |                               |  |                           |
| 510 108 125   | X                            |                               |                               |  |                           |
| 510 108 126   | X                            |                               |                               |  |                           |
| 510 108 131   | X                            |                               |                               |  |                           |
| 510 108 132   | X                            |                               |                               |  |                           |

### Cross Reference for Module Screw Sizes, cont.

| Module Part # | SOCKETHEAD<br>4-40 X .56 SST | SOCKETHEAD<br>4-40 X .625 SST | SOCKETHEAD<br>4-40 X .750 SST | SOCKETHEAD CAP-<br>TIVE 4-40 X .562 SST | FLATHEAD<br>2-56 X .5 SST |
|---------------|------------------------------|-------------------------------|-------------------------------|---|---------------------------|
| 510 108 138   | X                            |                               |                               |   |                           |
| 510 108 140   | X                            |                               |                               |   |                           |
| 510 108 144   |                              | X                             |                               |   |                           |
| 510 108 148   | X                            |                               |                               |   |                           |
| 510 108 160   |                              | X                             |                               |   |                           |
| 510 108 169   |                              | X                             |                               |   |                           |
| 510 108 178   | X                            |                               |                               |   |                           |
| 510 108 179   |                              | X                             |                               |   |                           |
| 510 108 210   | X                            |                               |                               |   |                           |
| 510 108 242   |                              |                               | X                             |   |                           |
| 510 108 245   | X                            |                               |                               |   |                           |
| 510 108 251   |                              |                               | X                             |   |                           |
| 510 108 262   | X                            |                               | X                             |   |                           |
| 510 108 263   | X                            |                               |                               |   |                           |
| 510 108 264   |                              | X                             |                               |   |                           |
| 510 108 281   |                              |                               |                               | X                                       |                           |
| 510 150 115   |                              |                               | X                             |   |                           |
| 510 150 116   |                              |                               | X                             |   |                           |
| 510 150 130   |                              |                               | X                             |   |                           |
| 510 150 131   |                              |                               | X                             |   |                           |
| 510 150 135   |                              |                               | X                             |   |                           |
| 510 150 136   |                              |                               | X                             |   |                           |
| 510 150 137   |                              |                               | X                             |   |                           |
| 510 150 147   |                              |                               | X                             |   |                           |
| 510 151 105   |                              |                               | X                             |   |                           |
| 510 151 106   |                              | X                             |                               |   |                           |
| 510 151 107   |                              | X                             |                               |   |                           |
| 510 151 108   |                              | X                             |                               |   |                           |
| 510 151 121   |                              |                               |                               |   | X                         |
| 510 151 124   |                              | X                             |                               |   |                           |
| 510 170 101   |                              |                               |                               | X                                       |                           |
| 510 171 101   |                              |                               |                               | X                                       |                           |



### Cross Reference for iCon Receiver Contacts and Receiver Modules

| RECEIVER CONTACTS | RECEIVER MODULES |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
|-------------------|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                   | 510 160 101      | 510 160 102 | 510 160 103 | 510 160 104 | 510 160 105 | 510 160 106 | 510 160 107 | 510 160 108 | 510 160 109 | 510 160 110 | 510 160 111 | 510 160 112 | 510 160 113 | 510 160 114 | 510 160 115 | 510 160 122 | 510 160 124 |
| 610 102 119       |                  |             |             |             |             |             |             |             |             |             |             |             |             | X           | X           |             |             |
| 610 102 133       |                  |             |             |             |             |             |             |             |             |             |             |             |             | X           | X           |             |             |
| 610 104 114       |                  | X           | X           | X           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 610 104 140       |                  | X           | X           | X           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 610 104 141       |                  | X           | X           | X           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 610 104 142       |                  | X           | X           | X           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 610 104 149       |                  | X           | X           | X           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 610 110 101       |                  |             | X           |             |             |             |             | X           | X           |             | X           |             |             |             | X           |             | X           |
| 610 110 128       |                  |             | X           |             |             |             |             | X           | X           |             | X           |             |             |             | X           |             | X           |
| 610 110 167       |                  |             | X           |             |             |             |             | X           | X           |             | X           |             |             |             | X           |             | X           |
| 610 110 177       |                  |             | X           |             |             |             |             | X           | X           |             | X           |             |             |             | X           |             | X           |
| 610 110 179       |                  |             | X           |             |             |             |             | X           | X           |             | X           |             |             |             | X           |             | X           |
| 610 113 131       |                  |             |             |             |             |             |             |             |             | X           |             |             |             |             |             |             |             |
| 610 113 132       |                  |             |             |             |             |             |             |             |             | X           |             |             |             |             |             |             |             |
| 610 113 144       |                  |             |             |             |             |             |             |             | X           |             |             |             |             |             |             |             |             |
| 610 113 170       |                  | X           | X           | X           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 610 113 172       |                  | X           | X           | X           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 610 116 112       |                  | X           | X           | X           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 610 131 108       |                  | X           | X           | X           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 610 138 117*      |                  |             |             |             | X           |             |             |             |             |             |             | X           | X           |             |             |             | X           |
| 610 138 118*      |                  |             |             |             | X           |             |             |             |             |             |             | X           |             |             |             |             |             |
| 610 138 200       |                  |             |             |             | X           |             |             |             |             |             |             | X           | X           |             |             |             | X           |
| 610 138 216       | X                | X           |             |             |             |             |             | X           |             |             |             |             |             |             |             |             |             |
| 610 140 101       |                  |             |             |             |             | X           | X           |             |             |             | X           | X           | X           |             |             |             |             |
| 610 140 102       |                  |             |             |             |             | X           | X           |             |             |             | X           | X           | X           |             |             |             |             |
| 610 140 103       |                  |             |             |             |             | X           | X           |             |             |             | X           | X           | X           |             |             |             |             |
| 610 140 104       |                  |             |             |             |             | X           | X           |             |             |             | X           | X           | X           |             |             |             |             |
| 610 142 101       |                  |             |             |             |             | X           | X           |             |             |             | X           | X           | X           |             |             |             |             |
| 610 142 102       |                  |             |             |             |             | X           | X           |             |             |             | X           | X           | X           |             |             |             |             |
| 610 149 101       |                  |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             | X           |

\* Must be used with 610 138 200

### Cross Reference for iCon ITA Contacts and ITA Modules

| ITA CONTACTS | ITA MODULES |             |             |             |             |             |             |             |             |             |             |             |             |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|              | 510 161 101 | 510 161 102 | 510 161 103 | 510 161 104 | 510 161 106 | 510 161 107 | 510 161 108 | 510 161 109 | 510 161 110 | 510 161 111 | 510 161 114 | 510 161 115 | 510 161 124 |
| 610 102 118  |             |             |             |             |             |             |             |             |             |             |             | X           | X           |
| 610 102 132  |             |             |             |             |             |             |             |             |             |             |             | X           | X           |
| 610 103 115  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 103 129  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 103 130  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 103 136  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 103 140  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 103 150  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 103 152  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 103 161  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 103 172  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 103 184  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 110 108  |             |             | X           |             |             |             | X           | X           |             | X           |             | X           |             |
| 610 110 113  |             |             | X           |             |             |             | X           | X           |             | X           |             | X           |             |
| 610 110 129  |             |             | X           |             |             |             | X           | X           |             | X           |             | X           |             |
| 610 110 169  |             |             | X           |             |             |             | X           | X           |             | X           |             | X           |             |
| 610 113 133  |             |             |             |             |             |             |             |             | X           |             |             |             |             |
| 610 113 134  |             |             |             |             |             |             |             |             | X           |             |             |             |             |
| 610 113 145  |             |             |             |             |             |             |             | X           |             |             |             |             |             |
| 610 113 171  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 113 173  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 115 124  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 115 125  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 132 106  |             | X           | X           | X           |             |             |             |             |             |             |             |             |             |
| 610 138 109  | X           | X           |             |             |             | X           |             |             |             |             |             |             |             |
| 610 138 112  | X           | X           |             |             |             | X           |             |             |             |             |             |             |             |
| 610 138 115  | X           | X           |             |             |             | X           |             |             |             |             |             |             |             |
| 610 138 122  | X           | X           |             |             |             | X           |             |             |             |             |             |             |             |
| 610 141 101  |             |             |             |             | X           | X           |             |             |             | X           |             |             |             |
| 610 141 102  |             |             |             |             | X           | X           |             |             |             | X           |             |             |             |
| 610 141 103  |             |             |             |             | X           | X           |             |             |             | X           |             |             |             |
| 610 141 104  |             |             |             |             | X           | X           |             |             |             | X           |             |             |             |
| 610 143 101  |             |             |             |             | X           | X           |             |             |             | X           |             |             |             |
| 610 150 101  |             |             |             |             |             |             |             |             |             |             |             |             | X           |



