

# M2M & Telematic Antennas – driven by communication

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**Hirschmann Solutions** is a business unit of Hirschmann Car Communication with headquarters located near Stuttgart in Germany. The company has more than 1000 employees worldwide with development, manufacturing and sales in Europe, Asia and the USA.

**Hirschmann Solutions** specialises in products and systems in three business areas:

**M2M /Asset Tracking** - From antennas through to complete systems including container and trailer tracking.

**Commercial /Off road** - Antennas and telematic products for trucks and off road applications.

**Automotive Aftermarket** - AM/FM/DAB antennas.

This catalogue contains products from the standard range for M2M and telematic applications.

To receive more information on these or our other products please contact us (see back page) or visit us on the web.

[www.hirschmann-car.com](http://www.hirschmann-car.com)  
[www.asset-tracking.solutions](http://www.asset-tracking.solutions)

### Remark:

This catalogue contains products from our European and US portfolio. All products are available worldwide. For more information please contact your nearest Hirschmann office.

Alternative cable and connector configurations on request.

The information/details in this publication merely contain general descriptions or performance factors which, when applied in an actual situation, do not always correspond with the described form, and may be amended by way of the further development of products. The desired performance factors shall only be deemed binding if these are expressly agreed on conclusion of the contract.

# GNSS/POSITIONING

GPS single band

## GPS 9 M

GPS

- Low current consumption
- Magnetic mount



Dimensions	38 x 34 x 14,7 mm
Voltage supply	2,7 - 5,5 VDC
Gain	typ. 2 dBic
Amplification	typ. 27 dB ± 1 dB
Current consumption	≤ 13 mA @ 5 V ± 0,5 V (typ. 10 mA)

Order code		Cable	Connector
		<b>RG 174</b>	
US	HGPS-MX-0102A-01	3000 mm	SMAm
EU	602 435-001		
US	HGPS-MX-0102A-02	3000 mm	FAKRAf, C
EU	602 435-002		
US	HGPS-MX-0102A-04	3000 mm	FAKRAf, Z
EU	-		
US	HGPS-MX-0128A-01*	3000 mm	SMAm
EU	-		

\*includes adhesive pad

## GPS 10 P

GPS

- Low current consumption
- Adhesive mount



Dimensions	34 x 38 x 12,8 mm
Voltage supply	2,7 - 5,5 VDC
Gain	typ. 2 dBic
Amplification	typ. 26 dB ± 2 dB
Current consumption	≤ 13 mA @ 5 V ± 0,5 V (typ. 10 mA)

Order code		Cable	Connector
		<b>RG 174 LL</b>	
US	HGPS-AX-0108A-01	3000 mm	SMAm
EU	-		
US	HGPS-AX-0108A-02	3000 mm	FAKRAf, C
EU	602 431-002		
US	HGPS-AX-0108A-03	1000 mm	FAKRAf, C
EU	-		

## GPS 7 M

GPS

- Magnetic mount



Dimensions	39 x 39 x 14 mm
Voltage supply	3 - 5,5 VDC
Gain	typ. 2 dBic
Amplification	typ. 26 dB ± 2 dB
Current consumption	< 25 mA @ 5 V ± 0,1 V

Order code		Cable	Connector
		<b>RG 174</b>	
US	-	3000 mm	MCXm
EU	920 092-001		
US	-	3000 mm	SMBf
EU	920 092-002		
US	-	3000 mm	SMAm
EU	920 092-003		
US	-	3000 mm	FAKRAf, C
EU	920 092-004		
US	-	3000 mm	FAKRAf angled, C
EU	920 092-005		

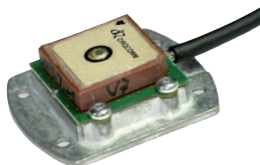
# GNSS/POSITIONING

## GPS single band

### GPS 9 I

#### GPS

- Low current consumption
- Embedded mount



Dimensions	32 x 36 x 10 mm
Voltage supply	2,7 - 5,5 VDC
Gain	typ. 2 dBic
Amplification	typ. 27 dB ± 1 dB
Current consumption	≤ 13 mA @ 5 V ± 0,5 V (typ. 10 mA)

Order code		Cable	Connector
		<b>RG 174</b>	
US	HGPS-IX-0105A-01	200 mm	raSMAm*
EU	-		
US	HGPS-IX-0105A-02	200 mm	raMCXm*
EU	-		
US	HGPS-IX-0105A-03	200 mm	raMMCXm*
EU	-		

\* ra = rectangular

## GPS combination

### GPS + WLAN/BLUETOOTH

### GPS 2400 LP S

#### GPS

#### WLAN / BLUETOOTH

- Screw mount



Dimensions	113 x 76 x 21 mm
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#### GPS

Voltage supply	3 - 5,5 VDC
Gain	typ. 2 dBic
Amplification	typ. 27 dB ± 3 dB
Current consumption	≤ 25 mA @ 5 V

#### WLAN + BLUETOOTH

Frequency range	2400 - 2484 MHz
Gain	typ. 0 dBi

		<b>GPS</b>		<b>WLAN + BLUETOOTH</b>	
Order code		Cable	Connector	Cable	Connector
		<b>RG 174</b>		<b>RG 174</b>	
US	-	150 mm	SMAm	150 mm	SMAm
EU	920 171-001				

GPS combination

GPS + Radio services

GPS MULTI S

68 - 86 MHz / 144 - 176 MHz /  
380 - 470 MHz / 410 - 430 MHz /  
450 - 470 MHz / 880 - 960 MHz /  
1710 - 1880 MHz



- Screw mount
- For GPS/several radio services

Dimensions  $\varnothing$  65 mm x 25 mm

GPS	
Voltage supply	3 - 5 VDC
Gain	typ. 5 dBic
Amplification	typ. 27 dB

Order code	GPS		RADIO SERVICES	
	Cable	Connector	Cable	Connector
	RG 174		RG 174	
US -	296 mm	SMBf	310 mm	FMEf
EU 920 420-001				

GPS MULTI M

68 - 86 MHz / 144 - 176 MHz /  
380 - 470 MHz / 410 - 430 MHz /  
450 - 470 MHz / 880 - 960 MHz /  
1710 - 1880 MHz



- Magnetic mount
- For GPS/several radio services

Dimensions  $\varnothing$  66 mm x 24,5 mm

GPS	
Voltage supply	3 - 5 VDC
Gain	typ. 5 dBic
Amplification	typ. 27 dB

Order code	GPS		RADIO SERVICES	
	Cable	Connect.	Cable	Connect.
	RG 174		RG 174	
US -	6000 mm	SMBf	6000 mm	FMEf
EU 920 421-001				

Rods for GPS MULTI



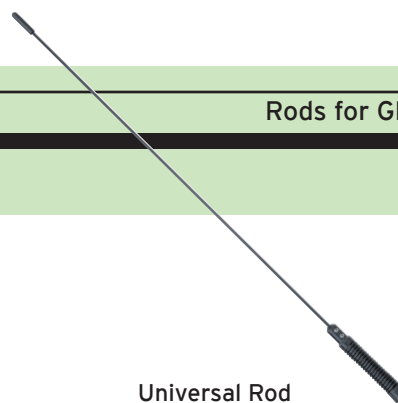
	Flexradiator
Length	146 mm
Thread Antenna rod	M5
Gain	typ. 0 dB
Frequency range	137 -151 MHz ORBCOMM

Order code	
US -	
EU 602 411-001	



	Rod
Length	63 mm
Thread	M5
Gain	typ. 0 dB
Frequency range	GSM 850 GSM 900 GSM 1800 GSM 1900 UMTS

Order code	
US -	
EU 825 097-001	



	Universal Rod
Length	tuneable
Thread	M5
Gain	typ. 0 dB
Frequency range	68 - 470 MHz tuneable • 4 m-band (68-86 MHz) • 2 m-band (144-176 MHz) • 70 cm-band (380-470 MHz) - Telephone - TETRA - ISM 433

Order code	
US -	
EU 823 688-001	

# GNSS/POSITIONING

## GLONASS + GPS

### GLONASS 9 M

#### GLONASS / GPS

- Low current consumption
- Easy interior and exterior mounting
- Magnetic mount



Dimensions	38 x 34 x 15,5 mm
Voltage supply	2,7 - 5,5 VDC
Gain	typ. 2 dBic
Amplification	typ. 27 dB ± 1 dB
Current consumption	≤ 13 mA @ 5 V ± 0,5 V

Order code		Cable	Connector
		<b>RG 174</b>	
US	-	3000 mm	SMAm
EU	<b>602 439-001</b>		

### GLONASS 11 S

#### GLONASS / GPS

- Low current consumption
- Screw mount



Dimensions	63 x 63 x 19 mm
Voltage supply	2,7 - 5,5 VDC
Gain	typ. 2 dBic
Amplification	typ. 27 dB ± 1 dB
Current consumption	≤ 13 mA @ 5 V ± 0,5 V

Order code		Cable	Connector
		<b>RG 174</b>	
US	-	5000 mm	FAKRAf, Code C
EU	<b>602 442-001</b>		
US	-	200 mm	SMBf
EU	<b>602 442-003</b>		

## GLONASS + GPS + CELLULAR

### GLONASS 1890 LP/LC P

#### GLONASS / GPS

#### GSM 850 / GSM 900 / 1800 / 1900 UMTS

- Low current consumption
- Mounting on various surfaces (plastic, metal, ...)
- Adhesive mount



Dimensions	102 x 66 x 20 mm
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#### GLONASS/GPS

Voltage supply	2,7 - 5,5 VDC
Gain	typ. 1 dBic
Amplification	typ. 27 dB ± 1 dB
Current consumption	≤ 13 mA @ 5 V (typ. 10 mA)

#### CELLULAR

Gain	typ. 0 dBi
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		GLONASS/GPS		CELLULAR	
Order code		Cable	Connect.	Cable	Connect.
		<b>RG 174</b>		<b>RG 174</b>	
US	-	3000 mm	SMAm	3000 mm	FMEf
EU	<b>602 440-001</b>				
US	-	4700 mm	SMAm	4700 mm	SMAm
EU	<b>602 440-002</b>				
US	-	5000 mm	FAKRAf, Code C		FAKRAf, Code D
EU	<b>602 440-003</b>				
US	-	3000 mm	FAKRAf, Code C		FAKRAf, Code D
EU	<b>602 440-004</b>				

## GLONASS 1890 LP S

GLONASS / GPS  
 GSM 850 / GSM 900 / 1800 / 1900  
 UMTS



- Mounting on various surfaces (plastic, metal, ...)

- Screw mount

Dimensions	124 x 80 x 21 mm
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### GLONASS/GPS

Voltage supply	3 - 5,5 VDC
Gain	typ. 4,5 dBic
Amplification	typ. 20 dB ± 2 dB
Current consumption	typ. 29 mA @ 3,3 V ± 0,3 V

### CELLULAR

Gain	typ. 0 dBi
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		GLONASS/GPS		CELLULAR	
Order code		Cable	Connect.	Cable	Connect.
		RG 174		RG 174	
US	-				
EU	602 434-001	3000 mm	FAKRA f, Code C	3000 mm	FME f, Code D
US	-				
EU	602 434-002	5000 mm	FAKRA f, Code C	5000 mm	FME f, Code D

# TERRESTRIAL COMMUNICATION

CELLULAR multi band

## MCA 1890 S

GSM 850 / GSM 900 / 1800 / 1900  
UMTS



- Mounting on various surfaces (plastic, metal, ...)
- Screw mount

Dimensions	80 x 80 x 28 mm
Gain	typ. 0 dBi

Order code		Cable	Connector
		RG 174 LL	
US	-	1000 mm	SMAM
EU	920 315-001		

## MCA 1890 SLIM

GSM 850 / GSM 900 / 1800 / 1900  
UMTS



- Easy interior windscreen mounting, self-adhesive

Dimensions	22 x 115 mm
Gain	typ. 0 dBi

Order code		Cable	Connector
		RG 174	
US	-	2500 mm	FMEf
EU	602 311-002		

## MCA 1890 STRIPE

GSM 850 / GSM 900 / 1800 / 1900  
UMTS



- Easy interior windscreen mounting, self-adhesive

Dimensions	12 x 130 mm
Gain	typ. 2,1 dBi

Order code		Cable	Connector
		RG 174	
US	-	2500 mm	FMEf
EU	602 335-002		

## MCA 1890 MP

GSM 850 / GSM 900 / 1800 / 1900  
UMTS



- Easy interior windscreen mounting, self-adhesive

Dimensions	Ø 57 mm
Gain	typ. 2,1 dBi

Order code		Cable	Connector
		RG 174	
US	-	2500 mm	FMEf
EU	602 317-002		
US	-	2500 mm	SMAM
EU	602 317-003		



## CEL 7026 A

LTE 698-862 / 2305-2690  
GSM 850 / GSM 900 / 1800 / 1900  
UMTS

- Easy interior and exterior windscreen mounting, self-adhesive



Dimensions	107 x 54 x 3,5 mm
Gain	typ. 2.15 dBi

Order code	Cable	Connector
	RG 174 LL	
US	-	3000 mm FAKRAf, Code D
EU	920 409-001	

## CEL 7026 RD M

LTE 698-862 / 2305-2690  
GSM 850 / GSM 900 / 1800 / 1900  
UMTS

- 2G through 4G/LTE service
- Magnetic mount



Dimensions	Ø 30 x 91,4 mm
Gain	typ. 3 dBi

Order code	Cable	Connector
	RG 174 LL	
US	HCEL-MX-0150A-01	2500 mm FMEf
EU	955 006-001	
US	HCEL-MX-0150A-02	2500 mm SMAM
EU	955 006-002	

## CEL 8521 RD M

GSM 850 / GSM 900 / 1800 / 1900  
UMTS

- Magnetic mount



Dimensions	Ø 29 mm x 90 mm
Gain	typ. 2 dBi

Order code	Cable	Connector
	RG 174	
US	-	2500 mm FMEf
EU	951 013-001	
US	-	2500 mm SMAM
EU	951 013-002	

## CEL 8521 ST

GSM 850 / GSM 900 / 1800 / 1900  
UMTS

- M2M application - telemetering, remote



Dimensions	Ø 10,5 mm x 50 x 17 mm
Gain	typ. 2 dBi

Order code	Cable	Connector
US	-	SMAM, angled 90°
EU	951 012-001	
US	-	FMEf, angled 90°
EU	951 012-002	

# TERRESTRIAL COMMUNICATION

## CELLULAR multi band

### CEL 8026 BASE

LTE 790-862 / 2305-2690  
 GSM 850 / 900 / 1800 / 1900  
 UMTS  
 WLAN / BLUETOOTH

- Outdoor antenna
- For fix mast and wall mounting



Dimensions (without bracket)	154 x 134 x 46 mm
Gain	typ. 9 dBi

Order code	Cable	Connector
	RG 58 LL	
US	-	
EU	602 456-001	5000 mm SMAm

### CEL 8026 STAT

LTE 790-862 / 2305-2690  
 GSM 850 / 900 / 1800 / 1900  
 UMTS

- Outdoor antenna
- For fix wall mounting



Dimensions (without bracket)	275 x 16 mm
Gain	typ. 5,1 dBi

Order code	Cable	Connector
	RG 58	
US	-	
EU	602 458-001	5000 mm FMEf
US	-	
EU	602 458-002	5000 mm SMAm

## CELLULAR combination

### CELLULAR + AM/FM

### CR 8521 RD S

GSM 850 / GSM 900 / 1800 / 1900  
 UMTS  
 AM/FM

- Combined Roof mount antenna
- Screw mount
- Antenna rod 400 mm



Dimensions (without rod)	64 x 46 x 47 mm
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#### CELLULAR

Gain	0 dB
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#### AM/FM

Voltage supply	9 - 16 VDC
Gain	AM: 10 dB FM: 6 dB

Order code	CELLULAR	AM/FM	
	Connector Cable length	Connect. cable Connector Cable length	Power lead Connector Cable length
	RG 174		FLY
US	-	FMEf 140 mm	M10x0,75m 240 mm 2,8 mm blade terminal
EU	920 445-001		

## CELLULAR combination

## CELLULAR + GPS

### GPS 1890 LP P

GSM 850 / GSM 900 / 1800 / 1900  
UMTS  
GPS



- Mounting on various surfaces (glass, plastic, metal, ...)
- Adhesive or magnetic mount\*

Dimensions 100 x 66 x 21 mm

#### CELLULAR

Gain typ. 0 dBi

#### GPS

Voltage supply 3 - 5,5 VDC

Gain typ. 2 dBic

Amplification typ. 27 dB  $\pm$  3 dB

Current consumption  $\leq$  25 mA @ 5 V

Order code	CELLULAR		GPS	
	Cable	Connect.	Cable	Connect.
	RG 174		RG 174	
US	-			
EU	920 061-001	3000 mm FMEf	3000 mm	SMBf
US	-			
EU	920 061-002	3000 mm FMEf	3000 mm	SMAm
US	-			
EU	920 061-004	3000 mm SMAm	3000 mm	SMAm
US	-			
EU	920 061-005	3000 mm FAKRAf, Code D	3000 mm	FAKRAf, Code C

\*Adhesive and magnetic pad see page 26

# TERRESTRIAL COMMUNICATION

## CELLULAR combination

## CELLULAR + GPS

### GPS 1890 LP S

GSM 850 / GSM 900 / 1800 / 1900  
UMTS  
GPS



- Mounting on various surfaces (glass, plastic, metal, ...)
- Screw mount

Dimensions 100 x 74 x 21 mm

#### CELLULAR

Gain typ. 0 dBi

#### GPS

Voltage supply 3 - 5,5 VDC  
Gain typ. 2 dBic  
Amplification typ. 27 dB ± 3 dB  
Current consumption < 25 mA @ 5 V

	CELLULAR		GPS	
	Cable	Connect.	Cable	Connect.
	RG 174		RG 174	
US	-			
EU	920 062-001	370 mm FME	310 mm	SMBf
US	-			
EU	920 062-004	3000 mm SMA	3000 mm	SMA
US	-			
EU	920 062-025	3000 mm FAKRAf, Code D	3000 mm	FAKRAf, Code C

### CG 8521 LP S

GSM 850 / GSM 900 / 1800 / 1900  
UMTS  
GPS



- Ground plane independent
- For vertical installation
- Screw mount

Dimensions 162 x 70 x 22 mm

#### CELLULAR

Gain typ. 2 dBi

#### GPS

Voltage supply 2.7 - 5.5 VDC  
Gain typ. 2 dBic  
Amplification typ. 15 dB, 20 dB max.  
Current consumption ≤ 6 mA @ 5 V

	CELLULAR		GPS	
	Cable	Connect.	Cable	Connect.
	RG 58 LL		RG 174 LL	
US	HCEL-SG-0155A-01			
EU	955 019-001	6100 mm SMA	6100 mm	SMA
US	HCEL-SG-0199A-01			
EU	955 161-001	2200 mm FAKRAf, Code D	2200 mm	FAKRAf, Code C

**CELLULAR combination**

**CELLULAR + GPS**

**GPS 925**

GSM 900 / 1800 / 1900  
GPS



- M2M application - Toll Collect
- Connecting cables available with different connectors (see p. 24)
- Screw mount

Dimensions 95 x 57 x 69 mm

**CELLULAR**

Gain typ. 3 dBi

**GPS**

Voltage supply 3 - 5,5 VDC  
Gain typ. 2 dBic  
Amplification typ. 27 dB ± 3 dB  
Current consumption max. ≤ 25 mA, typ. 20 mA

		<b>CELLULAR</b>		<b>GPS</b>	
Order code		Cable	Connect.	Cable	Connect.
		RG 174		RG 174	
US	-				
EU	<b>920 014-003</b>	350 mm	FAKRAF, Code D*	300 mm	FAKRAF, Code C*
US	-				
EU	<b>920 014-004</b>	350 mm	FAKRAF, Code D	300 mm	FAKRAF, Code C

\*Adapter cables to SMB female (GPS) and FME male (GSM) included in scope of supply

# TERRESTRIAL COMMUNICATION

## CELLULAR combination

### CELLULAR + GPS + WLAN/BLUETOOTH

#### CG 8524 LP A Extra Slim

GSM 850 / GSM 900 / 1800 / 1900  
 UMTS  
 GPS  
 WLAN / BLUETOOTH



- Low current consumption
- Mounting on non-conductive surfaces
- Adhesive mount

Dimensions 126 x 54.9 x 7 mm

#### CELLULAR / WLAN/BLUETOOTH

Frequency range	GSM 850: 824 - 894 MHz
	GSM 900: 880 - 960 MHz
	GSM 1800: 1710- 1880 MHz
	GSM 1900: 1850 - 1990 MHz
	UMTS: 1920 - 2170 MHz
	WLAN/BLUETOOTH: 2400 - 2484 MHz
Gain	GSM 850/CDMA 800/GSM 900: typ. 3 dBi
	GSM 1800/PCS/CDMA 1800/ UMTS/WLAN: typ. 4 dBi

#### GPS

Voltage supply	2,7 - 5,5 VDC
Gain	typ. 1 dBic
Amplification	typ. 26 dB ± 2 dB
Current consumption	≤ 13 mA, typ. 10 mA (max 13 mA)

		CELLULAR/ WLAN	GPS
Order code	Cable	Connector	Connector
RG 174			
US	HCEL-AG-0101B-01	3000 mm	SMAM
EU	-		
US	HCEL-AG-0101B-02	3000 mm	FAKRAf, Code D
EU	-		

#### GPS 2400 LP/CELLULAR

GSM 850 / GSM 900 / 1800 / 1900  
 UMTS  
 GPS  
 WLAN / BLUETOOTH



- Low current consumption
- Screw mount

Dimensions 124 x 80 x 21 mm

#### CELLULAR

Gain typ. 0 dBi

#### GPS

Voltage supply	2,7 - 5,5 VDC
Gain	typ. 2 dBic
Amplification	typ. 26 dB ± 2 dB
Current consumption	≤ 13 mA@5 V ± 0,5 V (typ. 10 mA)

#### WLAN + BLUETOOTH

Frequency range	2400 - 2484 MHz
Gain	typ. 0 dBi

		CELL	GPS	WLAN
Order code		Connect. Cable length	Connect. Cable length	Connect. Cable length
RG 174				
US	HCEL-S2-0119A-01	SMA m	SMAM	SMAM
EU	602 430-001	200 mm	170 mm	140 mm
US	HCEL-S2-0119A-02	FMEf	FMEf	FMEf
EU	-	3050 mm	3050 mm	3050 mm
US	HCEL-S2-0119A-03	FAKRAf, C	SMAM	rpSMAf*
EU	-	3050 mm	3050 mm	3050 mm
US	HCEL-S2-0119A-04	FAKRAf, C	SMA m	rpSMAf*
EU	-	5030 mm	5030 mm	5030 mm
US	HCEL-S2-0119A-07	MCXm	SMBf	SMAM
EU	602 430-007	200 mm	170 mm	140 mm

\*rp = reverse polarity

**CGW 852124 LP S**

GSM 850 / GSM 900 / 1800 / 1900  
UMTS  
GPS  
WLAN / BLUETOOTH



- Low current consumption
- Ground plane independent
- For vertical installation
- Screw mount

Dimensions	162 x 70 x 22 mm
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**CELLULAR**

Gain	typ. 2 dBi
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**GPS**

Voltage supply	2.7 - 5.5 VDC
Gain	typ. 2 dBic
Amplification	typ. 15 dB, 20 dB max.
Current consumption	≤ 6 mA@5 V

**WLAN + BLUETOOTH**

Frequency range	2400 - 2484 MHz
Gain	typ. 5 dBi

	CELL	GPS	WLAN
Order code	Connect. Cable length	Connect. Cable length	Connect. Cable length
	<b>RG 58 LL</b>	<b>RG 174 LL</b>	
US	HCEL-S2-0198A-01	FAKRAF, D	FAKRAF, B
EU	955 162-001	2200 mm	2200 mm

**CGW 702659 SF S**

LTE 698-862 / 2305-2690  
GSM 850 / GSM 900 / 1800 / 1900  
UMTS  
GPS  
WLAN / BLUETOOTH



- 2G through 4G/LTE service
- Ground plane independent
- Screw mount

Dimensions	95 x 57 x 69 mm
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**CELLULAR**

Gain	typ. 2,5 dBi
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**GPS**

Voltage supply	3 - 5.5 VDC
Gain	typ. 2 dBic
Amplification	typ. 27 dB ± 3 dB
Current consumption	≤ 25 mA typ. 20 mA

**WLAN + BLUETOOTH**

Frequency range	2400 - 2484 MHz 5725 - 5875 MHz
Gain	typ. 2.5 dBi@2.4 GHz typ. 3 dBi@5.8 GHz

	CELL	GPS	WLAN
Order code	Connect. Cable length	Connect. Cable length	Connect. Cable length
	<b>RG 174</b>		
US	HCEL-S2-0156A-01	SMAm	SMAm
EU	-	150 mm	150 mm
US	HCEL-S2-0156A-02	FAKRAF, D	FAKRAF, C
EU	-	325 mm	325 mm
US	HCEL-S2-0156A-03	FMEf	FMEf
EU	955 001-003	3000 mm	3000 mm
US	HCEL-S2-0156A-04	SMAm	SMAm
EU	955 001-004	5000 mm	5000 mm
US	HCEL-S2-0156A-05	FAKRAF, D	FAKRAF, C
EU	955 001-005	5000 mm	5000 mm
US	HCEL-S2-0156A-06	FMEf	SMAm
EU	955 001-006	5000 mm	5000 mm
US	HCEL-S2-0156A-07	FMEf	SMBf
EU	955 001-007	250 mm	250 mm

# TERRESTRIAL COMMUNICATION

## WLAN / BLUETOOTH single band

### MCA 2400 PA

#### WLAN / BLUETOOTH

- Easy interior windscreen mounting, self-adhesive



Dimensions	57 x 77 x 10 mm
Frequency range	2300 - 2500 MHz
Gain	typ. 2,1 dBi

Order code		Cable	Connector
		<b>RG 174</b>	
US	-	3000 mm	SMAM
EU	<b>602 399-001</b>		

### WLAN 24 ST

#### WLAN / BLUETOOTH

- Terminal mount



Dimensions	10,5 x 50 x 17 mm
Frequency range	Bluetooth: 2400 - 2484 MHz IEEE Std. 802.11b: 2412 - 2484 MHz
Gain	typ. 2dBi

Order code		Cable	Connector
US	-	-	SMAM, angled 90°
EU	<b>951 012-003</b>		

### WLAN 24 PA

#### WLAN / BLUETOOTH

- Easy interior windscreen mounting, self-adhesive



Dimensions	115 x 22 mm
Frequency range	Bluetooth: 2400 - 2484 MHz IEEE Std. 802.11b: 2412 - 2484 MHz
Gain	typ. 2dBi

Order code		Cable	Connector
		<b>RG 174</b>	
US	-	1500 mm	FAKRAF, Code I
EU	<b>951 002-001</b>		



WLAN / BLUETOOTH multi band

TETRA single band

**MCA 2458 S**

WLAN / BLUETOOTH / DSRC

- Mounting on various surfaces (plastic, metal, ...)
- Screw mount



Dimensions	80 x 80 x 28 mm
Frequency range	2400 - 2484 MHz 5150 - 5925 MHz
Gain	typ. 3 dBi

Order code	Cable	Connector
	RG 174 LL	
US	-	1000 mm
EU	920 315-002	SMAm

**MCA 480 FLEX**

TETRA

- Additional TETRA frequency 808 - 870 MHz
- Easy interior windscreen mounting, self-adhesive



Dimensions	20 x 244 x 5 mm
Frequency range	380 - 430 MHz 808 - 870 MHz
Gain	typ. 2,1 dBi

		TETRA	
Order code	Cable	Connect.	
	RG 174		
US	-	2500 mm	FMEf
EU	920 013-001		

**WLAN 2458 MIMO3 LP S**

WLAN / BLUETOOTH / DSRC

- Mounting on various surfaces (plastic, metal, ...)
- Screw mount



Dimensions	124 mm x 80 mm x 31 mm
Frequency range	2400 - 2484 MHz 5150 - 5925 MHz
Gain	typ. 3 dBi

	WLAN	BLUET.	DSRC
Order code	Connect. Cable length	Connect. Cable length	Connect. Cable length
	RG 174 LL		
US	-	SMAm	SMAm
EU	951 001-001	140 mm	170 mm
		200 mm	

# TERRESTRIAL COMMUNICATION

## TETRA combination

TETRA + GPS

### TG 3847 RD S

TETRA  
GPS

- Mounting on various surfaces (plastic, metal, ...)
- Screw mount
- Antenna rod 170 mm



Dimensions (without rod) 95 x 57 x 40 mm

#### TETRA

Gain typ. 5,1 dBi

#### GPS

Voltage supply 3 - 5,5 VDC  
Gain typ. 2 dBic  
Amplification typ. 27 dB ± 3 dB  
Current consumption ≤ 25 mA

	TETRA		GPS	
	Cable	Connect.	Cable	Connect.
Order code	RG 316		RG 174	
US	-	160 mm	FMEf	120 mm
EU	951 014-101			SMBf

TETRA + GPS + WLAN/BLUETOOTH

### TGW 3858 RD S

TETRA  
GPS  
WLAN / BLUETOOTH

- Mounting on various surfaces (plastic, metal, ...)
- Screw mount
- Antenna rod 170 mm



Dimensions (without rod) 95 x 57 x 40 mm

#### TETRA

Gain typ. 5,1 dBi

#### GPS

Voltage supply 3 - 5,5 VDC  
Gain typ. 2 dBic  
Amplification typ. 27 dB ± 3 dB  
Current consumption ≤ 25 mA

#### WLAN + BLUETOOTH

Frequency range 2400 - 2484 MHz  
5150 - 5925 MHz  
Gain typ. 2 dBi

	TETRA	GPS	WLAN
	Connect. Cable length	Connect. Cable length	Connect. Cable length
Order code	RG 316	RG 174	DACAR302
US	-	FMEf	SMBf
EU	951 016-101	160 mm	120 mm
			SMAm
			200 mm

# SATELLITE COMMUNICATION

IRIDIUM single band

## IRD LP M

IRIDIUM

- Iridium certified
- Adhesive pad on request
- Magnetic mount



Dimensions	63 x 63 x 18 mm
Frequency range	1616 - 1626,5 MHz
Gain	typ. 3 dBic

Order code		Cable	Connector
		<b>RG 174 LL</b>	
US	HIRD-MX-0106A-01	1500 mm	TNCm
EU	-		
US	HIRD-MX-0106A-02	1500 mm	SMAm
EU	-		
US	HIRD-MX-0106A-04	125 mm	SMAm
EU	-		
US	HIRD-MX-0106A-05	2500 mm	SMAm
EU	955 047-005		

Order code		Cable	Connector
		<b>RG 58 LL</b>	
US	HIRD-MX-0108A-01	4570 mm	TNCm
EU	-		
US	HIRD-MX-0108A-02	5500 mm	SMAm
EU	-		
US	HIRD-MX-0108A-03	5500 mm	rpTNCf*
EU	-		

\*rp = reverse polarity

## IRD LP S

IRIDIUM

- Iridium certified
- For use in telematic applications
- Screw mount



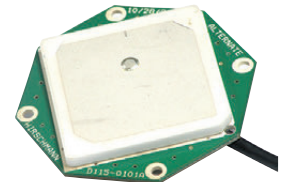
Dimensions	63 x 63 x 18 mm
Frequency range	1616 - 1626,5 MHz
Gain	typ. 3 dBic

Order code		Cable	Connector
		<b>RG 174 LL</b>	
US	HIRD-SX-0120A-01	150 mm	SMAm
EU	955 048-001		

## IRD PC S

IRIDIUM

- Iridium certified
- For embedded installation



Dimensions	52 x 52 x 7 mm
Frequency range	1616 - 1626,5 MHz
Gain	typ. 3 dBic

Order code		Cable	Connector
		<b>RG 174 LL</b>	
US	HIRD-IX-0111A-01	150 mm	SMAm
EU	-		
US	HIRD-IX-0111A-02	500 mm	SMAm
EU	-		

# SATELLITE COMMUNICATION

IRIDIUM combination

IRIDIUM + GPS

## GPS 1620 LP S

IRIDIUM  
GPS

- Iridium certified
- Low current consumption
- Screw mount



Dimensions 124 x 80 x 21 mm

### IRIDIUM

Frequency range 1616 - 1626,5 MHz  
Gain typ. 3 dBic

### GPS

Voltage supply 3 - 5.5 VDC  
Gain typ. 2 dBic  
Amplification typ. 26 dB ± 3 dB  
Current consumption ≤ 25 mA @ 5 V ± 1 V

		IRIDIUM	GPS
Order code		Connect. Cable length	Connect. Cable length
		<b>RG 174</b>	
US	HIRD-SG-0103B-01	SMAM 200 mm	SMAM 170 mm
EU	602 423-001		
US	HIRD-SG-0103B-02	SMAf 200 mm	SMAf 170 mm
EU	-		
US	HIRD-SG-0133A-01 <sup>1)</sup>	rpTNCf* 5000 mm	TNCm 5000 mm
EU	-		

<sup>1)</sup> Kit with extension cable RG 58 Low Loss

\*rp = reverse polarity

IRIDIUM + CELLULAR + GPS

## IGC 8521 LP S

IRIDIUM  
GSM 850 / GSM 900 / 1800 / 1900  
UMTS  
GPS

- Iridium certified
- Low current consumption
- Screw mount



Dimensions 124 x 80 x 69 mm

### IRIDIUM

Frequency range 1616 - 1626,5 MHz  
Gain typ. 3 dBic

### CELLULAR

Gain typ. ≥ 3 dBi

### GPS

Voltage supply 3 - 5.5 VDC  
Gain typ. 2 dBic  
Amplification typ. 26 dB ± 2 dB  
Current consumption ≤ 13 mA @ 5 V ± 5 V (typ. 10 mA)

		IRIDIUM	CELLULAR	GPS
Order code		Connect. Cable length	Connect. Cable length	Connect. Cable length
		<b>RG 174</b>		
US	HIRD-S2-0105A-01	SMAM 200 mm	SMAM 140 mm	SMAM 170 mm
EU	955 049-001			
US	HIRD-S2-0132A-01 <sup>1)</sup>	rpTNCf* 5000 mm	TNCm 5000 mm	SMAM 5000 mm
EU	-			
US	HIRD-S2-0132A-02 <sup>2)</sup>	SMBf 3000 mm	MCXm 3000 mm	SMAM 3000 mm
EU	-			

<sup>1)</sup> Kit with extension cable RG 58 Low Loss (5000 mm)

<sup>2)</sup> Kit with extension cable RG 58 Low Loss (3000 mm)

\*rp = reverse polarity

## IRIDIUM combination

IRIDIUM + GPS + WLAN/BLUETOOTH

### IGW 24 LP S

IRIDIUM  
GPS  
WLAN / BLUETOOTH



- Iridium certified
- Low current consumption
- Screw mount

Dimensions	124 x 80 x 21 mm
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#### IRIDIUM

Gain	typ. 3 dBic
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#### GPS

Voltage supply	3 - 5.5 VDC
Gain	typ. 2 dBic
Amplification	typ. 26 dB ± 3 dB
Current consumption	≤ 25 mA @ 5 V ± 0.1 V

#### WLAN/BLUETOOTH

Frequency range	Bluetooth:	2400 - 2484 MHz
	IEEE Std. 802.11b:	2412 - 2484 MHz
Gain	typ. 0 dB	

		IRIDIUM	GPS	WLAN
Order code		Connect. Cable length	Connect. Cable length	Connect. Cable length
		RG 174		
US	HIRD-S2-0117A-01 <sup>1)</sup>	SMAm 200 mm	SMAm 170 mm	SMAm 140 mm
EU	-			

<sup>1)</sup> Stainless steel mounting nut with 22 mm wrench size

# SATELLITE COMMUNICATION

## ORBCOMM single band

## ORBCOMM combination

## ORBCOMM + GPS

### ORB RD S

#### ORBCOMM

- Screw mount
- Antenna rod 405 mm

Dimensions (without rod)	94 x 57 x 38 mm
Frequency range	137 - 151 MHz
Gain	typ. 5 dBi

Order code		Cable	Connector
		<b>RG 58</b>	
US	<b>HORB-SX-0114A-01</b>	7620 mm	SMAM
EU	-		



### OG RD S

#### ORBCOMM GPS

- Screw mount
- Antenna rod 405 mm

Dimensions (without rod)	94 x 57 x 38 mm
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#### VHF (ORBCOMM)

Frequency range	137 - 151 MHz
Gain	typ. 5 dBi

#### GPS

Voltage supply	3 - 5.5 VDC
Gain	typ. 2 dBic
Amplification	typ. 27 dB ± 3 dB

		ORBCOMM		GPS	
Order code		Cable	Connector	Cable	Connector
		<b>RG 58</b>		<b>RG 174</b>	
US	<b>HORB-SG-0118A-04</b>	320 mm	FMEem	320 mm	FMEf
EU	-				



## OGC 8521 RD S

ORBCOMM  
GSM 850 / GSM 900 / 1800 / 1900  
GPS



- Antenna base only <sup>1)</sup>

- Screw mount

Dimensions 95 x 57 x 40 mm

**VHF (ORBCOMM)**

Frequency range 137 - 151 MHz  
Gain typ. 0 dB

**CELLULAR**

Gain typ. 0 dB

**GPS**

Voltage supply 3 - 5.5 VDC  
Gain typ. 2 dBic  
Amplification typ. 26 dB  $\pm$  3 dB  
Current consumption  $\leq$  25 mA@5V  $\pm$  0,1 V

	<b>ORBCOMM</b>	<b>CELL</b>	<b>GPS</b>
Order code	Connect. Cable length	Connect. Cable length	Connect. Cable length
	<b>RG 174</b>	<b>RG 58 LL</b>	<b>RG 174</b>
US	<b>HORB-S2-0101A-01</b>	FAKRAf, K	FAKRAf, D
EU	-	6100 mm	6000 mm
			6050 mm

<sup>1)</sup> Rod to be ordered separately (HROD-S2-0101A)

## Rod for OGC 8521 RD S

ORBCOMM  
GSM 850 / GSM 900 / 1800 / 1900



Length 405 mm  
Thread Antenna rod M5

## Order code

US **HROD-S2-0101A**  
EU **823 174-001**

# ACCESSORIES

## Connecting cables



### VK-SB SUPER-LOW-LOSS

Single pack	US	EU
	Order code	
L≈1000 mm	-	823 122-014
2000 mm	-	823 122-015
3000 mm	-	823 122-016
4000 mm	-	823 122-017
5000 mm	-	823 122-018
5000 mm 10 Piece	-	823 122-023

	US	EU
	Order code	

### VK SUPER-LOW-LOSS FMEf/SMAM 500

L≈5000 mm 1 Piece	-	602 340-001
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### VK SUPER-LOW-LOSS FMEf/FAKRAF Z ...

L≈5000 mm 1 Piece	-	602 406-001
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### VK RG58 FMEm/FMEf 500

L≈5000 mm 1 Piece	-	602 405-001
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	US	EU
	Order code	

### VK 174 SMBm/MCXm...

L≈5000 mm	-	823 915-005
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### VK 174 SMBm/GT5f...

L≈5000 mm	-	823 808-005
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### VK 174 SMBm/SMAM...

L≈5000 mm	-	823 684-005
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### VK 174 SMBm/SMBf...

L≈5000 mm	-	823 641-005
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### VK 174 SMBm/FMEf...

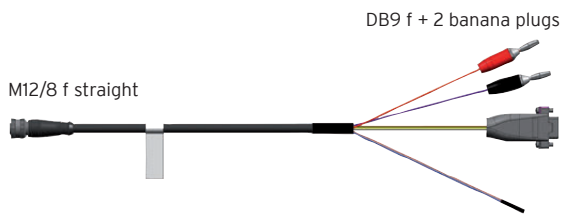
L≈ 5000 mm	-	823 685-005
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### VK 174 SMBm/FAKRAF Z...

L≈5000 mm	-	602 404-005
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## Extension cables ITAS / Edge










	US	EU
	Order code	
L≈1500 mm	HCBL-WX-0153A-01	-
L≈3000 mm	HCBL-WX-0153A-02	-
L≈5000 mm	HCBL-WX-0153A-03	-
L≈1500 mm	HCBL-WX-0161A-01	-
L≈3000 mm	HCBL-WX-0161A-02	-
L≈5000 mm	HCBL-WX-0161A-03	-
L≈1500 mm	HCBL-WX-0166B-01	955 025-001
L≈3000 mm	HCBL-WX-0166B-02	-
L≈5000 mm	HCBL-WX-0166B-03	-
L≈1500 mm	HCBL-WX-0167A-01	-
L≈3000 mm	HCBL-WX-0167A-02	955 051-002
L≈5000 mm	HCBL-WX-0167A-03	-

Contact us for other cable and connector configurations.

# ACCESSORIES

## Adapters FME

	US	EU
Order code		
	<b>KVS/MINI UHFm WINKEL (angled)</b>	
Adapter connector rectangular	-	<b>602 375-001</b>
	<b>KVS/SMAm</b>	
Adapter connector	-	<b>602 376-001</b>
	<b>KVS/MCXm</b>	
Adapter connector	-	<b>602 378-001</b>
	<b>KVS/BNCm</b>	
Adapter connector	-	<b>602 372-001</b>

	US	EU
Order code		
	<b>KVK</b>	
Adapter connector	-	<b>602 371-001</b>
	<b>KVB</b>	
Cable plug FME fem. for RG 58	-	<b>602 370-001</b>
	<b>AK 174 FME/FAKRAf Z</b>	
Adapter cable, RG 174, L≈150 mm	-	<b>602 403-001</b>

## Magnetic / Adhesive Pads

### Magnetic Pad

- For GPS 1890 LP P
- For mounting on metal surfaces

Order code	US	EU
	-	<b>821 049-001</b>



### Adhesive Pad

- For GPS 1890 LP P + GPS 1890 LP/LC P
- Mounting on various surfaces (glass, plastic, metal, ...)

Order code	US	EU
	-	<b>602 408 001</b>



# More from Hirschmann Solutions

## Asset Tracking

### Container/Trailer Tracking



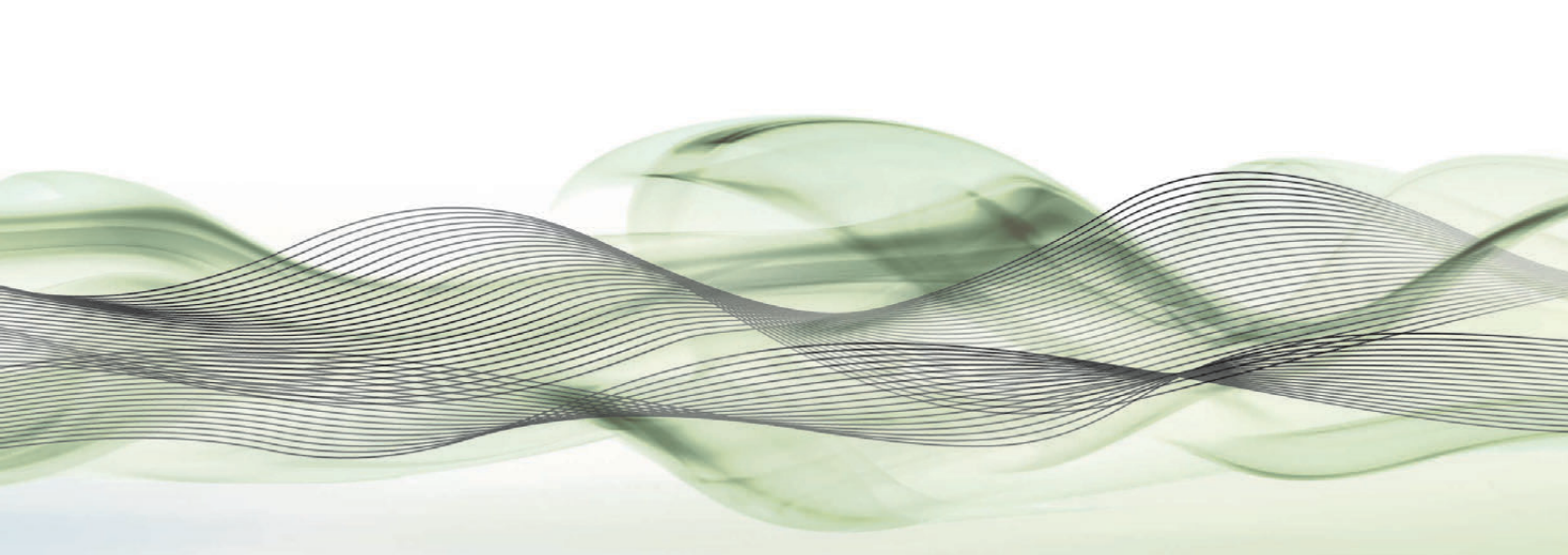
- Intelligent power management
- Over 7 years service life
- Rugged design
- Highest RF performance
- Scratch, shatter proof and self cleaning solar panel
- 2G/3G communication
- IP6K9K Protection class
- Operating temperature -40 °C to +85 °C
- Subscriber management
- Contact us for further information and availability

## Automotive Aftermarket

### Antennas



- Extensive range of antennas for after-market/retrofit applications
- DVB-T Film antennas
- GPS and GSM antennas for replacement/upgrade
- Accessories available including connectors and cables
- Magnetic, screw or adhesive variants
- Radio and TV modules for integration
- AM/FM antennas
- Contact us for further information and availability



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