Smart **READERS**







INID Smart Readers

INID Smart Readers are flexible by design. Only one application for access control that supports single and multi card environments for multiple ISO14443 technologies and NFC. INID Smart Readers come in various models: with and without PIN keypad and with different interfaces. The field programmable capabilities of INID Smart Readers future proof your investment.

Technologies

INID Smart Readers support:

ISO14443-3A: MIFARE® Classic, MIFARE Ultralight®. **ISO14443-4A:** MIFARE® DESFire® EV1 and V0.6,

SmartMX.

ISO14443-4B: Infineon, Atmel and

ST microelectronics.

NFC: peer-to-peer and support for passive

credentials and devices.

Multi-card capabilities

INID Smart Readers can be programmed to support up to five different card sets. Each card set defines: card type, input data handling, output data format, and protocol. This feature enables the use of a mixed card population with different card types, data encodings and or security settings. This feature makes the INID ISO14443 reader ideal for transitioning from one card technology to another or add existing card populations to your system.

INID Smart PIN readers

INID Smart Readers with PIN keypad provide a 3 x 4 matrix in a mullion style housing with back lighted symbols. The lighting is started by either pressing any key or presenting a card. PIN code entry is configurable from one to twelve characters in a PIN code string. Key encoding is provided by means of customer defined key tables. The back lighted feature allows for installation and use in low-light environments.

Output protocols

INID Smart Readers support: Wiegand, Clock & Data, TTL serial, RS485/RS422, RS232. (see Protocol interfaces and models)

Card handling

Card handling is provided in both transparent mode and reader mode. In transparent mode the reader automatically creates the requested output based on the information programmed in "auto formatted" cards. In reader mode, the requested output is created via the programmed parameters that control the operation of the highly flexible read and data engines of the reader.

In Field programmable

INID ISO144443 readers are field programmable. Dismounting of readers is not required with contactless programming cards. Field programming allows changes to the function of the reader, adoption to changing security requirements, and loading of new firmware with new technologies and features.

Security features

INID Smart Readers provide as standard several extra security features:

Tamper detection: To detect opening of the reader housing, signaling is provided via customer defined actions.

Key store: Each reader contains uniquely AES encrypted key storage for reader and card security keys

Key diversification: is available on all supported technologies to provide higher security by uniquely securing the data on the card.



TECHNICAL SPECIFICATIONS



Power supply			
Voltage range		7 – 24 Volt DC	
Power consumption	INID ISO14443 AC	1350 mW (average)	2100 mW (peak)
	INID ISO14443 AC PIN	1350 mW (average)	2100 mW (peak)
Current consumption	INID ISO14443 AC	115 mA (average)	175 mA (peak)
@ 12 V DC	INID ISO14443 AC PIN	115 mA (average)	175 mA (peak)

Environment	
Usage	Indoor and outdoor
Humidity	0 – 95% non condensing
Temperature	-25 to +65 °C / -15 to 150 °F
Protection class	IP54

Mechanical	
Dimensions	143x46x25 mm / 5.63"x1.8"x1"
Materials	UL94 V0 LEXAN

Technologies	
ISO14443-3A	MIFARE® Classic, MIFARE Ultralight®
ISO14443-4A	MIFARE® DESFire® EV1 (and version 0.6), SmartMX
ISO14443-4B	Infineon, Atmel, ST Microelectronics
NFC	Active mode on all models.

Protocol interfaces and m	odels		PIN
Wiegand	Active driven 0 - 5 VDC or		
Clock and Data	open drain	500-5000A	500-5040A
TTL serial	0 – 5 Volt levels	300-3000A	300-3040A
RS485/RS422	0 - 3 voit levels		
RS232	Separate model	500-5020	500-5060

User feedback	
Bi-color LED bar	Single bar or two controllable sections
Sounder	Multi-tone

Security features	
Tamper detection	Detect and signal open housing
Key store	Per reader uniquely encrypted key storage
SAM AV2	Optional

Installation	
Connections	Detachable 8 pin connector
Mounting	Two piece housing, front with electronics and wall mounting
	plate

PIN model specific	
Actuators	Mechanical switch
Actions	1.000.000 times minimum
Indicators	Back lighted symbols, sound and LED bar action

Compliance	
Listings and certifications	EN 50130-4 , CE, FCC, IC, UL 294, ULC-S319

Additional provisions	
Expansion bus	Provision for add-on modules

MIFARE® Classic, MIFARE Ultralight®, MIFARE® DESFire® and SmartMX are trademarks of NXP Semiconductors. All other referenced brands, product names, service names and trademarks are the property of their respective owners.

INID cares for the environment, we design our products to be durable and suitable for complete recycling. Our aim is to provide a cradle to cradle life cycle.

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