Invexs readers & antennas

The Invexs readers and antennas combine modern design with cutting edge functionality. Thanks to the unique multiple card reader technology the readers can simultaneously read different credentials which is extremely useful in situations of migration or in case companies have a mix of card technologies for either security or comfort reasons. The Invexs readers and antennas are available for both indoor and outdoor use.

Invexs series
- Multiple card reader technology
- Comfortable reading distances
- Multiple output protocols
- Huge distance possible between reader and controller

Invexs 170
- Modern touch keys design
- Black or white back panel

Invexs 190
- Suitable for outdoors
- Mullion reader
- Can be mounted on metal

Invexs 190 & 170

The Invexs family
The Invexs reader family consists of different readers and antennas. The Invexs 170 series is known for its stylish design and is available with different color back panels. The Invexs 170 optionally has modern touch keys for use with PIN – code and is intended for indoor use. The Invexs 190 series is developed especially for use on a door frame (mullion reader) and for outdoor applications. The Invexs 190 can be mounted directly on metal without the loss of detection distance.

Dual reader functionality
Invexs readers have the unique capability to simultaneously read Nedap, Mifare, Mifare Plus and DESFire credentials. One of the many advantages of this functionality is that it enables smooth migration. Customers can store all credentials in a mixed pool, so there is no need to change all credentials overnight during a migration process.

The Invexs 190 has a SAM socket (Secure Access Module) on board, which can optionally be equipped with a SAM for key storage and execution of high secure encryption algorithms.

Modern design
The modern, stylish look of Invexs readers fits perfectly with today's office buildings. The high-quality touch keys of the Invexs 170 are software-controlled and smoothly light up once a valid badge is presented which requires a PIN. For the Invexs 190 a spacer is available for guiding the cable output on the top/bottom side of the reader.

Different readers for different situations
Invexs readers are versatile. The different models are suitable for a variety of situations and customer demands. But Invexs' versatility also shows in its functionality and output, which can be configured to either Wiegand, RS485 protocol (encrypted or

plain) or XS RF modulation for integration with existing hardware.

Configuration and programming

Invexs readers are easy to configure and program. Configuration is done with AEreco software *(AEOS REader COnfiguraton),* a special configuration tool for Invexs and other AEOS readers.

The configuration is deployed to the Invexs with either a configuration card or AEmon, a configuring tool for AEOS AEpacks and Behavior Components.

Invexs series
Product numbers and versions

Invexs 170

	Color	Antenna/Reader		Keypad	
Mifare Nedap antenna	Black	A170B	9833560		
	White	A170W	9832610		
Mifare reader	Black	M170B	9833900	MK170B	9834230
	White	M170W	9832750	MK170W	9832920
Mifare DESFire reader	Black	MD170B	9834400	MDK170B	9834680
	White	MD170W	9834370	MDK170W	9834540
Mifare Nedap reader	Black	MN170B	9834060	MNK170B	9833730
	White	MN170W	9832890	MNK170W	9833080
Mifare Nedap DESFire reader	Black	MND170B	9899570	MNDK170B	9938761
	White	MND170W	9899430	MNDK170W	9938753

Invexs 190

	Reader		Keypad	
Mifare reader	M190	9945512	MK190	9948422
Mifare DESFire reader	MD190	9948406	MDK190	9948457
Mifare Nedap reader	MN190	9948392	MNK190	9948449
Mifare Nedap DESFire reader	MND190	9948414	MNDK190	9948465
Spacer Invexs 190	9949887			

Invexs series
Technical Specifications

		Invexs 170	Invexs 190
Dimensions	LxWxH Weight	171 x 75 x 25 mm +/- 200 gr.	190 x 50 x 29 mm +/- 350 gr.
Protection		IP54	IP65
Power	Supply Consumption	10VDC – 30VDC 70mA@12VDC, 35mA@24VDC	10VDC – 30VDC 160mA@12VDC, 80mA@24VDC
Environment	Temperature Rel. humidity	Operating 0 – 55 °C; Storage -30 – 65°C 10 -93% non condensing	Operating -20 – 55 °C; Storage -30 – 65°C 10 -93% non condensing
Tamper Switch		Optical	Optical / movement
Communication		RS485 (Encrypted AEOS or Plain Protocol –user definable-) Wiegand Data 0 and Data 1 (depends on configuration) RF Modulator (120 kHz for AX1014 or AB350)	
Inputs		3x open collector Beeper and 2x LED's	4x open collector Beeper and 3x LED's
Antennas		Antenna 1: 120 kHz, Nedap credentials Antenna 2: 13,56 MHz, Mifare/DESFire	n.a.
Detection Distance	Nedap Mifare	approx. 15 cm approx. 5 cm	approx. 8 cm approx. 4 cm
Cabling	Readers	RS485: 2 x 2 x 0,25 mm^2 shielded, max. 1000m. Wiegand: 4 x 0,25 mm^2 shielded, max 150m. Optional : 3 x 0.25 mm^2 LED's, beeper	RS485: 2 x 2 x 0,25 mm^2 shielded, max. 1000m. Wiegand: 4 x 0,25 mm^2 shielded, max 150 m. Optional : 4 x 0.25 mm^2 LED's, beeper Pigtail: 3m.
	Antennas	Nedap: 5 x 0,25 mm^2 shielded, max 50 m. Mifare: Coax RG58u max. 30 m. LED's: 3 x 0,25 mm^2 shielded.	n.a.