

AP1007 Mifare Proximity Reader

The AP1007 combines Mifare proximity reader technology with the maximum security of the AEOS concept and the convenience of a large detection range. Because the active part of this reader is installed on the secure side, the risk of sabotage is minimal. The functionality of the AP1007 can be easily configured using software components to match your specific requirements, now or in the future. A secure solution, into which existing Mifare cards can be integrated.

- For use in combination with Mifare cards
- Separation of reader and antenna for maximum security
- Four freely programmable digital inputs
- Two configurable relay outputs
- Monitored inputs and outputs
- 12/24V DC output
- LED status indicator
- Can be analysed and programmed remotely
- Hot-swappable

The most secure application of Mifare(r) technology

• **Safety first.** Mifare card readers are usually fitted with an integral antenna that is linked to the system by a standard communication interface. Due to the relatively short reading range, the entire card reader has to be installed on the unsecured side. This makes sabotage an easy task, so that security cannot be guaranteed. Nedap has applied its many years of experience in security and RFID to the development of the unique AP1007 Mifare reader. With this device, the antenna and the active reader can be installed up to 30m apart. In this way, all the sensitive components and data remain within the secure area. An extremely secure application of Mifare technology, with data transfer from the secure to the unsecured side. Nedap has developed the RefleXS 130M antenna specifically for this application.

• **Complete.** The AP1007 is equipped with four freely programmable digital inputs for the connection of sensors and contacts, such as a door contact or an RTE (request to exit) button.. Monitoring of the digital inputs can be activated in the software. This makes it possible to check for sabotage, short circuits, interference or bridging. In addition, there are two freely configurable relay outputs for door operation, signals and so on.

• **Versatile.** The AP1007 can supply power at either 12 or 24V DC for electrical or magnetic locks. This power supply can be monitored continuously for short circuits and voltage variations. An alarm signal can be generated in the event of any sabotage attempt.



Mifare detection antenna

More information about Nedap's RefleXS 130M Mifare antenna can be found in the corresponding product specifications.

Multifunctional combi-cards

The Nedap Combi-card contains a dual system with the Nedap UniXS chip and a Mifare chip. For maximum security, the reader verifies the Nedap Combi-card in two steps; by reading the CSN number with Mifare and checking the sectors. The card can further be enhanced with a contact chip and a magnetic strip or barcode.

Status indication and self-testing

All relevant status information is shown in a clear and comprehensive way with LED indicators. This enables you to check the status and operation of the AP1007 at a glance. Moreover, the AP1007 is equipped with ALT mode, a local self-testing function that checks the connected contacts, antenna and locks. This way, you can always check whether everything is properly connected and working, even when the network connection is not available. After completion of the local self-test, the AP1007 automatically returns to operational mode.

Reliable status checks and reports

The operational status of the inputs and the output (relay 1) is checked constantly. Any unforeseen changes can be signalled

See overleaf for technical specifications >>

immediately by means of an alarm. The system can record and display a variety of events, such as manual entry, sabotage attempts and short circuits.

Ease of installation and management

The AP1007 can be mounted on a DIN rail and it is hot-swappable. On installation, or in the event of a malfunction, it is simple to check whether modules are correctly or need replacing. After a brief and basic training session, your technical staff can install the hardware and check that the connections are operational. This can be done even when the network is not available. Because the status of the AP1007 can be viewed and analysed remotely, any malfunctions can be restored faster and more efficiently.

A suitable reader for every situation

Apart from the AP1007 Mifare reader, AEOS offers the AP1001 Proximity Reader with a range of up to 40 cm, the AP1002 Hands-free Reader with a range of up to 150 cm, the AP1003 Reader Interface (with which most current card reading technologies can be integrated), the AP1009 DuoProx Reader (for monitoring 2 doors or for secure and easy entry and exit registration) and the AP1005 MaXS Hands-free Reader, which combines hands-free use with multiple DES encryption.

Technical specifications AP1007



Product number	9839690	
Detection range	Up to 50 cm (depending on the passive ID card (with no battery) and environmental factors)	
Housing	Aluminium and plastic	
Dimensions	230 x 126 x 70 mm ³ (LxWxH) - excl. DIN rail	
Interface	RS232, 3 x 0.25 mm ² , shielded; max. cable length 15 metres	
Weight	~600g	
Temperature	Operating temperature: 0 - 55°C; storage: -30 - 65°C	
Power consumption	250 mA maximum, excluding lock	
Cabling	AEBus	Max. 5 m; 300 m maximum with AX2002 AEBus extender (powered)
	AEBus cable	2 x 2 x 0.5 mm ² , shielded
Contacts and sensors	Max. 100 m, n x 0.25 mm ²	
Antenna connection	Antenna: Coax RG58U, max. 30 m	
LEDs	LEDs: 3 x 0.25 mm ² , shielded; max. 30 metres	
Input ports	Four; monitored, freely definable, intended for potential free contact	
Output ports	Two; potential free NO / COM / NC contact with configurable functions; Out1 monitored. + 12V DC / 24V DC switchable, max. 0.5A	
Supported antennae	RefleXS 130M Mifare	
Cards and transponders	Mifare	

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