

EMI-Lock

Type III MIFARE

No.: 925-465-00

For software version 5.5 or later
v. 2.1



Description

A completely new electronic handle by apra-optinet allows to increase the safety of server cupboards and IT equipment with full flexibility to meet customer needs.

The most important features

- Possibility of reconfiguration and expansion in the future without the need to replace the handle,
- Mechanically compatible with the most popular types of holes: 150x25 and 200x25mm,
- Possibility of using both 1-point and 3-point type closures,
- Opening control through the EMI-One access control system or other,
- Integrated RFID reader operating in MIFARE standard,
- Built-in optical opening sensor for high reliability,
- Insert for the standard key acting as an emergency opening,
- Opening system based on servo motor instead of the coil allows reduction of generated electromagnetic disturbance,
- Possibility of selection of the locking code configuration - individually, in groups, a master key

Technical data

Power supply	12-24V, DC, typ. 12V DC
Power consumption	150mA
Electrical connectors	7-pin WE, 4-pin (RS485)
Supported protocols	1-Wire, Wiegand 26-bit*, Wiegand 34-bit* *Requires activation on factory level
Built-in RFID reader	Yes, 13.56 MHz
Type of cards supported	MIFARE: ULTRALIGHT C, DESFIRE EV1, other compliant with ISO14443A
Casing	plastic
Permissible temperature range	from 0°C to 40°C
Permissible humidity range	from 10% to 90%, non-condensing
Dimensions	215x37.5x51mm
Weight	136g handle, 325g set
Casing colour	black
Accessories	electrical harness 5m, user manual, set of mounting brackets
Certifications	CE, RoHS

Description of operation

After connecting the device to the power supply, the device is ready for operation and automatically switches to the safe - closing mode.

Unlocking the mechanism is activated by providing ground signal (GND) to the control line (yellow). Optionally, the logic levels can be changed to (5/12V) on demand. The minimum duration of the opening impulse is 100ms. If the control line is constantly connected with GND (or optionally 5/12V), the mechanism will remain open - this allows you to achieve the function of constantly open lock, e.g. in a range of hours. Disconnection of the control circuit automatically closes the handle within 10 seconds. The state of the lock is simultaneously represented by the change in the state on the Open Collector type position sensor line (grey wire) as follows:

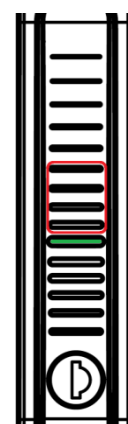
- Open circuit - open handle
- Closed circuit (short to GND) - closed handle

The handle status is signaled by the built-in LED. The default indication logic has been described below :

- **Green** - mechanism in the safe mode - closed
- **Red** - mechanism in the open mode
- *Alternately flashing **green/red** - alarm condition (EMI-One control module - if connected)

It is possible to change the LED indication logic at factory configuration level.

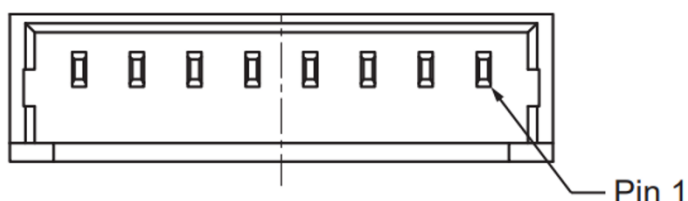
The RFID reader module was placed inside the handle at the height of the LED, in the area marked in the figure below. To authorize with a card, connect to the EMI-One master module, and then bring the card closer to marked place. The handle has the mechanism protecting against repeated reading of the same card - between subsequent readings, the RFID card/tag should be removed from the reader's reach (about 5 cm) for at least 1 second.



Description of connection

CONNECTOR DESCRIPTION - HANDLE

No.	Color		Signal	Comments
1	blue		Power supply	Permissible supply voltage is 12-24V DC
2	yellow		Control signal (opening)	Contact with the GND or optionally (5/12V) activates the opening
3	grey		Handle position sensor	Open Collector output
4	green		EMI Module Line 1 \ D0*	* Open Collector output
5	pink		EMI Module Line 2 \ D1*	* Open Collector output
6	white		EMI Module Line 3	Connect only with the EMI-One SE / EMI-Pro module!
7	brown		Ground (GND)	

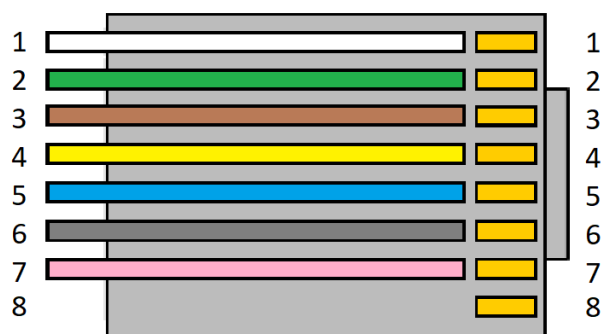


The maximum allowable voltage on terminals 4-6 is 5V, terminals 2-3 – 12V. Over-voltage will result in damage to the control module!

Maximum allowed current on Handle position (pin no.3) is 100mA.

CONNECTOR DESCRIPTION EMI-One SE / EMI-Pro

No.	Color		Signal	Comments
1	white		EMI Module Line 3	Connect only with the EMI-One SE / EMI-Pro module!
2	green		EMI Module Line 1 / D0*	Input / * Open Collector output
3	brown		Ground (GND)	
4	yellow		Control signal (opening)	Contact with the GND or optionally (5/12V) activates the opening
5	blue		Power supply	Permissible supply voltage is 12-24V DC
6	grey		Handle position sensor	Open Collector output
7	pink		EMI Module Line 2 / D1*	Input / * Open Collector output
8	----		-----	-----



*Custom (special) variants only. For further information, please contact us at the following address: service@apra-optinet.pl

Mechanical assembly variants

