

# SMARTair® i-reader

Wireless Online, Update on Card & Openow

## Next generation wall reader for Update on card, Wireless system and Openow

Suitable for doors, turnstiles, barriers, elevators or any access in which the locking or blocking element is automated.

The wall reader is managed by a Control Unit / Relay Board. The new i-reader is offered in two sizes: wide (i-reader and i-reader Keypad) and narrow (i-reader Design), ensuring a suitable i-reader for each site.



i-reader

i-reader Keypad

i-reader Design



Control elevator access to up to  
40 floors with all i-reader models

## Control Unit / Relay Board

Mounted in the secure area inside the building.

The Control Unit / Relay Board enables precise electrical control of the locking mechanism. Thanks to its design, the relay is physically separated from the reader. Secure, encrypted communication between the two ensures protection against unauthorized access.



# SMARTair i-reader

## Specification



### Technical data and features



#### General information

|                       |                                                                                |
|-----------------------|--------------------------------------------------------------------------------|
| <b>Traffic volume</b> | High                                                                           |
| <b>Exterior usage</b> | IP56 (Wall reader)<br>Up to 85% humidity without condensation –20 °C to +70 °C |
| <b>Keypad</b>         | Capacitive and backlit keypad                                                  |



#### Electrical specification

|                     |                                                                                                                                                                                          |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Power supply</b> | 12–24 V AC / V DC: powered through control unit / relay board<br>Max power consumption (reader + Control Unit / Relay Board): 300 mA @ 12 V / 150 mA @ 24 V<br>Power supply not included |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



#### Credentials

|                                    |                                                                                       |
|------------------------------------|---------------------------------------------------------------------------------------|
| <b>Multi-technology</b>            | MIFARE Classic and Ultralight<br>ISO 15693<br>DESFire EV1, EV2 and EV3<br>Mobile Apps |
| <b>Compatible mobile solutions</b> | Openow® (Bluetooth Low Energy)<br>TESA SMARTair                                       |
| <b>Multi-authentication</b>        | Yes. RFID and PIN. Only RFID. Only PIN. RFID + PIN (or PIN + RFID).                   |



#### Operation

|                                   |                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Control Unit / Relay Board</b> | Board, with one relay to manage the door blocking device and two voltage-free extra inputs for: <ul style="list-style-type: none"> <li>• Request to exit button</li> <li>• Door sensor</li> <li>• It can be connected to an 8 relay board. Up to 5 relays board in series can control up to 40 floors</li> </ul> |
| <b>Upgradability</b>              | Wall readers can be upgraded on the field: <ul style="list-style-type: none"> <li>• To Openow-BLE by Openow activation card/s; no extra hardware required</li> <li>• To Wireless Online by adding RF module to Control Unit / Relay Board</li> </ul>                                                             |



#### Certifications

|                                |                       |
|--------------------------------|-----------------------|
| <b>Market</b>                  | CE (EMC, R&TTE), UKCA |
| <b>Substances and disposal</b> | ROHS, REACH, WEE      |
| <b>External conditions</b>     | IP56 and IK09         |

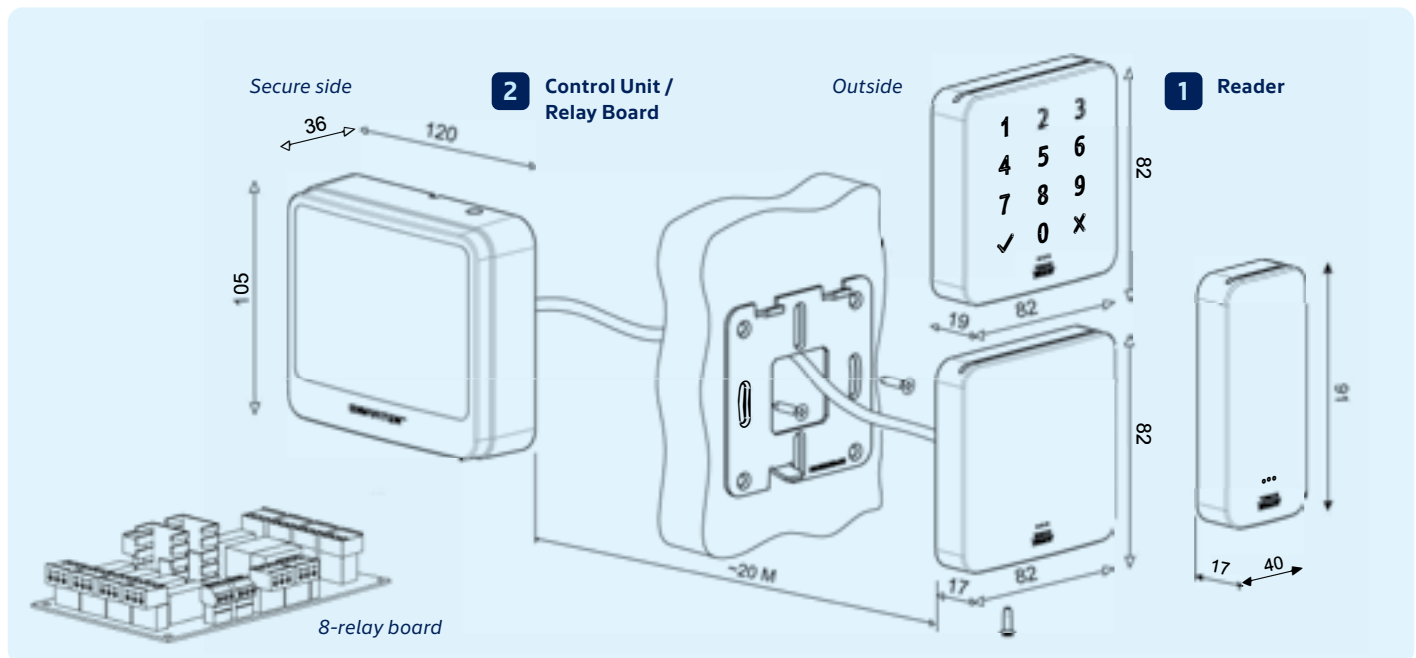


#### Installation

|                                                |                                                                                                                                                                                                                     |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mounting</b>                                | Reader module is compatible with standard electrical boxes<br>A back plate is included in the i-reader and i-reader Keypad models if surface mounting is needed                                                     |
| <b>Hardware compatibility and installation</b> | <ul style="list-style-type: none"> <li>• To be combined with electromechanical devices to unlock the door (e.g. electric strike plates, electromagnetic locks)</li> <li>• Voltage free relay. Output: 5A</li> </ul> |
| <b>Connections</b>                             | CAT5e UTP cable or higher between reader and Control Unit / Relay Board<br>Cable not included                                                                                                                       |

# SMARTair i-reader

## Technical drawings and Electronic technical characteristics



### Reader module

- Reading distance: 2–4 cm read/write distance standard RFID credentials. Barriers and gates open when a valid Openow credential is used up to 5 metres away
- 3 PIN connection is available to connect the via portable programmer, PC-To-Lock or i-programmer App
- RFID reader with configurable LED (green/red/blue) and sound buzzer for different warning signals: access authorized or denied, etc.
- Capacitive and Backlit keypad – lights up on touch and fades out, perfect for low-light areas

### Control Unit / Relay Board

- Upgradeable firmware
- Non-volatile memory

#### The wall reader can be programmed to operate in 3 modes:

- Extended mode: 6500 users and 1200 events
- Normal mode: 3000 users and 1200 events
- High traffic door: unlimited number of users filtered into 48 groups (permissions)

#### Real-time clock and calendar:

- 30 time zones with 5 time periods (week days and holidays selectable)
- 365-day calendar for defining holidays
- Automatic DST: Daylight Saving Time change, updated with calendar
- Maintains clock/calendar for 8 hours without power supply



# SMARTair i-reader

## Electronic technical characteristics



### Operating modes:

You can configure up to 20 changes of operating modes per door per day (state tables):

- **Standard:** Default operating mode. Closed until valid credential (RFID or mobile) or user PIN presented, then allows to open the door for 1 to 240 seconds (configurable)
- **Keypad mode:** PIN only. The door remains locked until a valid PIN is entered on the keypad, then unlocks
- **Passage mode:** Door is always in open mode (configured by time zones or by authorized user after double badging)
- **Double user:** Two valid credentials needed to open the door
- **First user:** Door in standard mode until first valid user enters, then will remain in passage mode
- **Card + PIN Mode:** Requires both RFID credential and associated PIN. The door remains locked until both are presented, then unlocks
- **PIN + Card Mode:** Requires PIN entry first, followed by the associated RFID credential. The door remains locked until both are provided, then unlocks



### Special features:

- People with disabilities (PWD): Standard with double opening time
- Models for elevators in buildings with up to 40 floors



### Wireless online:

RF Module (connected to Control Unit / Relay Board):

- 868 MHz, 902 MHz, 915 MHz or 922 MHz selectable in field
- 30 configurable channels
- Auto-link with communication Hubs (easy setup)



### Openow:

Low Energy Bluetooth 5.1



### Mounting:

- The Control Unit / Relay Board is supplied in a box that allows surface mounting

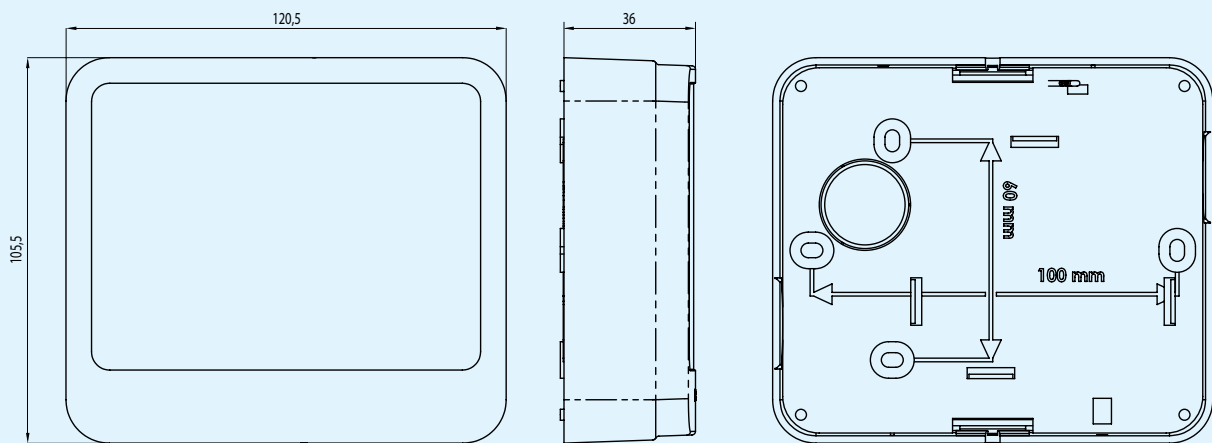
# SMARTair i-reader

## Electronic technical characteristics



### Connections:

- Connector for reader
- Power supply 12–24 AC / V DC connector
- Door position (sensor not included): Intrusion or door left open will be reported
- Request to exit (push button not included)
- 1 output relay (NO, C, NC) to command the electrical / electromechanical door device
- Voltage free relay. Output: 5A
- Wireless RF module connector
- Connector for 8-relay board (available in specific i-reader models)



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