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## PRODUCT INFORMATION



**Reference :** FD-020-224



**Protocols :** RS485, Wiegand



Technologies : Mifare Plus, Mifare Classic, Desfire, BLE

## DESCRIPTION

The Wiegand/RS485 P40 proximity reader is a bi-protocol key reader.

Thanks to a switch, it switches from Wiegand open protocol to FDI secure, proprietary protocol.

By default, this reader only processes FDI secure Mifare® Plus keys/passes (FD-010-200). It has a 58-bit Wiegand output.

Its behaviour and its output format can be modified by encoding on the settings tool, then showing a configuration key/pass to the reader.

With its up-to-the-minute design, it can be easily integrated in your commercial and residential projects. In addition to Mifare® RFID technology, this reader offers the opportunity to work with Bluetooth virtual credentials.

## KEY CHARACTERISTICS

- High security and easy installation with the RS485 output based on mode used
- Wiegand open protocol via the mode switch
- Mifare® Classic and Mifare® Plus proximity reader (AES 128 bit encryption)
- All Mifare® (light, Classic, + and DESFire) can be read for an optional charge
- Secure Bluetooth read technology for access with virtual credentials (RS485 only)
- Integrated LEDs
- Surface-mounted with terminal output – IP65 (provided installation instructions are complied with)
- Firmware updated online and remotely (RS485 only)

### Power supply

The P40 RFID reader draws its power supply from the FDI access controller.

### Communication

The proximity reader is connected via 5 wires (RS485) and up to 8 wires (Wiegand).

In RS485 mode, communication is two-way and permanent with the iPassan access controller LPU. The controller is real-time aware if the reader is connected.

## Updating firmware

P40 key reader firmware can be updated via iPassan Manager software in RS485 mode.

## TECHNICAL CHARACTERISTICS

### Power supply

Operating voltage: 12V supplied by the controller

### Outputs

- Wiegand outputs: Up to 8 wires (including the 2 power supply wires)
- RS485 output: 5 wires (including the 2 power supply wires)
- Max. cable length: 100 m – 8/10 AWG20 // 1,000 m – 6/10 AWG24 RS485 (local power supply)
- Frequency: 13.56 MHz (Mifare® Classic, Mifare® Plus and DESFire) + Bluetooth Low Energy (BLE)

### Read distance

- Mifare® Classic: Up to 40 mm
- BLE : based on mode and settings

### LEDs

- 3 colors
- Managed via the controller software

### Temperature

- Operating temperature: -20°C to 60°C
- Storage temperature: -20°C to 70°C
- Humidity : 85 RH max.

## PROTECTION RATING

- Protection rating: IK10

- Waterproof rating: IP65

### Size

- Size (L x l x H): 90 mm x 47 mm x 23 mm
- Weight: 65g

### COMPLEMENTARY ASSOCIATED PRODUCTS

- FD-010-213 : BLE credit
- FD-010-158 : Proximity key – Pack of 10 – Mifare® Plus
- FD-010-080 : MASTER – Proximity key
- FD-010-142 : Event management key