



PRODUCT INFORMATION



Reference : FD-020-241



Protocols : RS485, Wiegand



Technologies : Mifare Plus, Mifare Classic

DESCRIPTION

The FD-020-241 reader is specially designed to be mounted in a 40 x 40 front housing. It has two output protocols. Thanks to a switch, the output switches from Wiegand to RS485.

The RS485 mode is specially developed for iPassan and increases the reader-controller distance to 1,000 m compared to 100 m for Wiegand.

In Wiegand mode, the reader is compatible with a wide array of controllers on the market.

Key/reader security is optimal as FDI Mifare® Plus keys are used. These keys boast production-encoded AES 128 bit security that the Alpha reader checks when reading the key.

Finally, this reader is totally configurable via the web portal <https://partner.fdimatelec.com/>

The Wiegand output format, the LED behaviour as well as the type and security of the keys/passes to manage is defined on the screen and then encoded in a configuration key/pass that is also secure.

When this configuration key is shown to the reader, the reader integrates the new settings.

KEY CHARACTERISTICS

- Reader compatible with FDI Mifare® Classic and Mifare® Plus (AES 128 bit encryption)
- Configurable Wiegand protocol
- Integrated LEDs and buzzer
- Firmware can be updated remotely in RS485 mode

Power supply

The 40 x 40 OEM reader draws its power supply from the FDI access controller.

Communication

In RS485 mode, the reader two-way communicates permanently (FDI protocol) with the iPassan controller. As such, the controller is real-time aware if the reader is connected as well as its status. In Wiegand mode, the reader sends a frame to the connected controller as soon as a recognized key/pass is presented.

Updating firmware

Wiegand / RS485 Sinthesi S2 reader firmware can be updated via iPassan Manager software (RS485 mode only).

TECHNICAL CHARACTERISTICS

Power supply

Operating voltage: 12V supplied by the controller / or by third-party RS485-mode supply

Outputs

- Wiegand output: up to 8 wires
- Max. cable length: 100 metres
- Frequency: 13.56 MHz (Mifare® Classic and Mifare® Plus)

Read distance

- Mifare® Classic: up to 30 mm depending on the key/pass
- Mifare® Plus: up to 20 mm depending on the key/pass

LEDs

- 3 colors: blue, red and green.
- Behaviour adjustable via iPassan Manager (RS485)

Temperature

- Operating: -20°C to 50°C
- Storage: -20°C to 70°C
- Humidity : 85 RH max

Size

- Size (L x l x H) : 60 mm x 60 mm x 16 mm
- Weight: 52g

COMPLEMENTARY ASSOCIATED PRODUCTS

- FD-020-240 : 40x40 OEM reader