



Wiegand Interface - 4 units DIN rail

Functional characteristics

The FD-WA01 allows to connect any third party's reader with a standard wiegand interface output. With FD-WA01 an existing Access Control system can be replaced by OrangeLink saving the already installed readers. The FD-WA01 can also be used to integrate into the OrangeLink system particular readers for specific applications like long range proximity readers, readers for very harsh environment, explosion proof readers, etc. The FD-WA01 can be easily configured by the XAtlas software to read standard 26 bits wiegand format or other configurable formats..

- ◆ Can be mounted on DIN rails
- ◆ Visual fault and/or alarm indication
- ◆ Connection to FD-BUS through an RJ45 connection
- ◆ Double RJ45 connector (internally in parallel) for easy reconnection to the FD-BUS.
- ◆ Galvanic separation of the FD-BUS backbone from the local reference ground
- ◆ 1 wiegand input
- ◆ 3 open collector outputs to connect LEDs and buzzer of the connected reader
- ◆ 1 tamper input from the connected reader
- ◆ Power supply to the connected reader (12 Vdc, 500 mA)

Protection

The equipment is protected against the following events:

- ◆ polarity reversal on the cables (RJ45) connecting to the FD-BUS
- ◆ voltage surge in the power supply
- ◆ negative voltage peaks at outputs with inductive loads

Modes of Operation

- ◆ The FD-WA01 module is part of the OrangeLink system and can perform the data acquisition functions from any reader with a standard wiegand output. It has also three outputs to control the LEDs and buzzer of the connected reader. The wiegand interface can be programmed to accept the standard 26 bits format or the 35 (Corporate 1000 HID[®]), 37, 40 bits formats.

Visual indicators

The FD-WA01 module can give the user indications by means of:

- ◆ a red LED
- ◆ a yellow LED
- ◆ a green LED

The most common indications are as follows:

- ◆ Green LED, lit steadily when in operation
- ◆ Red LED, lit steadily in the event of an alarm and/or fault
- ◆ Yellow LED, flashes during communication (one flash per message)

Parameter	Description
Dimensions	62x95x59 mm (4 DIN units)
Weight	106g
Mounting	On DIN rail
Power supply: internal circuit	From 8V _{DC} to 14V _{DC} 48 mA nominal (at 14V _{DC})
Power supply: optically isolated section on FD-BUS	From 8V _{DC} to 14V _{DC} 0.8 mA nominal (at 14V _{DC})
Processor	P89C662 Philips at 11.0592 MHz
Connections	Power supply input FD-BUS (2 RJ45s in parallel) Wiegand interface Tamper input
Operating temperature	0 ↔ 50°C
Relative humidity	Up to 90% without condensation
FD-BUS connection	2 RJ45 ports in parallel Differential RS485 serial interface Baud rate (nominal) 11,5000 baud Optically isolated floating ground (500V insulation)
Address selector	From 0 to 63 through binary coding on 6 DIP switches
Indicator signals	Alarm LED (red) Communication LED (yellow) Operation LED (green)
Other functions	Protection against reversed polarity at input Tamper switch for alarm if casing is opened Functional diagnosis of outputs with alarm indicator in the event of faults
Compliance	 Directives 89/336/EEC, 93/68/EEC, 92/31/EEC EN60950, EN 55022, EN 55024