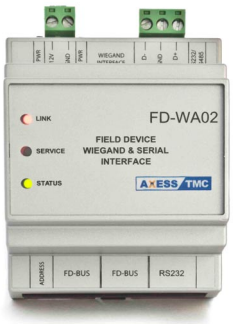
OrangeLink

FD-WA02



Wiegand & serial I/F - 4 unità barra DIN

Functional characteristics

The FD-WA02 is a module designed for interfacing the OrangeLink system with external devices by means of a serial line (RS232 or RS485 or Wiegand).
The module has the following characteristics:

- Designed for mounting on DIN rails
- Capable of interfacing with a full duplex RS232 line (standard levels) with speed of 300 baud to 115 Kbaud.
- Capable of interfacing with a half duplex RS485 line with speed of 300 baud to 115 Kbaud.
- Capable of interfacing with a Wiegand line with speed of 10 bps to 20 kbps.
- Management of status LEDs for an external Wiegand reader (LED GO, LED STOP, Buzzer)
- Visual fault and/or alarm indication
- Connection to FD-BUS through an RJ45 connection
- Double RJ45 connector (internally in parallel) for easy branching of the FD-BUS connection
- Galvanic separation of the FD-BUS backbone from the local ground reference
- Possibility of connecting the -FD-BUS remote power supply to the local power supply by means of jumpers.

Protections

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

Modes of Operation

FD-WA02 module forms part of the Orangelink link system and is capable of controlling serial printers, acquiring data from Wiegand readers and interfacing with biometric modules, turnstiles, etc.
The asynchronous serial channel can be configured by means of jumpers in two different and mutually exclusive modes:

- RS232
- RS48

The Wiegand synchronous serial channel is always active

Visual indicators

FD-WA02 can give signals to the user by the following means:

- green LED
- red LED
- yellow 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)

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FD-WA02

Parameter	Description
Dimensions	105x69x55mm (4 DIN units)
Weight	110g
Mounting	On DIN rail
Power supply: internal circuit	From 8VDC to 14VDC 75mA rated (at 14VDC)
Power supply: optically isolated section on FD-BUS	From 8VDC to 14VDC 0.8mA rated (at 14VDC)
Processor	Philips P89C669, 11,0592MHz
Connections	• Input for local power supply • FD-BUS (2 RJ45s in parallel) • Wiegand input • RS232 serial interface • RS485 serial interface
Power supply In	Terminal block (removable) Voltage: From 8VDC to 14VDC Current: up to 1 Amp
Wiegand interface	On RJ45 connector • Wiegand inputs (0 and 1) TTL level protected against overvoltage up to +14V • Open collector outputs (3) for managing LEDs/buzzers (14V max, 100mA max) • Power supply for reader 14V 350mA max
RS232 interface	On RJ45 connector • Level inputs -16V…+16V • Level outputs -8V…+8V, 22mA max • Speed from 300 baud to 115200 baud
RS485 interface	On removable terminal block • Differential input (levels -7V…+12V) • Differential output (levels 0V…+5V) 90mA max • Speed from 300 baud to 115200 baud
Serial port selector	Serial port selection by means of jumper • RS232 (jumper inserted) • RS485 (jumper removed)
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) 115000 baud Optically insulated floating ground (500V insulation)
Address selector	1 to 16 by rotary switch selector.
Indicator signals	Red LED for communication on serial port Yellow LED for communication on FD-BUS Operation LED (green)
Other functions	• Jumpers to allow remote power supply by FD-BUS • 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	CE Directives 89/336/EEC, 93/68/EEC, 92/31/EEC EN60950, EN 55022, EN 55024