



## FX-DU-10

Security and access control door unit

- 8 alarm loops
- 2 digital outputs
- 2 external entrance card readers
- IP55, non flammable casing



### Security from front to back door

The DU-10 door unit can be connected to actuator / solenoid controls (open or close locks, day/night mode) and alarms related to the entrance area (push-to-open buttons, movement detection, magnetic contacts, ...) totalling 8 inputs. In addition, the door unit can be connected to two different RFID readers, and to the Fidelix Building Automation system through a Modbus loop (RS-485).

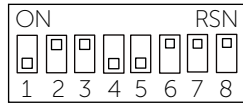
The points connected to the door unit are then displayed in the control room, just like any other point connected to the system. The unit is, within some limits, freely programmable and adjustable to meet every individual customer's needs.

### Technical features

Size (with casing):	110mm x 110mm (x 65mm height)
Operating voltage:	16-26VDC
Operating temperature:	0 to +50°C
Maximum load (per relay):	1 A / 30 VDC

**Modbus address:** The address of the DU-10 module is set by changing the position of dip-switches 1-6. Each dip-switch represents a binary value, as indicated on the module: dip-switch 1 (ST1) = 1, dip-switch 2 (ST2) = 2, dip-switch 3 (ST4) = 4, dip-switch 4 (ST8) = 8, dip-switch 5 (ST16) = 16, dip-switch 6 (ST32) = 32.

**Example:** To set the Modbus address of the module to 38, set dip-switches 2, 3 and 6 to ON, and dip-switches 1, 4 and 5 to OFF (dip-switch 2 = 2, dip-switch 3 = 4, dip-switch 6 = 32.  $32+4+2 = 38$ ).



**Modbus speed:** The DU-10 module communicates, using the Modbus RTU protocol over a serial RS485 connection with 8 databits, no parity and 1 stop bit. To set the Modbus speed at which the module sends and receives

Comm. speed	Dip-switch 7	Dip-switch 8
9 600 bps	OFF	OFF
19 200 bps	OFF	ON
38 400 bps	ON	OFF
57 600 bps	ON	ON

data, set dip-switch 7 and 8 as indicated in the table on the right.

On the last module in the Modbus loop, the loop must be closed by connecting a 120 Ω resistor between the A and the B side of the RS-485 loop. This can be done using the module's own terminating resistance by closing the built-in jumper next to the Modbus connectors.

**Relays:** The 2 relays have a maximum allowed throughput of 1A at 30 VDC. Connect a normally open circuit to connectors 31-32 and 34-35, or connect a normally closed circuit to connectors 30-32 and 33-35.

**Digital Inputs:** The 8 digital inputs have 5V on the uneven numbered connectors from 61-75.

**Connecting the key card readers:** Use Idesco Access 7C2 or 7C2pin in combination with the DU-10 and connect as follows:

yellow: control alarm (40/50), brown: control red LED (41/51), blue: control green LED (42/52), grey: RS232 TxD (43/53), pink: RS232 RxD (44/54), red: power supply + (45/55), black: power supply 0V (46/56)

