

Access Terminal IF-800

1 Slave Terminal IF-800

We are pleased that you have decided to use a device from the IF-800 series for recording access data.

Scope of delivery:

- IF-800 terminal (slave)
- I/O controller board for controlling locking devices
- Terminal board
- Material required for mounting in a DIN appliance case

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Please check the completeness and condition of the shipment upon receipt.



1.1 Intended Use

Terminals of the IF-800 series are designed for controlling access as well as for controlling and monitoring locking devices. Any other use is not in accordance with the intended purpose and is therefore not permitted.

2 Risk of Electric Shock





Danger to life due to electric shock

People can be seriously hurt or killed through physical contact with live parts (e.g. 230 V~). Make sure that you cannot touch live lines during installation. Disconnect devices from the mains power supply.

Please observe the accident prevention regulations and take all precautionary measures to ensure the safe installation of the devices.

- Connection to power supply voltage and initial operation may only be carried out by qualified persons trained in electrical engineering.
- The electrical installation, in which the device is to be operated, must comply with national standards. To guarantee trouble-free operation, we recommend carrying out the electrical installation according to the principles of a TN-S system, which means using separate neutral and grounding conductors.
- Secure the power cable with a strain relief, if necessary.
- The device must be connected via an external separator to ensure that it can be disconnected from the mains power supply.
- The device must be equipped with an external fuse protection with a maximum nominal current of 16 A.

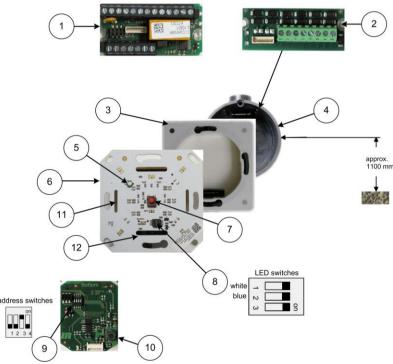
3 Function

Access terminals of the series IF-800 are part of an access control system. They are preferably installed directly next to locking devices. In general, they are connected with an RS-485 data cable to a master terminal, access manager or terminal controller. Terminals of the series IF-800 are designed for controlling the access of persons who identify themselves with RFID identification media as well as for controlling and monitoring locking devices.

We recommend:

- installing a separate, fuse-protected circuit,
- keeping a minimum distance of 30 cm between the device and other systems with RFID readers,
- keeping a distance of 10cm between connecting cables and power lines.

4 Installation into an Appliance Case



| 1 | I/ O controller board installation in protected area | 7 | Anti-tamper switch |
|---|--|----|---|
| 2 | Terminal board | 8 | DIP switches for light emitting diodes |
| 3 | Protective cover | 9 | Address switch |
| 4 | DIN appliance case | 10 | MPU board |
| 5 | Adjusting screw for reader adjustment | 11 | narrow cutout |
| 6 | RFID reader | 12 | wide cutout must be at the top and bottom |

The terminal strip board is mounted into the DIN appliance case with the adhesive tape supplied.

5 Shielded Cables

To ensure malfunction-free operation, we recommend the use of shielded bus cables.

Operation is also possible with unshielded cables. In case of transmission problems, you will have to examine the reasons in each individual case. Where necessary, a shielded cable should be used for the connection of the respective devices.

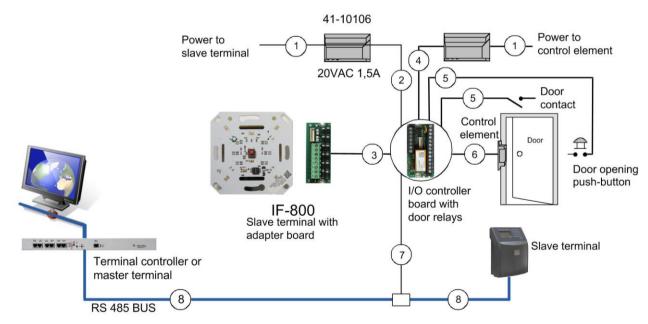
6 Installation

- 1. Install all cables. Use the correct cable types. See: Function of the Cables and Cable Types
- 2. Plaster the appliance case into the wall at the installation site. Make sure that the screws of the case are at the top and bottom.
- Make electrical connections.
- Fasten the terminal strip board into the appliance case (see NOTE below).
 Connect the power supply
- Connect the data cables
- Connect the actuators and any required feedback sensors
- 3. Set the device address
- 4. Install the terminal Mount the IF-800 terminal into the appliance case so that the large cutouts of the reader are at the top and bottom.
- 5. Switch on the operating voltage
- 6. Initiate operation and check the device functions
- Adjust the reader
- Set the LEDs
- 7. Mount the front design panel so that the Interflex logo is at the top

The I/O controller board must not be installed inside the appliance case due to the risk of manipulation or tampering.

Install the I/O controller board in a secured area.

6.1 Electrical connections

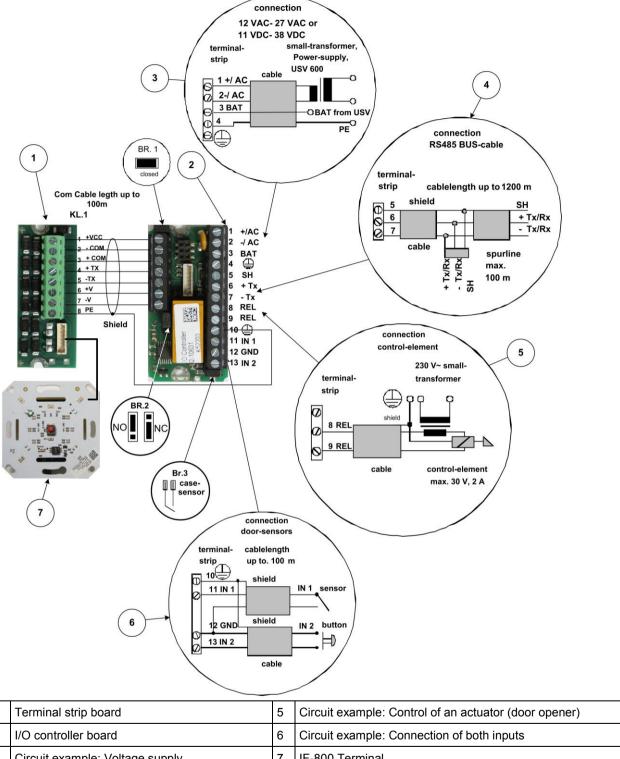


6.1.1 Cable Functions and Cable Types

| | Cable Function | Max. Length | Recommended Cable Type |
|---|--|-------------|--------------------------------------|
| 1 | Voltage supply 230 VAC to power transformer 20 VAC 1.5 A (order number 41-10106) | | NYM 3 x 1.5 mm ² |
| 2 | Low-voltage cable | | J-Y(ST) Y 4x 2 x 0.6 mm ² |
| 3 | Shielded cable from terminal strip board to I/O controller in secured area | 100 m | J-Y(ST) Y 4x 2 x 0.6 mm ² |
| 4 | Voltage supply to actuator | | J-Y(ST) Y 4x 2 x 0.6 mm ² |
| 5 | Connection cable to floating sensors | 100 m | J-Y(ST) Y 2x 2 x 0.6 mm ² |
| 6 | Connection to actuator (up to max. 30 V, 2 A) | | J-Y(ST) Y 4x 2 x 0.6 mm ² |
| 7 | Spur line from bus to installation site | 100 m | J-Y(ST) Y 4x 2 x 0.6 mm ² |
| 8 | RS485 bus cable | 1,200 m | J-Y(ST) Y 4x 2 x 0.6 mm ² |

Install the power supply line in duplicate (one conductor pair each). The protective ground conductor should likewise be installed in duplicate and, in doing so, the drain wire can also be installed.

6.2 Connections



| 1 | Terminal strip board | 5 | Circuit example: Control of an actuator (door opener) |
|---|-----------------------------------|---|---|
| 2 | I/O controller board | 6 | Circuit example: Connection of both inputs |
| 3 | Circuit example: Voltage supply | 7 | IF-800 Terminal |
| 4 | Circuit example: RS485 connection | | |

| BR.1 | For operation as I/O controller board (relay 1), the jumper is plugged in. For operation as an I/O expansion (relay 2), the jumper is removed. | |
|------|--|--|
| BR.2 | Normal open / Normal closed. This jumper is used to set the relay contact. Opening or closing contact. | |
| BR.3 | When the jumper is removed, an external anti-tamper switch can be connected. | |

NOTE

A shielded cable with a core diameter of at least 0.6 mm² must be used for the connection between the terminal strip board and the I/O controller board.

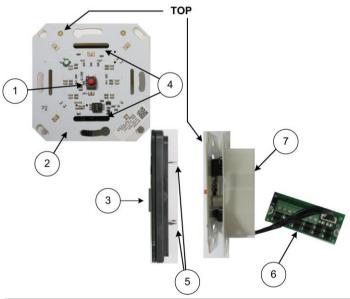
For security reasons, the I/O controller board should be mounted in a secured area.

6.3 Setting the device address

There is a 4-way DIP switch on the MPU board for setting the device address.

| Switch: | 1 | 2 | 3 | 4 |
|-----------|-----|-----|-----|---|
| Address 1 | OFF | OFF | OFF | OFF (not required if connected to master terminals) |
| Address 2 | ON | OFF | OFF | OFF |
| Address 3 | OFF | ON | OFF | OFF |
| Address 4 | ON | ON | OFF | OFF |
| Address 5 | OFF | OFF | ON | OFF |
| Address 6 | ON | OFF | ON | OFF |
| Address 7 | OFF | ON | ON | OFF |
| Address 8 | ON | ON | ON | OFF |

6.4 Installing the terminal



| 1 | Anti-tamper switch | |
|---|--|--|
| 2 | RFID board | |
| 3 | Design kit | |
| 4 | Large cutouts for latching the front panel | |
| 5 | Metal retaining clips for fastening in the front panel | |
| 6 | 7-wire cable from terminal to terminal strip board | |
| 7 | Protective cover | |

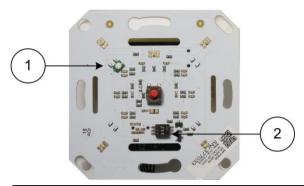
NOTE

Make sure that the lettering "TOP" on the IF-800 terminal is always on top. Only then can the design kit (accessory) be properly installed.

6.5 Adjusting the reader

Due to certain conditions at the installation site, it may become necessary to readjust the reader.

- After mounting the reader into the appliance case, adjust it using the adjustment set (order no. 75-99-0004).
- Turn the adjusting screw until the field indicator reaches maximum.



| 1 | Adjusting screw | |
|---|---------------------------------------|--|
| 2 | 3-pin DIP switch for setting the LEDs | |

6.6 Setting the LEDs

According to the design kit chosen, set the function of the light-emitting diodes using the 3 DIP switches on the front panel

| Design kit | Switch 1/white | Switch 2/blue | Switch 3 |
|--------------------|----------------|---------------|----------|
| Glass, white | OFF | ON | ON |
| Glass, black | ON | ON | ON |
| IF design | OFF | ON | ON |
| Third-party design | OFF | OFF | OFF |

7 Remote Placement of the I/O Controller Board

NOTE

To protect the I/O controller board against manipulation, it should be installed in a secured area.

It can, for example, be installed in a junction box together with the power supply. In such case, the terminal strip board must be connected directly to the terminal.

- A shielded cable should be used for the connection between the terminal strip board and the I/O controller board.
- The cable length may not exceed 100 m.
- Adhesive tape for fastening the terminal strip board in the appliance case is included in delivery.

8 Technical Specifications of IF-800

| Power Supply | | |
|-------------------|---|--|
| Low-voltage | 12 - 24 VAC/DC measured directly at the terminal | |
| Power consumption | Max. 4 VA | |
| Protection | Via PTC resistor | |
| Interfaces | RS-485; 9600/ 19200 baud (automatic configuration) | |
| Reader | RFID reader, MIFARE or LEGIC (depending on order) | |
| Read range | Up to 50 mm | |
| Sensor inputs | 4 floating sensors (2 per I/O controller board). | |
| Output relays | 2 relays with max. 30 V 2 A (1 per each I/O controller board) | |
| User information | Buzzer; Green and red LEDs (white and blue are not visible) | |

| General Data | |
|------------------------|--|
| Anti-tamper Switch | Activated when front panel (design kit) is removed |
| Ambient temperature | -25° C to +55° C |
| Humidity | Max. 95%, non-condensing |
| Dimensions (H x W x D) | 71 x 71 x 27 mm |
| Weight | Approx. 0.35 kg |

9 EU Declaration of Conformity



Interflex hereby declares that the products comply with the directives 2014/53/EU and 2011/65/EU.

The complete EU Declaration of Conformity is available at the following Internet address: www.interflex.de/en/header/downloads/ce_declaration_of_conformity.html

10 Disposal



Once its service life comes to an end, the device must be disposed of properly as electronic waste. The owner can dispose of the device himself or return it to the supplier.

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