IF-800/W02

1 IF-800/W02 Terminal (Slave)

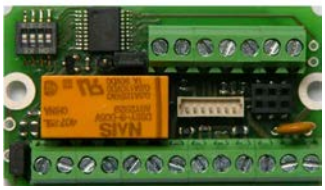
Thank you for choosing an Interflex system. With this slave terminal, you have purchased a reliable device for access control.

Scope of delivery:

The following is included in the package:

- W02 housing cover
- Reader housing with encapsulated RFID electronics and 5 m connecting cable
- I/O controller board with address switch
- Mounting plate for fastening
- Material for wall mounting

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



2 Function

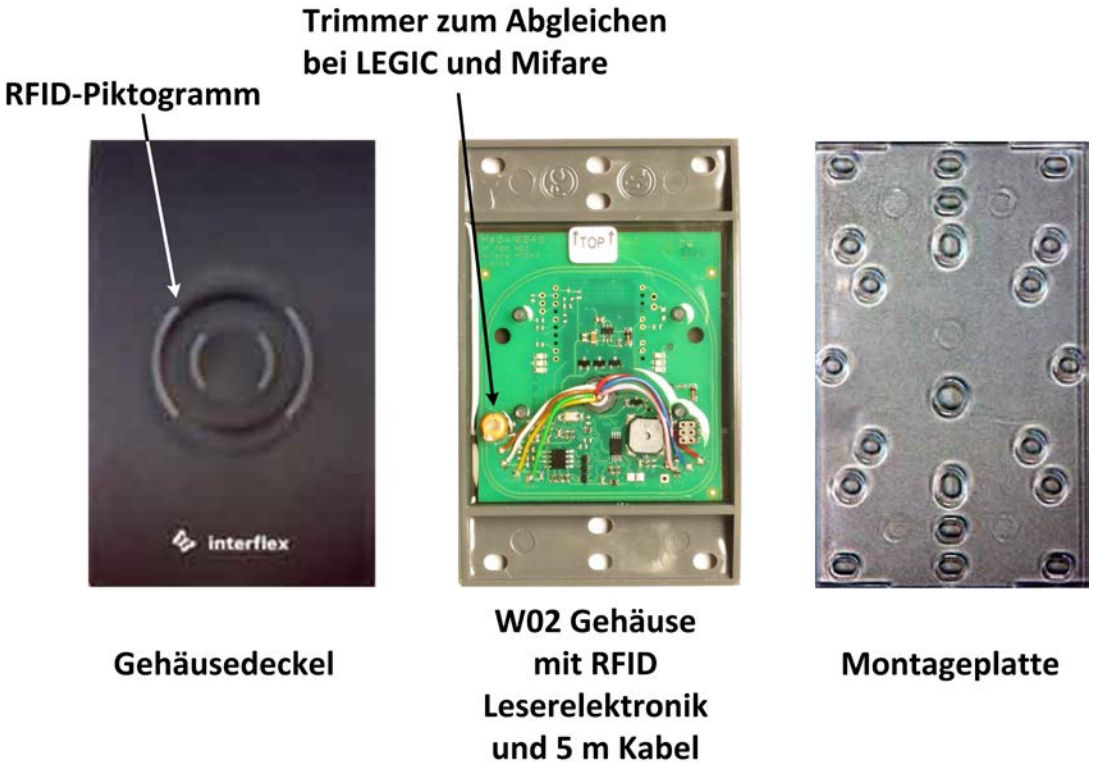
Slave terminals of series IF-800 W02 are used for:

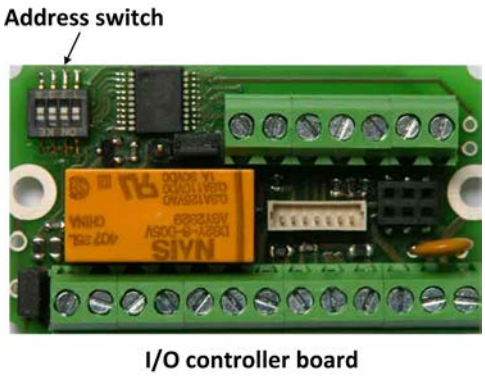
1. controlling the access of people who identify themselves via an RFID credential before entering a security zone.
2. controlling and monitoring locking devices that prevent uncontrolled (physical) access to security zones.
3. writing NetworkOnCard access rights. The data is used for identification at offline devices, e.g. PegaSys terminals.

A higher-ranking device, such as a terminal controller or a master terminal, is required for operation.

3 Hardware Components

The slave terminal consists of the following components:





I/O controller board

4 Shielded Cables

To guarantee trouble-free operation, we recommend the use of shielded cables.

Operation, however, is also possible with unshielded cables. Data transfer problems must be examined on a case-by-case basis. Where necessary, a shielded cable must be used for the corresponding devices.

5 How to Proceed During Installation

The following installation procedure has been proven and tested:

1. Install the electric cables required for operation.
2. Install the power supply.
3. Fasten the reader housing and the I/O controller board.
4. Set the address.
5. Connect the electrical cables.
6. Check the functions.
7. Close the W02 housing cover.

6 Electrical Connections

The figure below shows the electrical connections for door management and door monitoring. Installations without door monitoring do not require sensors (13) or opening push-buttons (12) and the cables can be omitted.

- All cables must be laid to the I/O controller board.
- The 5 m long reader cable (1) can be extended to 100 m.
- For information on the connection, see: (Connections on the I/O Controller Board).

10	Housing for the installation of power packs and the I/O board	12	Opening push-button or handle contact
11	Electric actuator up to 30 V, 2 A	13	Door sensor for monitoring the locking device

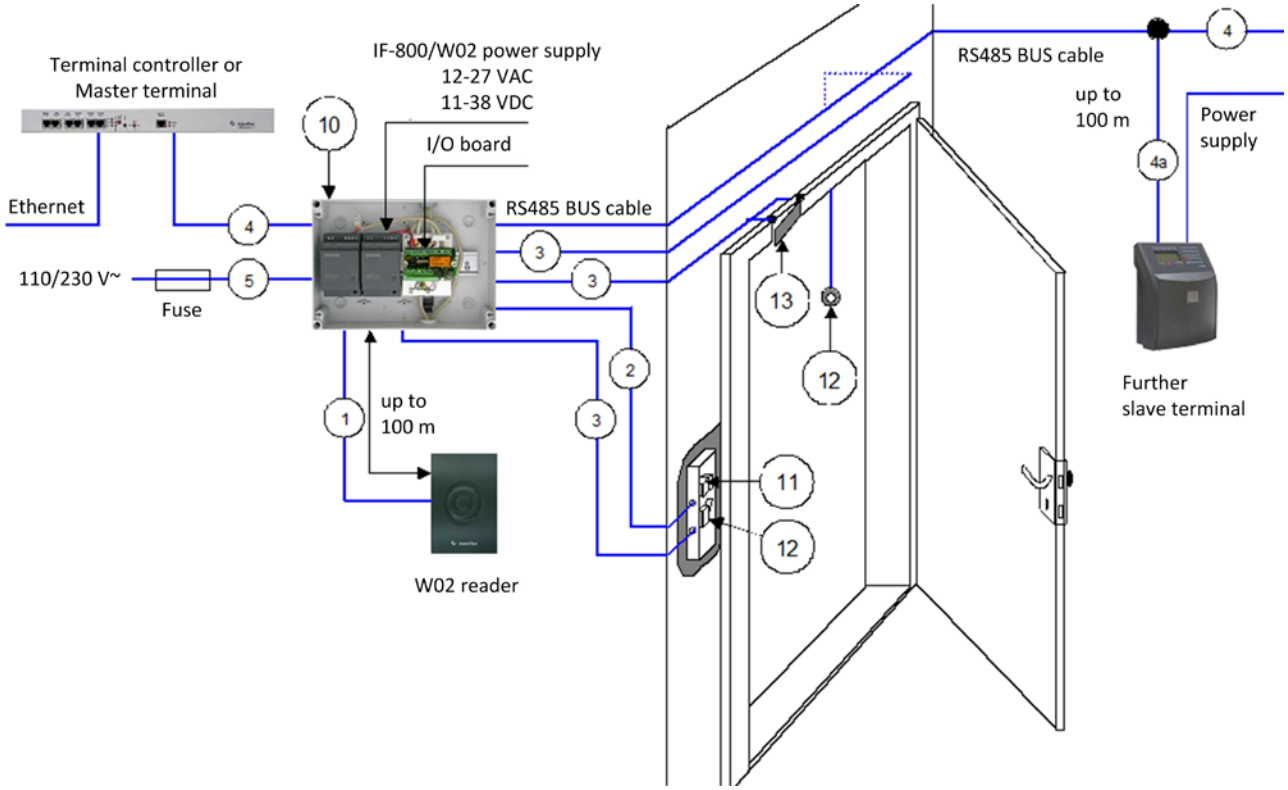


Figure Possible Connections and Electrical Wiring

Cable No.		Max. Length	Cable Cores
1	Reader/ COM cable, preferably laid in empty conduit	100 m	4 x 2 x 0.6 mm²
2	Control line for electric actuator	No specifications	2 x 2 x 0.6 mm²
3	Cable to door sensor, handle contact or opening push-button	100 m	2 x 2 x 0.6 mm²
4	RS485 BUS cable to higher-ranking device	1200 m	2 x 2 x 0.6 mm²
4a	RS485 spur line from BUS cable to installation site	100 m	2 x 2 x 0.6 mm²
5	Mains cable	No specifications	NYM 3 x 1.5 mm²

- Only use shielded connecting cables, e.g. cable type J-Y(ST)Y.
- The above-specified cable lengths may not be exceeded. Excessive lengths can cause malfunctions.
- The power supply must have a separate fuse protection.
- The power supply of the access control element must be provided separately.
- The recommended distance between cables and power lines is 10 cm.
- If the locking device is monitored, a handle contact or door opening switch must be installed. The switching of the contact allows for the locking device to be opened without setting off an alarm when exiting the security zone.

7 Installation

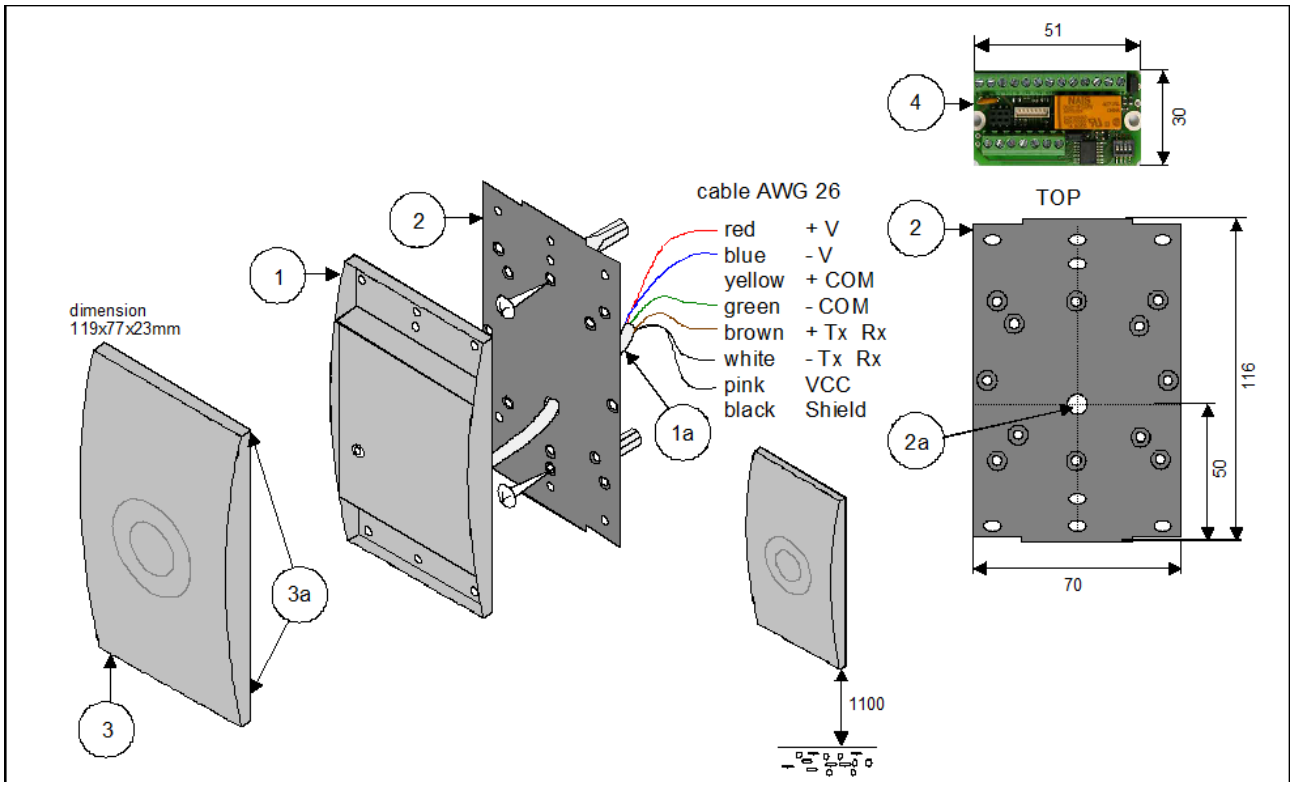
- The reader (IP 65) can be installed on a flat wall or pillar, both indoors and outdoors.
- The mounting plate (2) is used for fastening. The holes are designed for screw fastening to flat walls and also to DIN appliance cases.

Snap-in elements (3a) in the housing cover (3) lock into place when the cover is pressed onto the mounting plate (2) and thus, prevent the loosening of the cover.

NOTE

- The mounting plate must not get twisted out of shape when it is screwed down.
- The countersunk screws must end up flush with the countersunk holes and not protrude.
- There should be a distance of at least 20 cm from other devices with RFID readers.
- When the device is mounted on a metal surface, the reading distance is reduced.

Close housing: The housing cover (3) is first placed over the reader electronics during initial operation. To close the housing, the cover is positioned over the housing and pressed down until the snap-in elements lock into place in the mounting plate.



1	Reader housing with reader electronics	3	Housing cover
1a	5 m reader cable for connection to I/O controller board	3a	Snap-in elements in cover
2	Mounting plate	4	I/O controller board with address switches
2a	Drilling for reader cable		

7.1 Installation of the I/O Controller Board

The I/O controller board (4) can be installed in a distance of up to 100 m from the reader housing (1).

NOTE The I/O controller board must be installed in a secured area, e.g. in a DIN appliance case or in a housing together with the power supply.

8 Setting the Address

An address must be set for identification.

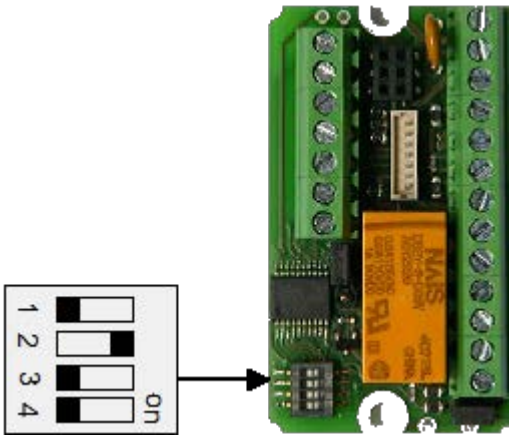
Address setting for the connection to a terminal controller or an access manager:

It is common practice to assign the first slave terminal on each RS485 BUS to address 1, the second to address 2, and so on.

Address setting for the connection to a master terminal:

It is common practice to assign the first slave terminal to address 2, the second to address 3, and so on.

Before making the settings, check the BUS address section of the higher-ranking device, such as, e.g., a master terminal. You can do so by using a remote program, e.g. Telnet, and entering the OC command "cfg". Furthermore, please check if the address of the terminal already exists on this BUS. It is not allowed to assign identical addresses to one RS485 BUS.



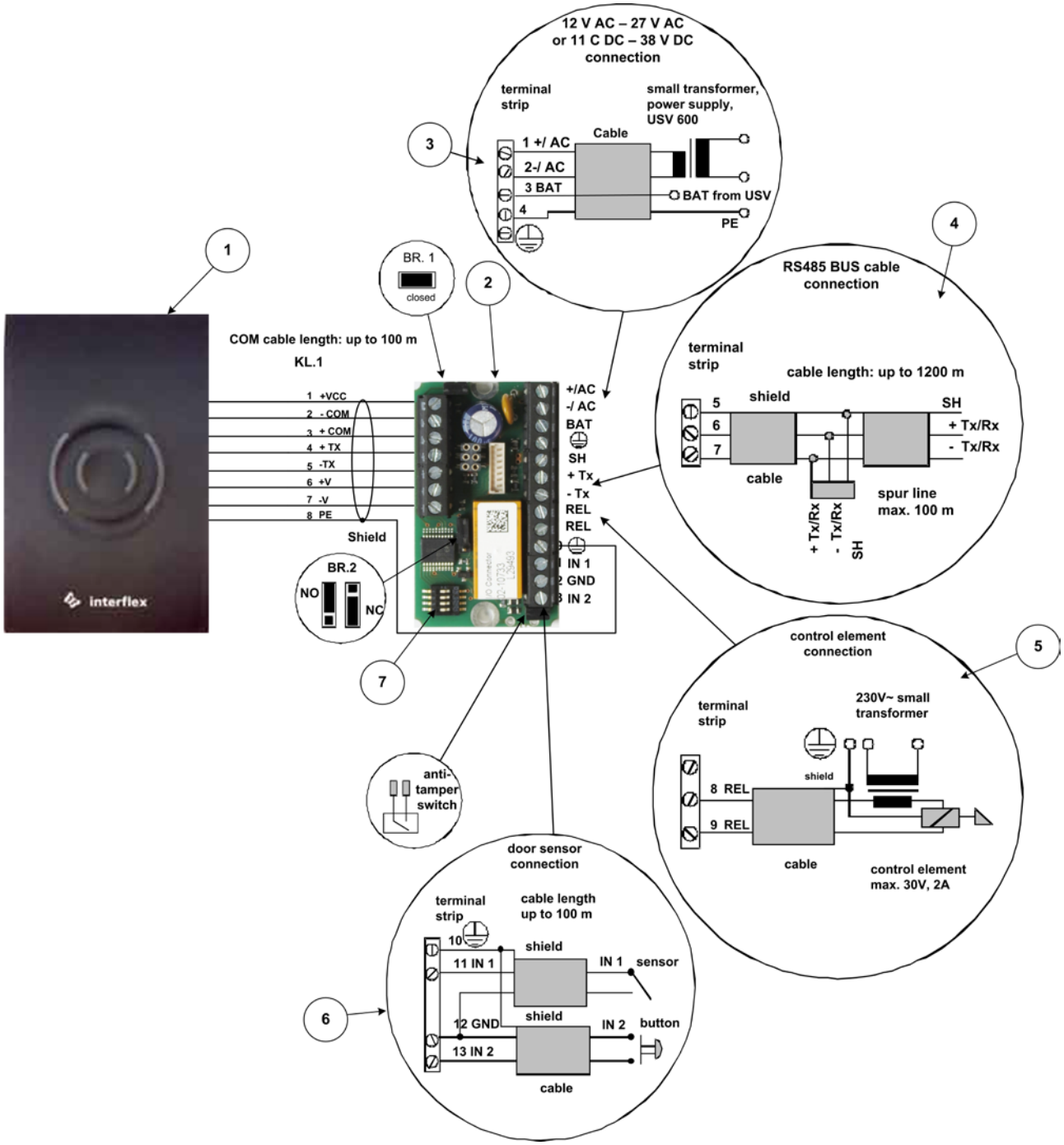
Switch off the power supply prior to changing an address.

Switch:	1	2	3	4
Address 1 (A)	OFF	OFF	OFF	OFF (not required if connected to a master terminal)
Address 2 (B)	ON	OFF	OFF	OFF
Address 3 (C)	OFF	ON	OFF	OFF (as shown in the figure above)
Address 4 (D)	ON	ON	OFF	OFF
Address 5 (E)	OFF	OFF	ON	OFF
Address 6 (F)	ON	OFF	ON	OFF
Address 7 (G)	OFF	ON	ON	OFF
Address 8 (H)	ON	ON	ON	OFF

9 Connections on the I/O Controller Board

To maintain the required EMC values, the protective earth conductor and also the cable shields must be connected as shown in the figure below.

For information on the connection of the RS485 data line to a terminal controller or master terminal, please refer to the installation and wiring instructions included in the delivery of the respective device.



1	IF-800/W02	6	Example: Door monitoring connection
2	I/O controller board	7	Address switch
3	Power supply example	Br1	Bridge is removed if the I/O controller board is to be used as an expansion
4	Example: Connection of the RS485 data line	Br2	Setting the relay output to normally open / normally closed
5	Example: Connection of an actuator	Br3	Contact for monitoring the housing

10 Technical Specifications

Power Supply	
Low-voltage	12-24 VAC/DC
Power consumption	Max. 4 VA
Protection	Self-resetting fuse
Interface to parent devices	RS485, 9600/ 19200 baud (automatic configuration)
RFID reader according to order	Mifare, LEGIC or Proxif reading technology
Read range	Up to 50 mm, depending on the size of the identification medium used
Inputs for floating sensors	4 floating sensors (2 per each I/O controller board)
Output relays	2 relays with max. 30V 2A (1 per each I/O controller board)
Switching power	Up to 30V, 2A
User information	Buzzer; blue, red and green LEDs
Device Protection	
Protection category	III
Degree of protection	Reader IP65, encapsulated electronics I/O board IP 00
General Data	
Ambient temperature	-25°C to +55°C
Humidity	Max. 95%, non-condensing
Product safety	EN 60950-1
Compatibility (EMC)	EN 300330-1/-2 EN 301489-1/-3
Dimensions (H x W x D)	119 x 77 x 23 mm (reader), 52 x 30 x 16 mm (I/O board)
Weight	Approx. 0.4 kg
Installation type	Surface-mounted
Color	Anthracite or light gray

11 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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Interflex Datensysteme GmbH

Zettachring 16, D-70567 Stuttgart, Germany

Tel.: +49 (0711) 1322 0

Internet E-Mail: interflex.info@allegion.com

Websites: www.interflex.de www.allegion.com