



Operating instructions
Bluetooth adapter
E30446

GB

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1 Preliminary note

You will find instructions, technical data, approvals and further information using the QR code on the unit / packaging or at www.ifm.com.


1.1 Symbols used

- ✓ Requirement
- ▶ Instructions
- ▷ Reaction, result
- [...] Designation of keys, buttons or indications
- Cross-reference
-  Important note
Non-compliance may result in malfunction or interference.
-  Information
Supplementary note

1.2 Warnings used

| | |
|---|--|
| ATTENTION | Warning of damage to property |
|  | CAUTION Warning of personal injury ▷ Slight reversible injuries may result. |

1.3 Safety symbols on the unit

-  Observe instructions in chapter → Electrical connection!

2 Safety instructions

- The unit described is a subcomponent for integration into a system.
 - The system architect is responsible for the safety of the system.
 - The system architect undertakes to perform a risk assessment and to create documentation in accordance with legal and normative requirements to be provided to the operator and user of the system. This documentation must contain all necessary information and safety instructions for the operator, the user and, if applicable, for any service personnel authorised by the architect of the system.
- Read this document before setting up the product and keep it during the entire service life.
- The product must be suitable for the corresponding applications and environmental conditions without any restrictions.
- Only use the product for its intended purpose (→ Intended use).
- If the operating instructions or the technical data are not adhered to, personal injury and/or damage to property may occur.
- The manufacturer assumes no liability or warranty for any consequences caused by tampering with the product or incorrect use by the operator.
- Installation, electrical connection, set-up, programming, configuration, operation and maintenance of the product must be carried out by personnel qualified and authorised for the respective activity.
- Protect units and cables against damage.
- Replace damaged units, otherwise the technical data and safety will be impaired.

2.1 Cyber security

ATTENTION

Device operation in an unprotected network environment:

- ▷ Unauthorised read or write access to data is possible.
- ▷ Unauthorised manipulation of the device function is possible.
- ▶ Restrict access to authorised users (e.g. password-protected access).
- ▶ Set a new password for Bluetooth access.

3 Intended use

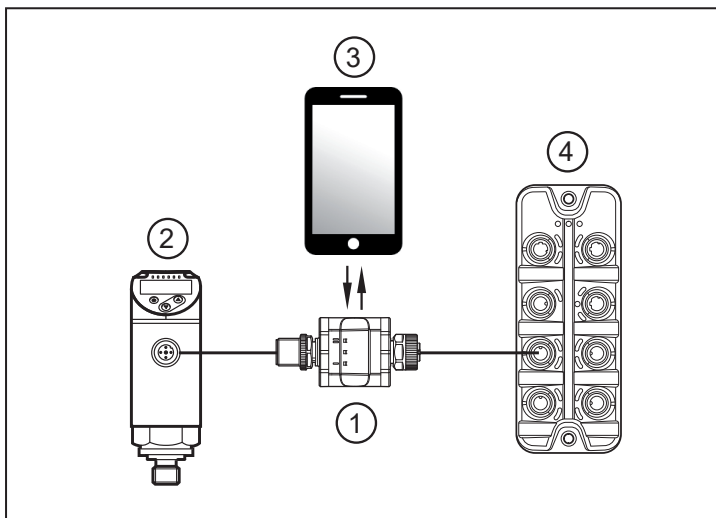


Fig. 1: Example of a system integration

- 1: E30446
- 2: IO-Link device
- 3: Mobile device
- 4: IO-Link master

3.1 Restriction of the application area



The device is not suited for environments with particular requirements on mechanical stability (e.g. shock/vibration).

The unit is intended for indoor use only.

Observe the operating conditions. → Technical data documentation.ifm.com

The received and transmitted process data via Bluetooth Mesh are used for plant monitoring and only to a limited extent for plant control because they are not transmitted in real time.

4 Function

The E30446 listens to the IO-Link communication between a master and a device and transmits the information live via Bluetooth to a smartphone or tablet.

Thanks to an integrated history memory the device can also be used as a stand-alone data logger.

The connection cables and their signals are neither interrupted nor influenced by the integrated E30446. The device's behaviour in the installation is fully transparent and it does not need to be registered as communication participant.

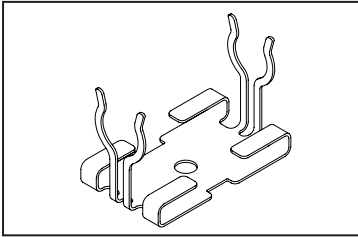
All available functions can be accessed via moneo|blue APP. The APP is available for Android and iOS in the corresponding app store.



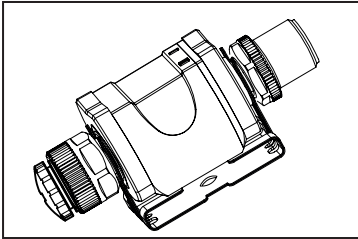
The unit does not support IO-Link 1.0 devices.

5 Installation

The device is fastened using the E89208 mounting clip.



Mounting clip (fasten with M4 screw or cable ties).



Mounting clip with attached device.



More information about the available accessories at: www.ifm.com

6 Electrical connection



The unit must be connected by a qualified electrician.

Observe the national and international regulations for the installation of electrical equipment.

Voltage supply according to SELV, PELV.



CAUTION

Input current is not limited.

▷ No fire protection.

▶ Protect circuits.

▶ Disconnect power.

▶ Connect the unit as follows:

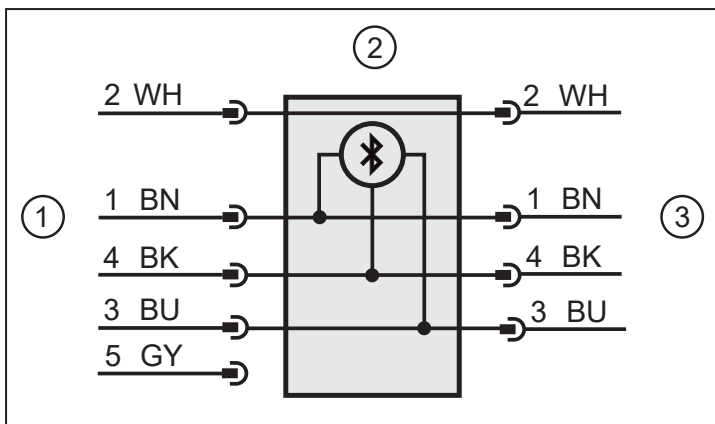


Fig. 2: Electrical connection

- 1: 5-pole M12 connector to the IO-Link device
 2: E30446
 3: 4-pole M12 female connector

| Pin | Core colour | |
|-----|-------------|-------|
| 1: | BN | Brown |
| 2: | WH | White |
| 3: | BU | Blue |
| 4: | BK | Black |
| 5: | GY | Grey |

Colours to DIN EN 60947-5-2

| Pin | Input for the IO-Link interface of the device |
|-----|---|
| 1: | L+ (connected through) |
| 2: | no function (connected through) |
| 3: | L- (connected through) |
| 4: | IO-Link (connected through) |
| 5: | not connected (1) / not available (3) |

Tab. 1: Pin connection

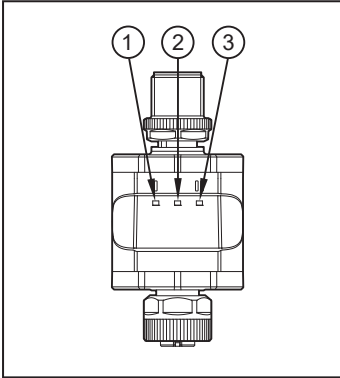


Required master port class: port class A



A 4-pole socket can also be used for the interface on the device side because pin 5 is not used.

7 LED indicator



| Number | Col-our | Designation |
|--------|---------|--------------------------------|
| 1: | Yellow | IO-Link communication detected |
| 2: | green | unit is in the operating mode |
| 3: | blue | Bluetooth connection is active |

8 Set-up

8.1 Moneo|blue's functions

The moneo|blue APP is used to transmit and display live data from the E30446 and to set the parameters of the E30446.

Saved data can be read via a data file.

8.2 System requirements

To install moneo|blue on a mobile device such as smartphone or tablet an internet connection is needed. moneo|blue can be downloaded from the "Apple APP Store" or "Google Play Store". The mobile device must meet the following system requirements:

- Bluetooth 4.0
- iOS operating system version 8.0 or higher
- Android operating system version 4.3 or higher

8.3 Installation of moneo|blue

- ▶ Open the Apple APP Store or the Google Play Store.
- ▶ Search for moneo|blue.
- ▶ Follow the installation instructions.



Update the IODD catalogue when using the moneo|blue App for the first time.



8.4 Connect a mobile device.

- ▶ Activate Bluetooth data transmission on the mobile device.
- ▶ Position the mobile device within the range of E30446.
- ▶ Select the requested E30446.
- ▶ Enter the access password 0000.



You can find information about moneo|blue in the App description.

9 Status display of the LEDs

| Description | LED 1 | LED 2 | LED 3 |
|---|-----------------|-----------------|-----------------|
| Supply voltage too low | Off | Off | Off |
| Device error | Off | flashes at 1 Hz | Off |
| No IO link communication | flashes at 1 Hz | on | X |
| IO-Link communication error | flashes at 1 Hz | flashes at 1 Hz | X |
| Recording not active | on | on | X |
| Recording active | double flash | on | X |
| Bluetooth connection has been established | X | on | on |
| ready for Bluetooth connection | X | on | double flash |
| no Bluetooth connection is active | X | on | Off |
| Bluetooth fault | X | on | flashes at 1 Hz |

x: any / double flash: briefly flashes 2x

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11 Maintenance, repair and disposal

The unit is maintenance-free.

- ▶ Contact ifm in case of malfunction.
- ▶ Do not open the housing as the unit does not contain any components which can be maintained by the user. The unit must only be repaired by the manufacturer.
- ▶ Clean the device using a dry cloth.
- ▶ Dispose of the unit in accordance with the national environmental regulations.