



Model Number

WRM-F301-IO-B15-2V15

IO-Link/Bluetooth interface with SmartBridge technology

Features

- Monitoring and control of IO-Link devices via a mobile device app
- Reaction-free access to sensor data and actuator data from the production process
- Process data recording for monitoring and troubleshooting

Description

The IO-Link/Bluetooth interface enables IO-Link-capable sensors and actuators to be monitored, parameterized, and controlled via the SmartBridge® app. The app is installed on a conventional mobile device and communicates with the IO-Link/Bluetooth interface via Bluetooth.

Accessories

V15-G-1M-PUR-V15-G

Connecting cable, M12 to M12, PUR cable 5-pin

Technical Data

Electrical specifications

Operating voltage	U_B	24 V DC
Operating current	I_B	No load: ≤ 20 mA Monitor mode: ≤ 32 mA Master mode: ≤ 30 mA
Time delay before availability	t_v	Monitor mode (from power up to data logging) < 200 ms Master mode: < 700 ms

Interface 1

Interface type	IO-Link
Protocol	IO-Link V1.1 , IO-Link-V1.01
Transfer rate	COM 1 (4.8 kBaud) , COM 2 (38.4 kBaud) , COM 3 (230.4 kBaud)

Interface 2

Interface type	Radio interface: Bluetooth smart (BT4.0, BT-LE)
Transmitter radiated power	< 10 mW
Frequency range	2402 ... 2480 MHz

Interface 3

Interface type	USB2.0 Micro-B (for access to data logging)
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Switching output

Output type	Configurable in master mode : Push/pull , NPN , PNP
Output rated operating current	$I_L \leq 200$ mA

Ambient conditions

Ambient temperature	-25 ... 75 °C (-13 ... 167 °F)
Relative humidity	95 % non-condensing

Mechanical specifications

Housing length	103 mm
Housing width	50 mm
Housing height	28 mm
Degree of protection	IP54
Connection	5-pin, M12x1 socket (A-coded) USB2.0 Micro-B socket (for access to data logging)

Material	
Housing	PC/ABS
Mass	approx. 135 g

General information

Note	Data logging: microSD card required, max 32 GB, FAT32 format
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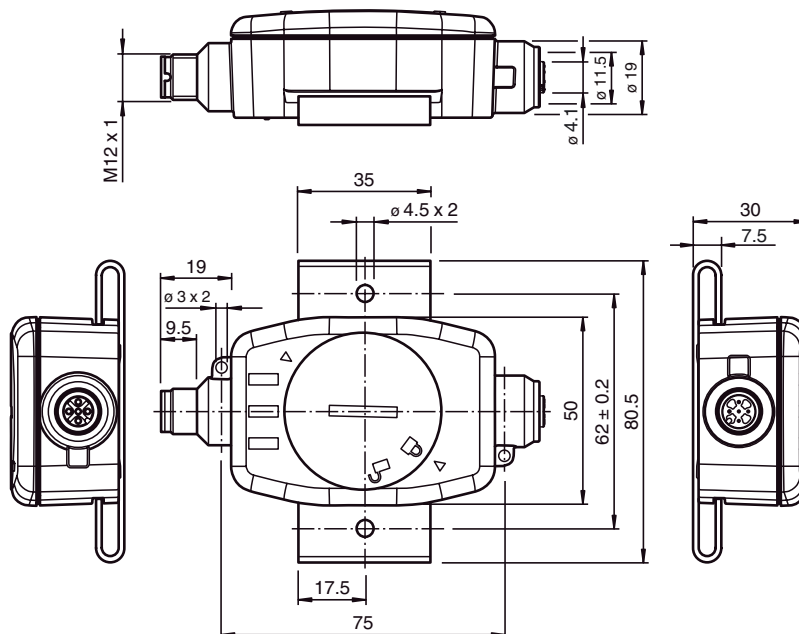
Compliance with standards and directives

Directive conformity	
R&TTE Directive 1995/5/EC	EN 301489-1 V1.9.2 (2011-09), EN 301489-17 V2.1.1 (2009-05) EN 300328 V1.8.1 (2012-04)
Standard conformity	
Standards	IEC 61131-9:2013 (IO-Link)

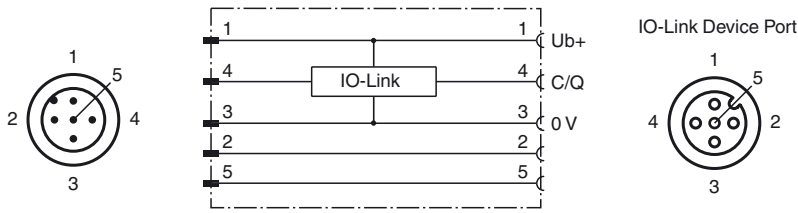
Approvals and certificates

CE conformity	EN 61000-6-3 , EN 61000-6-2
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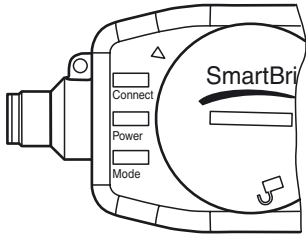
Dimensions



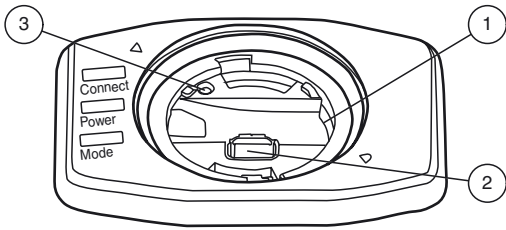
Electrical Connection



Additional Information



LED	Colors	Description
Connect	Blue	Bluetooth communication
Power	Green/red	Status indicator (operation, error)
Mode	Green/yellow	Operating mode (master or monitor)



1	SD card slot
2	USB 2.0 Micro B socket
3	Reset button

Functional Description and Application

Functional Description

The IO-Link/Bluetooth interface with SmartBridge technology performs two functions:

- In monitor mode, it enables data to be extracted without reaction from a connection between an IO-Link master and IO-Link device.
- In master mode, it acts like an IO-Link master and can establish data communication with an IO-Link device. If necessary, the SmartBridge interface can emulate the original standard input/output signal (SIO) and forward this to the machine control.

Application

In monitor mode, the SmartBridge interface is used to ensure correct IO-Link data communication between the IO-Link master and IO-Link device. In master mode, the SmartBridge interface enables functions such as parameterization, process data control, and event analysis to be controlled on IO-Link devices.

Additional Functions

The SmartBridge interface provides the ability to write process data to a removable microSD card (data logging). Access to the log file generated through this process can be gained by removing the microSD card or using the integrated micro USB interface.

Installation

The supplied mounting clamp makes securing the SmartBridge interface quick and easy.

Mobile Device App

Mobile device apps for controlling and monitoring connected IO-Link devices are available for the mobile device families outlined below in the relevant app store.

- Android devices: Google Play Store
- Apple devices: Apple App Store