

RFID read/write device

IUT-F191-IO-V1-FR1-01



- Flexible UHF read/write device with short detection range
- Ready-made PLC function blocks designed for quick and easy system integration
- Compact and robust housing for harsh industrial environments
- Multi-tag reading of up to 20 tags ensures increased productivity
- Circular antenna polarization ensures reliable transponder detection and improves process flow
- For connection to IO-Link master
- Degree of protection IP67

UHF RFID read/write device with IO-Link, Europe



Function

The read/write device operates in the UHF frequency range and is optimized for use in industrial applications involving shorter distances. The device reads and writes passive tags acc. to EPC Generation 2 (ISO/IEC 18000-63). The read/write device is compliant with the relevant transmission regulations.

Wide range of options supported for filtering data. The read/write device has an IO-Link interface and is connected via a M12 connector.

The user can monitor the status of the read/write device using the integrated LEDs.

The read/write device has a typical detection range of around 1 meter; this range is determined by the tag used and can be adjusted by configuring the transmission power. Other influencing factors include the setup and installation of the specific application and the surrounding materials, particularly metal. The read and write distances for the relevant tag, which are detailed separately, have been established in a test laboratory under ideal conditions. For the actual read and write distances under real conditions, the combination of read/write device and tag must be tested in the desired application.

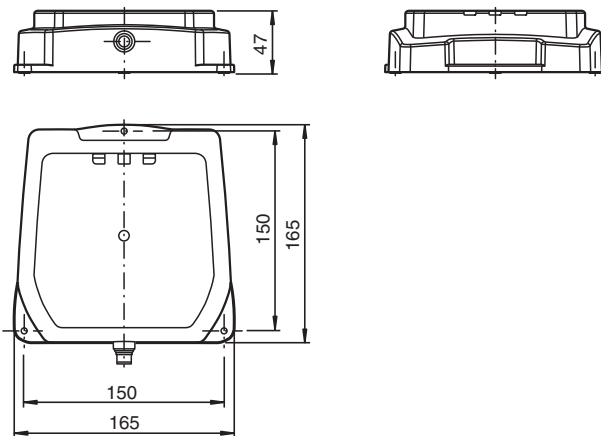
Application

This product is a wireless device and may be operated only in the country for which a transmission license exists. If a product is released to a customer in a country for which there is no transmission license, the product may be operated only in the country for which a transmission license exists.

If a product does not correspond to the legal requirements in force in the EU but is released to a purchaser within the EU, the product is intended for use solely in the destination country of the end customer outside of the EU for which a transmission license exists. The product may therefore under no circumstances be used directly by the purchaser or released to third parties for the purpose of distribution, application or use on the market within the EU as part of a commercial activity.

In the event of an infringement, the purchaser is obliged to indemnify the supplier against any resulting damages, costs, penalty payments and other expenses.

Dimensions



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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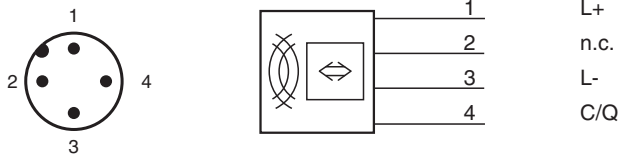
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Technical Data

General specifications		
Operating frequency		865 ... 868 MHz: EU, Turkey Transmission licenses for other countries on request
Emitted power		3 ... 100 mW ERP adjustable
Operating distance		typ. 1 m
MTBF		127 a (Operation at +40 °C)
Indicators/operating means		
LED green/red		Solid green: Ready for operation, no IO-Link communication Flashing green (1 Hz): IO-Link operation
LED yellow		Read/write operation successful
LED blue		Transmission mode
Electrical specifications		
Operating voltage	U _B	18 ... 30 V DC (IO-Link)
Current consumption		≤ 90 mA (at 24 V DC)
Interface		
Interface type		IO-Link
IO-Link revision		1.1
Device profile		Identification and Diagnosis - I&D
Process data		Input 32 Byte Output 32 Byte
Vendor ID		1 (0x0001)
Device ID		4194817 (0x400201)
Data transfer rate		COM3 (230.4 kbits/s)
Min. cycle time		4 ms
SIO mode support		no
Compatible master port type		Class A Class B
Directive conformity		
Radio equipment		
Directive 2014/53/EU		EN 301489-1 EN 301489-3 EN 302208 EN 62368-1 EN 50364
RoHS		
Directive 2011/65/EU (RoHS)		IEC/EN 63000
Standard conformity		
Degree of protection		EN 60529
Communication interface		IEC 61131-9 / IO-Link V1.1.3
RFID		ISO/IEC 18000-63
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F) (Operation with nontransmission periods) -25 ... 60 °C (-13 ... 140 °F) (Continuous transmission mode)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Housing length		165 mm
Housing width		165 mm
Housing height		47 mm
Degree of protection		IP67
Connection		connector M12 x 1
Material		
Housing		PA 6.6
Base		Aluminum
Mass		700 g

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Connection





Accessories

	ICE1-8IOL-G60L-V1D	Ethernet IO-Link module with 8 inputs/outputs
	ICE1-8IOL-S2-G60L-V1D	Ethernet IO-Link master with PROFINET S2 redundancy
	ICE1-8IOL-G30L-V1D	Ethernet IO-Link module with 8 inputs/outputs
	ICE2-8IOL-G65L-V1D	EtherNet/IP IO-Link master with 8 inputs/outputs
	ICE2-8IOL-K45S-RJ45	EtherNet/IP IO-Link master with 8 inputs/outputs, DIN rail, screw terminal
	ICE2-8IOL-K45P-RJ45	EtherNet/IP IO-Link master with 8 inputs/outputs, DIN rail, push-in connectors
	ICE3-8IOL-G65L-V1D	PROFINET IO IO-Link master with 8 inputs/outputs
	ICE3-8IOL-K45S-RJ45	PROFINET IO IO-Link master with 8 inputs/outputs, DIN rail, screw terminal
	ICE3-8IOL-K45P-RJ45	PROFINET IO IO-Link master with 8 inputs/outputs, DIN rail, push-in terminals
	IO-Link-Master02-USB	IO-Link master, supply via USB port or separate power supply, LED indicators, M12 plug for sensor connection
	IUC77-25L100-GBL 1000pcs	RFID Transponder
	IUC77-28L90-M-FR1 25pcs	RFID Transponder
	IUC77-34-M-FR1 10pcs	RFID Transponder
	IUC77-50-FR1 10pcs	RFID Transponder
	IUC87-F257-T17-M-FR1 10 pcs	Tag for standard applications
	IUC87-F257-T18-M-FR1 10 pcs	Tag for paint shop applications
	IUC87-F257-T19-M-FR1 10 pcs	Tag for autoclave applications

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Accessories

	V1-G-*M-PVC-V1-G	Cordset M12 socket straight to M12 plug straight A-coded, 4-pin, PVC cable grey
	V1-G-BK*M-PVC-U-V1-G	Cordset M12 socket straight to M12 plug straight A-coded, 4-pin, PVC cable black, UL approved
	V1-G-BK*M-PUR-U-V1-G	Cordset M12 socket straight to M12 plug straight A-coded, 4-pin, PUR cable black, UL-approved, drag chain suitable, torsion resistant