



RFID read/write device

IUT-F190-B40-2V1D-FR1-01

- Flexible UHF read/write device with medium detection range
- Ready-made PLC function blocks designed for quick and easy system integration
- Compact and robust housing for harsh industrial environments
- Switchable antenna polarization guarantees reliable tag detection and enhances process flow
- LED status indicator for bus communication and read/write station
- Network loop through by means of integrated 2 port switch
- Multi-tag reading increases productivity

UHF RFID read/write device, Europe



Function

The compact read/write device IUT-F190-B40-2VD1-* operates in the UHF frequency range and is optimized for industrial use over medium distances. The device writes and reads passive transponders according to EPC Gen2 (ISO/IEC 18000-63). The read/write device complies with the respective local radio regulations.

Extensive possibilities for data filtering are supported. The read/write device has an ethernet interface and is connected via an 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 about 2 m, which is determined by the transponder used and can be adjusted by setting the transmission power. Further influencing factors are the mounting or installation for the specific application and the surrounding materials, especially metal. The separately specified read and write distances for the respective transponders have been determined in a test laboratory under ideal conditions. For the actual read and write distances under real conditions, the combination read/write device and transponder must be tested in the desired application.

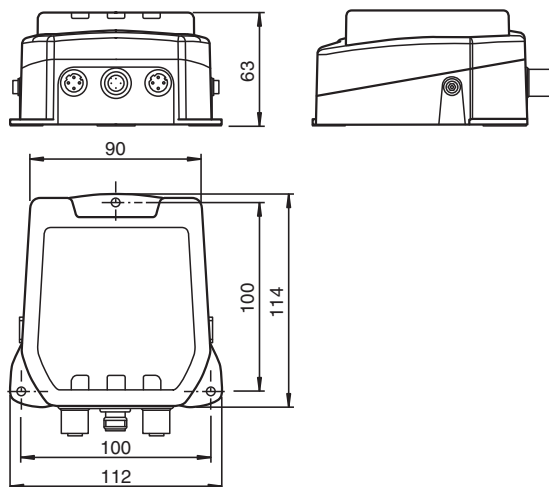
Application

This product is a wireless device and may be operated only in the country for which a transmission license exists. Information regarding transmission licenses can be found on the datasheet for the product. 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



Technical Data

General specifications

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

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PEPPERL+FUCHS

Technical Data

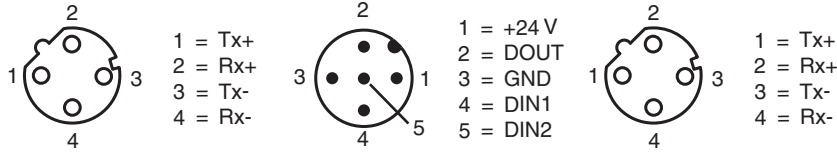
Operating frequency	865 ... 868 MHz: EU, Turkey Transmission licenses for other countries on request	
Emitted power	3 ... 1000 mW ERP adjustable	
Operating distance	typ. 2 m	
MTBF	55 a (Operation at +40 °C)	
Indicators/operating means		
LED green	Power on	
LED yellow	Read/write operation successful	
LED blue	Transmission mode	
LED Link/Traffic	green: network connection yellow: flashes in rhythm with the transmitted data	
Electrical specifications		
Rated operating voltage	U _e	20 ... 30 V DC , PELV
Ripple	≤ 10 % at 30 V DC	
Current consumption	≤ 500 mA	
Power consumption	P ₀	≤ 10 W
Surge protection	category 2	
Interface 1		
Physical	Ethernet	
Protocol	HTTP EtherNet/IP PROFINET IO	
Transfer rate	10 MBit/s or 100 MBit/s	
Interface 2		
Physical	Ethernet	
Protocol	HTTP EtherNet/IP PROFINET IO	
Transfer rate	10 MBit/s or 100 MBit/s	
Directive conformity		
Radio equipment		
Directive 2014/53/EU	EN 301489-1 EN 301489-3 EN 302208 EN 62368-1 EN 62311 EN 50364	
RoHS		
Directive 2011/65/EU (RoHS)	IEC/EN 63000	
Standard conformity		
Degree of protection	EN 60529	
RFID	ISO/IEC 18000-63	
Ambient conditions		
Classification	Environmental condition A (controlled environment)	
Ambient temperature	-20 ... 70 °C (-4 ... 158 °F) (Operation with nontransmission periods, adjustable) -20 ... 50 °C (-4 ... 122 °F) (Continuous transmission mode)	
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)	
Pollution degree	2	
Mechanical specifications		
Housing length	114 mm	
Housing width	112 mm	
Housing height	63 mm	
Degree of protection	IP67	
Connection	Power supply: M12 connector Protective earth: M4 earthing screw Ethernet: M12 plug connection	
Material		
Housing	PA 6.6	

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Technical Data

Base	diecast aluminum
Mass	770 g

Connection Assignment



Accessories

	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
	IUZ-MH13	Mounting bracket for wall mounting
	IUZ-MH15	Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm
	V15-G-*M-PUR-ABG	Female cordset single-ended M12 straight A-coded, 5-pin, PUR cable grey, shielded
	V1SD-G-GN*M-PUR-E1S- V45-G	Ethernet bus cable M12 plug straight D-coded to RJ45 Ethernet-coded, 4-pin, PUR cable green, Cat5e, shielded, drag chain suitable