



RFID read/write device

IUH-F190-V1-FR1-04

- 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
- For connection to IDENTControl control interface
- Multi-tag reading increases productivity

UHF RFID read/write device for IDENTControl, India

Function

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

The read/write head can be used in India.

Wide range of options supported for filtering data. The read/write head is connected to the IDENTControl interface using an M12 connector. The user can monitor the status of the read/write head using the integrated LEDs.

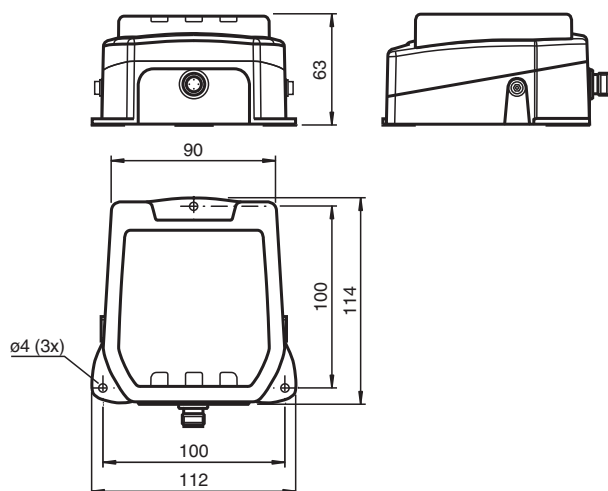
The read/write head has a typical detection range of around 2 meters; this range is determined by the tag used and can be adjusted by configuring the transmission power. Other influencing factors include the setup and installation of the specific application and the surrounding materials, particularly 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 head and tag must be tested in the desired 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

Release date: 2023-08-04 Date of issue: 2023-08-04 Filename: 309805_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

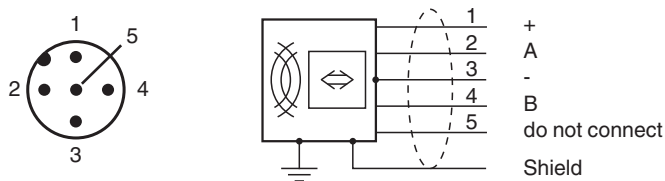
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS




Technical Data

Operating frequency	865 MHz ... 867 MHz: India Transmission licenses for other countries on request	
Emitted power	3 ... 800 mW ERP adjustable	
Operating distance	typ. 2 m	
MTBF	105 a (Operation at +40 °C)	
Indicators/operating means		
LED green	Power on	
LED yellow	Read/write operation successful	
LED blue	Transmission mode	
Electrical specifications		
Current consumption	≤ 450 mA	
Power consumption	P ₀	≤ 9 W
Supply	from the IDENTControl	
Surge protection	category 2	
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 ... 60 °C (-4 ... 140 °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	connector M12 x 1	
Material		
Housing	PA 6.6	
Base	diecast aluminum	
Mass	810 g	

Connection
















Accessories

	IC-KP-B17-AIDA1	IDENTControl control interface with Ethernet interface for TCP/IP, PROFINET, EtherNet/IP, and MODBUS TCP protocols
	IC-KP2-2HRX-2V1	Control interface unit IDENTControl Compact with serial interface RS-232 and RS-485
	IC-KP2-2HB6-V15B	Control interface unit IDENTControl Compact with interface for PROFIBUS DP

Release date: 2023-08-04 Date of issue: 2023-08-04 Filename: 309805_eng.pdf

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

Accessories

	IC-KP2-2HB17-2V1D	IDENTControl Compact control interface with Ethernet interface for TCP/IP, PROFINET, EtherNet/IP, and MODBUS TCP protocols
	IC-KP2-2HB21-2V1D	Control interface unit IDENTControl Compact with EtherCAT interface
	IUC76-F157-T17-M-FR1	Data carrier for standard applications
	IUC76-F157-T18-M-FR1	Data carrier for paint shop applications
	IUC77-25L100-GBL 1000pcs	Data carrier
	IUC77-28L90-M-FR1 25pcs	Data carrier
	IUC77-34-M-FR1 10pcs	Data carrier
	IUC77-50-FR1 10pcs	Data carrier
	IUZ-MH13	Mounting bracket for wall mounting
	IUZ-MH15	Mounting aid for round steel \varnothing 12 mm or sheet 1.5 mm ... 3 mm
	V1-G-2M-PUR-ABG-V1-W	Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded
	V1-G-5M-PUR-ABG-V1-W	Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded
	V1-G-10M-PUR-ABG-V1-W	Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded