



## RFID read/write device

### IUH-F190-V1-FR2-03

- 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, China



## Function

The compact IUH-F190-V1-FR2-03 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 in line with EPC Generation 2 (ISO/IEC 18000-63). The read/write head can be used in China. The read/write head is compliant with the relevant transmission regulations.

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.

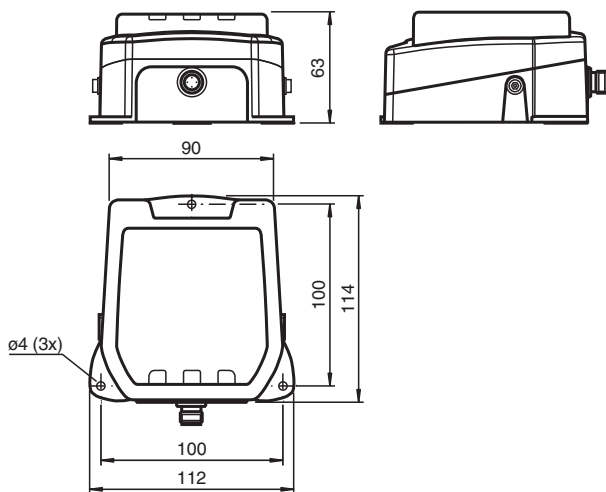
The read and write distances for the relevant tag, which are detailed separately, have been established in a test laboratory under ideal conditions. For the actual read and write distances under real conditions, the combination of read/write head and tag must be tested in the desired application.

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: 283537\_eng.pdf

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

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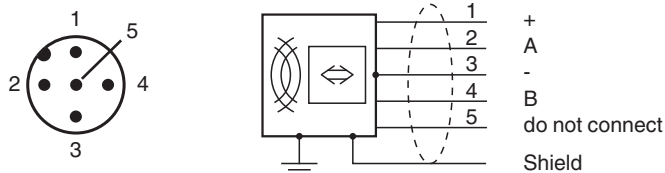
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**PEPPERL+FUCHS**


## Technical Data

Operating frequency	920.5 ... 924.5 MHz: China Transmission licenses for other countries on request	
Emitted power	3 ... 800 mW ERP adjustable	
Operating distance	typ. 2 m	
UL File Number	E468231	
MTBF	105 a (Operation at +40 °C)	
<b>Indicators/operating means</b>		
LED green	Power on	
LED yellow	Read/write operation successful	
LED blue	Transmission mode	
<b>Electrical specifications</b>		
Current consumption	≤ 450 mA	
Power consumption	P <sub>0</sub>	≤ 9 W
Supply	from the IDENTControl	
Surge protection	category 2	
<b>Standard conformity</b>		
Degree of protection	EN 60529	
RFID	ISO/IEC 18000-63	
<b>Approvals and certificates</b>		
SRRC approval	CMIIT ID: 2021DJ7843	
<b>Ambient conditions</b>		
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	
<b>Mechanical specifications</b>		
Housing length	114 mm	
Housing width	112 mm	
Housing height	63 mm	
Degree of protection	IP67	
Connection	connector M12 x 1	
<b>Material</b>		
Housing	PA 6.6	
Base	diecast aluminum	
Mass	860 g	















## Connection



## Accessories

	<b>IC-KP-B17-AIDA1</b>	IDENTControl control interface with Ethernet interface for TCP/IP, PROFINET, EtherNet/IP, and MODBUS TCP protocols
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## Accessories

	<b>IC-KP2-2HRX-2V1</b>	Control interface unit IDENTControl Compact with serial interface RS-232 and RS-485
	<b>IC-KP2-2HB6-V15B</b>	Control interface unit IDENTControl Compact with interface for PROFIBUS DP
	<b>IC-KP2-2HB17-2V1D</b>	IDENTControl Compact control interface with Ethernet interface for TCP/IP, PROFINET, EtherNet/IP, and MODBUS TCP protocols
	<b>IC-KP2-2HB21-2V1D</b>	Control interface unit IDENTControl Compact with EtherCAT interface
	<b>IUC76-F157-T19-M-FR2</b>	Data carrier for autoclave applications
	<b>IUC77-25L100-GBL 1000pcs</b>	Data carrier
	<b>IUC77-28L90-M-FR2 25pcs</b>	Data carrier
	<b>IUC77-34-M-FR2 10pcs</b>	Data carrier
	<b>IUC77-50-FR2 10pcs</b>	Data carrier
	<b>IUZ-MH13</b>	Mounting bracket for wall mounting
	<b>IUZ-MH15</b>	Mounting aid for round steel $\varnothing$ 12 mm or sheet 1.5 mm ... 3 mm
	<b>V1-G-2M-PUR-ABG-V1-W</b>	Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded
	<b>V1-G-5M-PUR-ABG-V1-W</b>	Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded
	<b>V1-G-10M-PUR-ABG-V1-W</b>	Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded