RFID read/write device

IUH-F190-V1-FR2-02

- 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 IDENT*Control* control interface
- Multi-tag reading increases productivity

UHF RFID read/write device for IDENTControl, Mexico

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Function

The compact IUH-F190-V1-FR2-02 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 Mexico. 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.
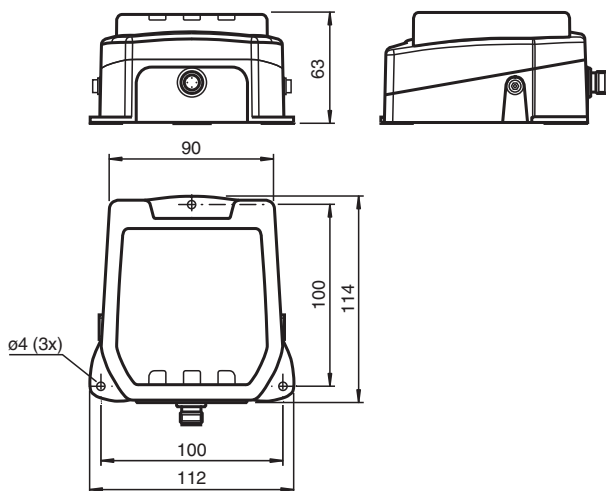The read/write head has a typical detection range of around 2 meters; this range is determined by the tag used and can be adjusted by configuring the transmission power. Other influencing factors include the setup and installation of the specific application and the surrounding materials, particularly 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. 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

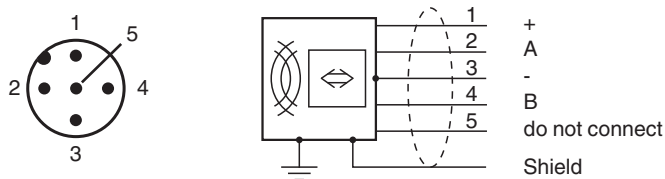## Technical Data

General specifications

Operating frequency	902 … 928 MHz: Mexico Transmission licenses for other countries on request

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

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Technical Data

Emitted power		3 … 1250 mW EIRP adjustable
Operating distance		typ. 2 m
UL File Number		E468231
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		860 g

Connection


```
1   +
2   A
3   -
4   B
5   do not connect
    Shield
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Safety Information

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Accessories

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

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Accessories

	IC-KP2-2HRX-2V1	Control interface unit IDENTControl Compactwith serial interface RS-232 and RS-485
	IC-KP2-2HB6-V15B	Control interface unit IDENTControl Compact with interface for PROFIBUS DP
	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-T19-M-FR2	Data carrier for autoclave applications
	IUC77-25L100-GBL 1000pcs	Data carrier
	IUC77-28L90-M-FR2 25pcs	Data carrier
	IUC77-34-M-FR2 10pcs	Data carrier
	IUC77-50-FR2 10pcs	Data carrier
	IUZ-MH13	Mounting bracket for wall mounting
	IUZ-MH15	Mounting aid for round steel ø 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

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