



Read/write head IUH-F190-V1-FR2

- Most flexible midrange UHF read/write head for worldwide use
- 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
- Multi-tag reading of up to 40 tags ensures increased productivity

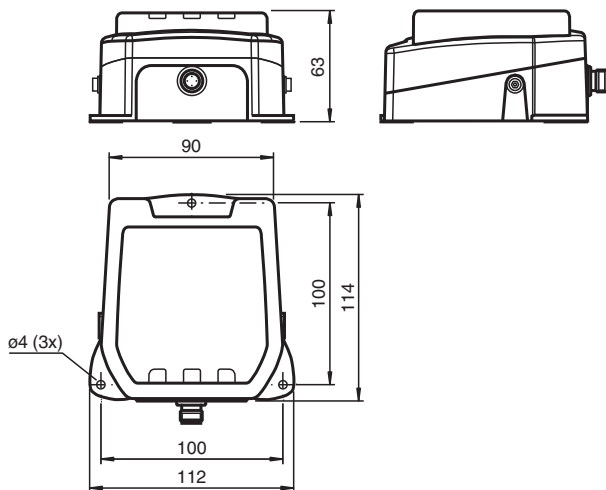
UHF read/write head, for IDENTControl, Asia and America, excluding Canada, USA, and Mexico



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

Operating frequency	920.0 MHz ... 926.0 MHz: Australia 915.0 MHz ... 928.0 MHz: Brazil 920.5 MHz ... 924.5 MHz: China 916.7 MHz ... 920.5 MHz: Japan 921.5 MHz ... 928.0 MHz: New Zealand Transmission licenses for other countries on request
Emitted power	50 ... 500 mW EIRP = 30 ... 300 mW ERP adjustable
Operating distance	typ. 1 m
UL File Number	468231

Indicators/operating means

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

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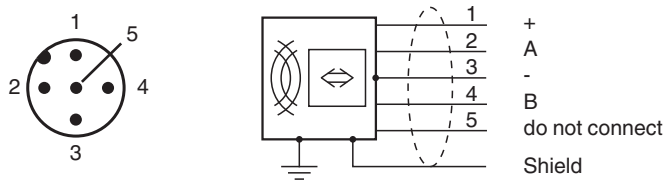
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Technical Data

LED green		Power on
LED yellow		Read/write operation successful
LED blue		Transmission mode
Electrical specifications		
Power consumption	P_0	$\leq 7 \text{ W}$
Supply		from the IDENTControl
Compliance with standards and directives		
Standard conformity		
Electromagnetic compatibility		EN 301489-1 V1.9.2:2011 EN 301489-3 V1.4.1:2003
Safety		EN 60950-1:2006/A1:2010
Degree of protection		EN 60529:2000
Approvals and certificates		
UL approval		UL 61010-1 3rd Edition CSA C22.2 NO. 61010-1-12 3rd Edition (EN 60950-, EN 60529 and IP67 are not included)
Radio approval		Australia: ACMA CERT3988 Brazil: ANATEL 2881-15-6150 China: CMIIT ID 2014DJ1548 Japan: 006-000393
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F) (Operation with nontransmission periods, adjustable) -25 ... 50 °C (-13 ... 122 °F) (Continuous transmission mode)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Degree of protection		IP67
Connection		connector M12 x 1
Material		
Housing		PA 6
Base		diecast aluminum
Mass		approx. 900 g





















Connection



Accessories

	IC-KP-B17-AIDA1	IDENTControl control interface with Ethernet interface for TCP/IP, PROFINET, EtherNet/IP, and MODBUS TCP protocols
	IC-KP2-1HB17-2V1D	IDENTControl Compact control interface with Ethernet interface for TCP/IP, PROFINET, EtherNet/IP, and MODBUS TCP protocols
	IC-KP2-2HB17-2V1D	IDENTControl Compact control interface with Ethernet interface for TCP/IP, PROFINET, EtherNet/IP, and MODBUS TCP protocols
	IC-KP2-1HB6-V15B	Control interface unit IDENTControl Compact with interface for PROFIBUS DP

Accessories



	IC-KP2-2HB6-V15B	Control interface unit IDENTControl Compact with interface for PROFIBUS DP
	IC-KP2-1HB6-2V15B	Control interface unit IDENTControl Compact with interface for PROFIBUS DP
	IC-KP2-1HRX-2V1	Control interface unit IDENTControl Compact with serial interface RS-232 and RS-485
	IC-KP2-2HRX-2V1	Control interface unit IDENTControl Compact with serial interface RS-232 and RS-485
	IC-KP2-2HB21-2V1D	Control interface unit IDENTControl Compact with EtherCAT interface
	V1-G-5M-PUR-ABG-V1-W	Connecting cable, M12 to M12, PUR cable 4-pin, shielded
	V1-G-10M-PUR-ABG-V1-W	Connecting cable, M12 to M12, PUR cable 4-pin, shielded
	IUC72-F152-M-FR2	Data carrier
	IUC76-50-FR2	Data carrier
	IUC76-F203-M-FR2 10pcs	Data carrier
	IUC77-F151-M-GBL	Data carrier
	IUC77-25L100-GBL 1000pcs	Data carrier
	IUC77-25L110-GBL 1000pcs	Data carrier
	IUZ-MH12	Mounting bracket for pole and wall mounting
	IUZ-MH13	Mounting bracket for wall mounting
	IUZ-MH15	Mounting aid for round steel \varnothing 12 mm or sheet 1.5 mm ... 3 mm
	IUC76-F157-T17-M-FR1	Data carrier for standard applications
	IUC76-F157-T17-M-FR2	Data carrier for standard applications
	IUC76-F157-T18-M-FR1	Data carrier for paint shop applications
	IUC76-F157-T18-M-FR2	Data carrier for paint shop applications

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Accessories

	<p>IUC76-F157-T19-M-FR1</p>	<p>Data carrier for autoclave applications</p>
	<p>IUC76-F157-T19-M-FR2</p>	<p>Data carrier for autoclave applications</p>

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Function

The compact IUH-F190-V1-FR2 read/write head operates in the UHF frequency range and is optimized for use in industrial applications involving shorter distances. The device reads and writes passive tags according to EPC Generation 2 (ISO/IEC 18000-63). The read/write head can be operated in different countries, e.g. China. The read/write head complies with the respective radio regulations.

Wide range of options supported for filtering data. The read/write head is connected to the IDENT*Control* 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 approx. 1 meter; this range is determined by the tag used and can be changed by adjusting the transmission power. Other influencing factors are the application specific setup and surrounding materials, particularly metal. The read and write distances measured under ideal conditions can be found in a separate document. For the actual read and write distances under real conditions, the combination of read/write head and tag must be tested in the intended application.