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

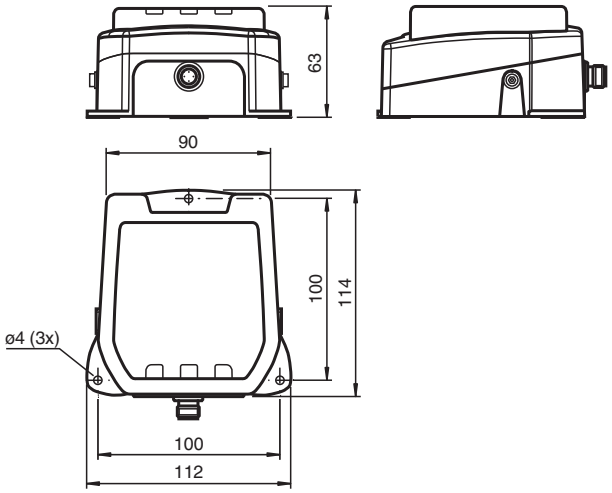
UHF RFID read/write device for IDENTControl, USA and Canada

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 the United States and Canada. 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	
Operating frequency	902 … 928 MHz: USA, Canada Transmission licenses for other countries on request

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Technical Data

Emitted power		3 … 1250 mW EIRP adjustable
Operating distance		typ. 2 m
UL File Number		E468231
MTBF		83 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		≤ 500 mA
Power consumption	P_0	≤ 10 W
Supply		from the IDENTControl
Surge protection		category 2
Standard conformity		
Degree of protection		EN 60529
RFID		ISO/IEC 18000-63
Approvals and certificates		
FCC approval		This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. **Caution:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
IC approval		This device complies with Industry Canada licence-exempt RSS standard(s) and with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
Radio approval		USA: Contains FCC IREIURF190 Canada: Contains 7037A-IURF190
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

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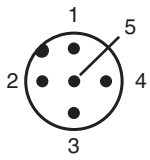
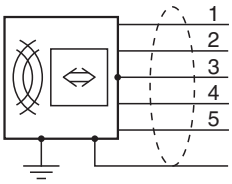
Connection





\+
A
\-
B
do not connect
Shield

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
	**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

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Accessories

	**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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