



Read/write station

IUT-F190-R4-V1-FR2-02

- Flexible UHF read/write station 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
- Multi-tag reading of up to 40 tags ensures increased productivity
- Connection via integrated RS-485 interface

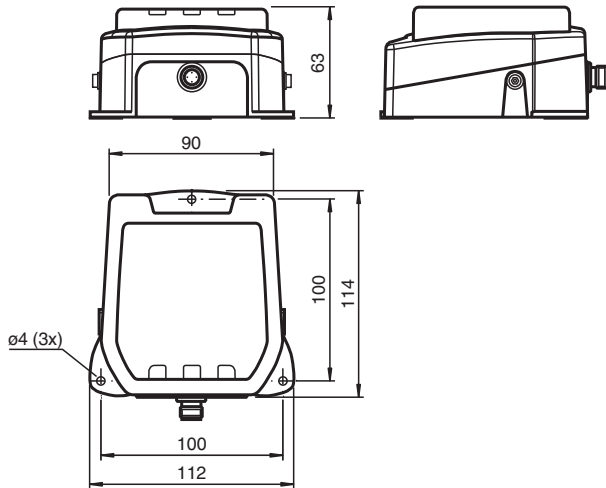
UHF read/write station, USA and Canada



Function

The compact IUT-F190-R4-V1-FR2-02 read/write station operates in the UHF frequency range and is optimized for industrial use at medium distances. The device writes and reads passive transponders according to EPC Gen2 (ISO/IEC 18000-63). The read/write station can be used in the USA and Canada. The read/write station is compliant with the relevant radio regulations. Wide range of options supported for filtering data. The read/write station has an RS-485 interface and is connected via an M12 connector. The user can monitor the status of the read/write station using the integrated LEDs. The read/write station has a typical detection range of approximately 2 m, which is determined by the transponder used and can be adjusted by the setting of the transmission power. Other influencing factors include the setup and installation of the specific application and the surrounding materials, in particular metal. The separately specified read and write distances for the respective transponders have been determined in a test laboratory under ideal conditions. For the actual read and write distances under real conditions, the combination of read/write station and transponder must be tested in the desired application.

Dimensions



Technical Data

General specifications	
Operating frequency	902 ... 928 MHz: USA, Canada Transmission licenses for other countries on request
Emitted power	3 ... 1250 mW EIRP adjustable
Operating distance	typ. 2 m
UL File Number	E468231
Functional safety related parameters	
MTTF _d	210 a

Release date: 2020-03-27 Date of issue: 2020-03-27 Filename: 292223_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

Indicators/operating means		
LED green		Power on
LED yellow		Read/write operation successful
LED blue		Transmission mode
Electrical specifications		
Rated operating voltage	U_e	20 ... 30 V DC , ripple 10 % _{SS}
Current consumption		≤ 450 mA
Power consumption	P_0	≤ 9 W
Surge protection		category 2
Interface		
Physical		RS-485 point-to-point connection
Protocol		ASCII
Transfer rate		1200, 2400, 4800, 9600, 19200, 38400 (default) Bit/s
Standard conformity		
Electromagnetic compatibility		EN 301489-1 EN 301489-3
Degree of protection		EN 60529
Safety		EN 62368-1
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.
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		
Degree of protection		IP67
Connection		connector M12 x 1
Material		
Housing		PA 6
Base		diecast aluminum
Mass		860 g

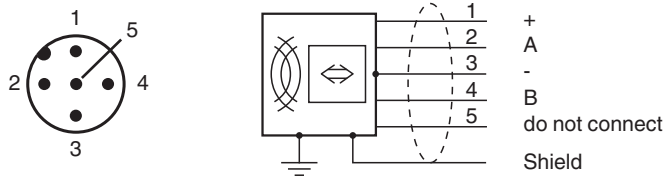
Release date: 2020-03-27 Date of issue: 2020-03-27 Filename: 292223_eng.pdf

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













Pepperl+Fuchs Group
www.pepperl-fuchs.comUSA: +1 330 486 0001
fa-info@us.pepperl-fuchs.comGermany: +49 621 776 1111
fa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Connection



Accessories

	IUC76-34-M-FR2	Data carrier
	IUC76-50-FR2	Data carrier
	IUC76-F157-T17-M-FR2	Data carrier for standard applications
	IUC76-F157-T18-M-FR2	Data carrier for paint shop applications
	IUC76-F157-T19-M-FR2	Data carrier for autoclave applications
	IUC76-28L90-M-FR2 25pcs	Data carrier
	IUC77-25L100-GBL 1000pcs	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	Connecting cable, M12 to M12, PUR cable 4-pin, shielded
	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

Release date: 2020-03-27 Date of issue: 2020-03-27 Filename: 292223_eng.pdf

Function

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.

Parameterization

Preferences:

Interface transfer rate: 38400 bps

Port settings: 8 data bits, no parity, 1 stop bit, no handshake

Transpondertype: 80