

# **RFID** read/write device IUT-F190-R4-V1-FR1-05

- Flexible UHF read/write device with medium detection range
- Compact and robust housing for harsh industrial environments
- Switchable antenna polarization guarantees reliable tag detection and enhances process flow
- Connection via integrated RS-485 interface
- Multi-tag reading increases productivity

UHF RFID read/write device, Singapore and Vietnam

### **Function**

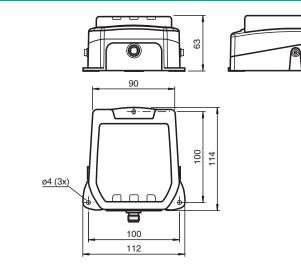
The compact IUT-F190-R4-V1-FR1-05 read/write station operates in the UHF frequency range and is optimized for industrial use at medium distances. The device writes and reads passive transponders according to EPC Gen2 (ISO/IEC 18000-63). The read/write station can be used in Singapore and Vietnam. The 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.

### **Parameterization**

Interface transfer rate:	38400 Bit/s
Port settings:	8 data bits, no parity, 1 stop bit, no handshake
Transpondertype:	80

### **Dimensions**



### **Technical Data**

#### **General specifications**

Operating frequency

Emitted power

866 MHz ... 868 MHz: Singapore, Vietnam Transmission licenses for other countries on request

#### 3 ... 500 mW ERP adjustable

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

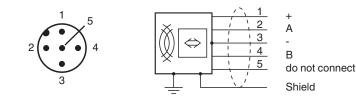
USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com



### **Technical Data**

Operating distance		typ. 2 m
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		
Rated operating voltage	Ue	20 30 V DC , ripple 10 $\%_{\rm SS}$
Current consumption		≤ 450 mA
Power consumption	P <sub>0</sub>	≤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		
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		810 g

## Connection



# 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.

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

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2

Accessories			
	IUC76-F157-T17-M-FR1	Data carrier for standard applications	
	IUC76-F157-T18-M-FR1	Data carrier for paint shop applications	
ROF.	IUC77-25L100-GBL 1000pcs	Data carrier	
	IUC77-28L90-M-FR1 25pcs	Data carrier	
0	IUC77-34-M-FR1 10pcs	Data carrier	
	IUC77-50-FR1 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	
1 C	V1-G-2M-PUR-ABG-V1-W	Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded	
d b	V1-G-5M-PUR-ABG-V1-W	Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded	
1 C	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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 Get

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