

RFID read/write device

IUT-F190-R4-V1-FR1-01



- 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, Europe



Function

The compact IUT-F190-R4-V1-FR1-01 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 Europe. The read/write station is compliant with the relevant radio regulations.

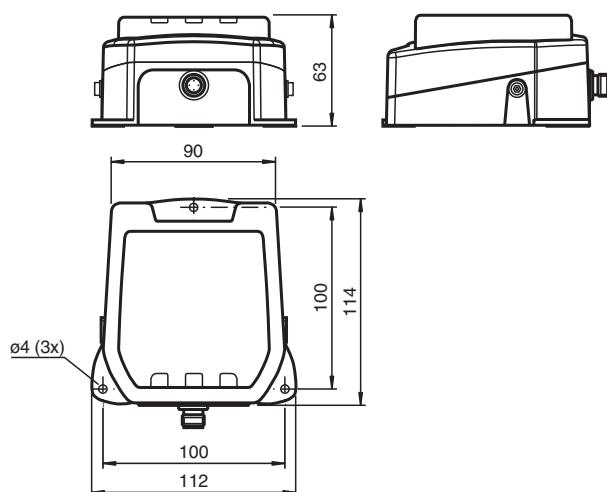
Wide range of options supported for filtering data. The read/write station has an RS-485 interface and is connected via an M12 connector. The user can monitor the status of the read/write station using the integrated LEDs.

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

865 ... 868 MHz: EU, Turkey

Transmission licenses for other countries on request

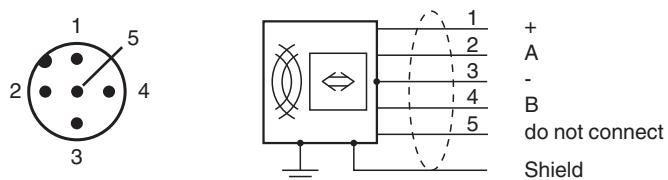
Emitted power

3 ... 1000 mW ERP adjustable

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	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	
Directive conformity		
Radio equipment		
Directive 2014/53/EU		EN 301489-1 EN 301489-3 EN 302208 EN 62368-1 EN 62311 EN 50364
RoHS		
Directive 2011/65/EU (RoHS)		IEC/EN 63000
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.

Accessories

	IUC76-F157-T17-M-FR1	Data carrier for standard applications
	IUC76-F157-T18-M-FR1	Data carrier for paint shop applications
	IUC77-25L100-GBL 1000pcs	Data carrier
	IUC77-28L90-M-FR1 25pcs	Data carrier
	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
	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