

Read/write station

IUT-F190-R4-V1-FR1-01

- Flexible UHF read/write station 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 read/write station, Europe

Function

The compact IUH-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

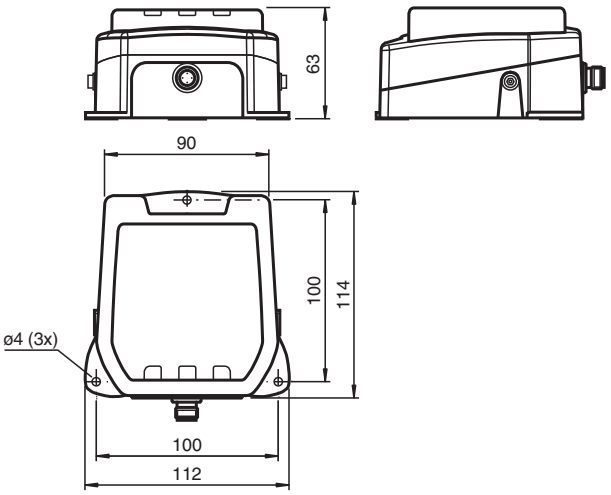
Interface transfer rate:	38400 Bit/s
Port settings:	8 data bits, no parity, 1 stop bit, no handshake
Transpondertype:	80

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.

Release date: 2021-01-22 Date of issue: 2021-01-22 Filename: 292221_eng.pdf

Dimensions



Technical Data

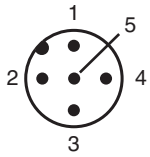
General specifications		
Operating frequency		865 … 868 MHz: EU, Turkey Transmission licenses for other countries on request
Emitted power		3 ... 1000 mW ERP adjustable
Operating distance		typ. 2 m
Functional safety related parameters		
$MTTF_d$		210 a
Indicators/operating means		
LED green		Power on
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)		EN 50581
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

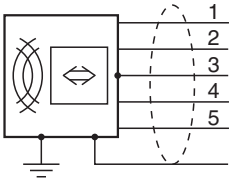
Release date: 2021-01-22 Date of issue: 2021-01-22 Filename: 292221_eng.pdf

Technical Data

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





\+
A
\-
B
do not connect
Shield

Accessories

	**IUC76-34-M-FR1**	Data carrier
	**IUC76-50-FR1**	Data carrier
	**IUC76-F157-T17-M-FR1**	Data carrier for standard applications
	**IUC76-F157-T18-M-FR1**	Data carrier for paint shop applications
	**IUC76-F157-T19-M-FR1**	Data carrier for autoclave applications
	IUC76-28L90-M-FR1 25pcs	Data carrier
	**IUC77-25L100-GBL 1000pcs**	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

Release date: 2021-01-22 Date of issue: 2021-01-22 Filename: 292221_eng.pdf

Accessories

	**V1-G-10M-PUR-ABG-V1-W**	Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded

Release date: 2021-01-22 Date of issue: 2021-01-22 Filename: 292221_eng.pdf