Read/write station

IUT-F190-B40-2V1D-FR1-01

- 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
- LED status indicator for bus communication and read/write station
- Network loop through by means of integrated 2 port switch
- Flexible UHF read/write station with medium detection range
- Multi-tag reading increases productivity

UHF read/write station, Europe

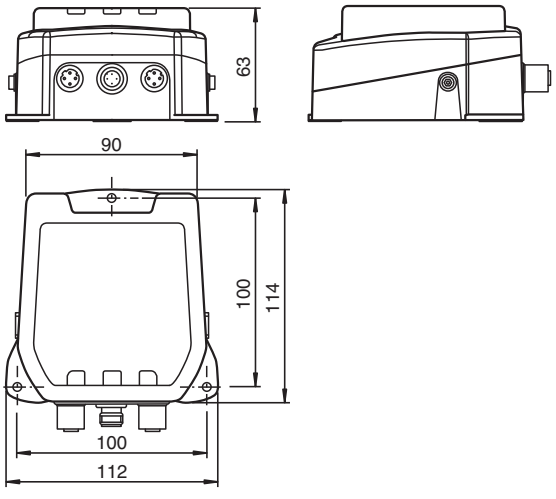
Function

The compact read/write station IUT-F190-B40-2VD1-* operates in the UHF frequency range and is optimized for industrial use over medium distances. The device writes and reads passive transponders according to EPC Gen2 (ISO/IEC 18000-63). The read/write station complies with the respective local radio regulations.
Extensive possibilities for data filtering are supported. The read/write station has an ethernet 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 about 2 m, which is determined by the transponder used and can be adjusted by setting the transmission power. Further influencing factors are the mounting or installation for the specific application and the surrounding materials, especially 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 read/write station and transponder must be tested in the desired application.

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



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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
Indicators/operating means		
LED green		Power on
LED yellow		Read/write operation successful
LED blue		Transmission mode
LED Link/Traffic		green: network connection yellow: flashes in rhythm with the transmitted data
Electrical specifications		
Rated operating voltage	U_e	20 ... 30 V DC , PELV
Ripple		≤ 10 % at 30 V DC
Current consumption		≤ 500 mA
Power consumption	P_0	≤ 10 W
Surge protection		category 2
Interface 1		
Physical		Ethernet
Protocol		HTTP EtherNet/IP PROFINET IO
Transfer rate		10 MBit/s or 100 MBit/s
Interface 2		
Physical		Ethernet
Protocol		HTTP EtherNet/IP PROFINET IO
Transfer rate		10 MBit/s or 100 MBit/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 ... 50 °C (-4 ... 122 °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		Power supply: M12 connector Protective earth: M4 earthing screw Ethernet: M12 plug connection
Material		
Housing		PA 6.6

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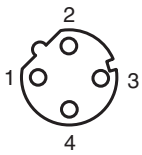
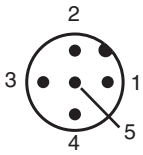
Base	diecast aluminum
Mass	770 g

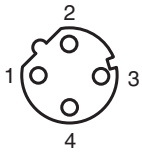
Connection Assignment



1 = Tx+
2 = Rx+
3 = Tx-
4 = Rx-



1 = +24 V
2 = DOUT
3 = GND
4 = DIN1
5 = DIN2



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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
	**V15-G-2M-PUR-ABG**	Female cordset single-ended M12 straight A-coded, 5-pin, PUR cable grey, shielded
	**V15-G-5M-PUR-ABG**	Female cordset single-ended M12 straight A-coded, 5-pin, PUR cable grey, shielded
	**V15-G-10M-PUR-ABG**	Female cordset single-ended M12 straight A-coded, 5-pin, PUR cable grey, shielded
	**V1SD-G-2M-PUR-ABG-V45-G**	Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e
	**V1SD-G-5M-PUR-ABG-V45-G**	Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e
	**V1SD-G-10M-PUR-ABG-V45-G**	Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e

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