



## Read/write station IUT-F190-R4-V1-FR2-14

- 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 readwrite station, Singapore and Vietnam

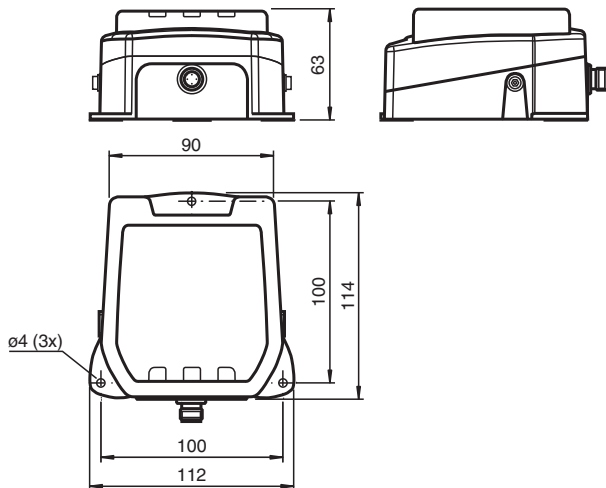
### Function

The compact IUT-F190-R4-V1-FR2-14 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.

### Dimensions



### Technical Data

| General specifications               |   |
|--------------------------------------|---|
| Operating frequency                  | 920 MHz ... 925 MHz: Singapore, Vietnam<br>Transmission licenses for other countries on request |
| Emitted power                        | 3 ... 500 mW ERP adjustable   |
| Operating distance                   | typ. 2 m  |
| Functional safety related parameters |   |
| MTTF <sub>d</sub>                    | 210 a   |
| Indicators/operating means           |   |

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

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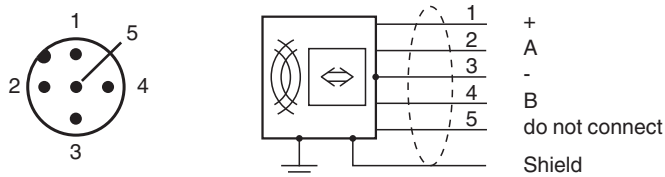
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## Technical Data

|                                  |       |  |
|----------------------------------|-------|--|
| LED green                        |       | Power on   |
| LED yellow                       |       | Read/write operation successful  |
| LED blue                         |       | Transmission mode  |
| <b>Electrical specifications</b> |       |  |
| Rated operating voltage          | $U_e$ | 20 ... 30 V DC , ripple 10 % <sub>SS</sub>   |
| Current consumption              |       | ≤ 450 mA   |
| Power consumption                | $P_0$ | ≤ 9 W  |
| Surge protection                 |       | category 2   |
| <b>Interface</b>                 |       |  |
| Physical                         |       | RS-485 point-to-point connection   |
| Protocol                         |       | ASCII  |
| Transfer rate                    |       | 1200, 2400, 4800, 9600, 19200, 38400 (default) Bit/s   |
| <b>Standard conformity</b>       |       |  |
| Electromagnetic compatibility    |       | EN 301489-1<br>EN 301489-3   |
| Degree of protection             |       | EN 60529   |
| Safety                           |       | EN 62368-1   |
| RFID                             |       | ISO/IEC 18000-63   |
| <b>Ambient conditions</b>        |       |  |
| Classification                   |       | Environmental condition A (controlled environment)   |
| Ambient temperature              |       | -20 ... 70 °C (-4 ... 158 °F) (Operation with nontransmission periods, adjustable)<br>-20 ... 60 °C (-4 ... 140 °F) (Continuous transmission mode) |
| Storage temperature              |       | -40 ... 85 °C (-40 ... 185 °F)   |
| Pollution degree                 |       | 2  |
| <b>Mechanical specifications</b> |       |  |
| Degree of protection             |       | IP67   |
| Connection                       |       | connector M12 x 1  |
| Material                         |       |  |
| Housing                          |       | PA 6   |
| Base                             |       | diecast aluminum   |
| Mass                             |       | 860 g  |










## Connection



## Accessories

|   |                             |  |
|---|-----------------------------|--|
|  | <b>IUC76-34-M-FR2</b>       | Data carrier                           |
|  | <b>IUC76-50-FR2</b>         | Data carrier                           |
|  | <b>IUC76-F157-T17-M-FR2</b> | Data carrier for standard applications |

## Accessories

|  |                                    |   |
|--|------------------------------------|---|
|   | <b>IUC76-F157-T18-M-FR2</b>        | Data carrier for paint shop applications                                  |
|   | <b>IUC76-F157-T19-M-FR2</b>        | Data carrier for autoclave applications                                   |
|   | <b>IUC76-28L90-M-FR2</b><br>25pcs  | Data carrier  |
|   | <b>IUC77-25L100-GBL</b><br>1000pcs | Data carrier  |
|   | <b>IUZ-MH13</b>                    | Mounting bracket for wall mounting  |
|   | <b>IUZ-MH15</b>                    | Mounting aid for round steel $\varnothing$ 12 mm or sheet 1.5 mm ... 3 mm |
|   | <b>V1-G-2M-PUR-ABG-V1-W</b>        | Connecting cable, M12 to M12, PUR cable 4-pin, shielded                   |
|   | <b>V1-G-5M-PUR-ABG-V1-W</b>        | Connecting cable, M12 to M12, PUR cable 4-pin, shielded                   |
|  | <b>V1-G-10M-PUR-ABG-V1-W</b>       | Connecting cable, M12 to M12, PUR cable 4-pin, shielded                   |

## 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