

# Read/write station

## IUT-F191-R4-V1-FR2-02



- Flexible UHF read/write station with short detection range
- Compact and robust housing for harsh industrial environments
- Multi-tag reading of up to 20 tags ensures increased productivity
- Circular antenna polarization ensures reliable transponder detection and improves process flow
- Connection via integrated RS-485 interface

UHF read/write station, USA and Canada



### Function

The read/write station operates in the UHF frequency range and is optimized for use in industrial applications involving shorter distances. The device reads and writes passive tags acc. to EPC Generation 2 (ISO/IEC 18000-63). The read/write station is compliant with the relevant transmission regulations.

The read/write station can be used in the USA and Canada.

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 around 1 meter; this range is determined by the tag used and can be adjusted by configuring the transmission power. Other influencing factors include the setup and installation of the specific application and the surrounding materials, particularly metal. The read and write distances for the relevant tag, which are detailed separately, have been established in a test laboratory under ideal conditions. For the actual read and write distances under real conditions, the combination of read/write station and tag must be tested in the desired application.

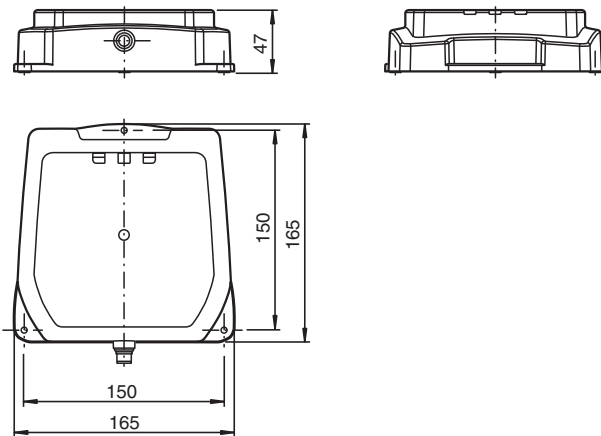
### Application

This product is a wireless device and may be operated only in the country for which a transmission license exists. 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



Release date: 2021-09-28 Date of issue: 2021-09-28 Filename: 70113814\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

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

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

## Technical Data

| General specifications        |   |
|-------------------------------|---|
| Operating frequency           | 902 ... 928 MHz: USA, Canada<br>Transmission licenses for other countries on request  |
| Emitted power                 | 3 ... 150 mW EIRP adjustable  |
| Operating distance            | typ. 1 m  |
| Indicators/operating means    |   |
| LED green                     | Ready for operation   |
| LED yellow                    | Read/write operation successful   |
| LED blue                      | Transmission mode   |
| Electrical specifications     |   |
| Rated operating voltage       | $U_e$ 10 ... 30 V DC  |
| Current consumption           | $\leq 190$ mA   |
| Power consumption             | $P_0$ $\leq 1.9$ W  |
| Surge protection              | category 2  |
| Interface                     |   |
| Physical                      | RS-485 point-to-point connection  |
| Protocol                      | ASCII   |
| Transfer rate                 | 38400 Bit/s   |
| Standard conformity           |   |
| Electromagnetic compatibility | EN 301489-1<br>EN 301489-3  |
| Degree of protection          | EN 60529  |
| RFID                          | ISO/IEC 18000-63  |
| Approvals and certificates    |   |
| FCC approval                  | This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:<br>(1) This device may not cause harmful interference, and<br>(2) This device must accept any interference received, including interference that may cause undesired operation.<br><b>Caution:</b><br>Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.   |
| IC approval                   | This device complies with Industry Canada licence-exempt RSS standard(s) and with part 15 of the FCC Rules. Operation is subject to the following two conditions:<br>(1) this device may not cause interference, and<br>(2) this device must accept any interference, including interference that may cause undesired operation of the device.<br><br>Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :<br>(1) l'appareil ne doit pas produire de brouillage, et<br>(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. |
| Ambient conditions            |   |
| Classification                | Environmental condition A (controlled environment)  |
| Ambient temperature           | -25 ... 70 °C (-13 ... 158 °F) (Operation with nontransmission periods)<br>-25 ... 55 °C (-13 ... 131 °F) (Continuous transmission mode)  |
| Storage temperature           | -40 ... 85 °C (-40 ... 185 °F)  |
| Pollution degree              | 2   |
| Mechanical specifications     |   |
| Housing length                | 165 mm  |
| Housing width                 | 165 mm  |
| Housing height                | 47 mm   |
| Degree of protection          | IP67  |
| Connection                    | connector M12 x 1   |
| Material                      |   |
| Housing                       | PA 6.6  |
| Mass                          | 700 g   |

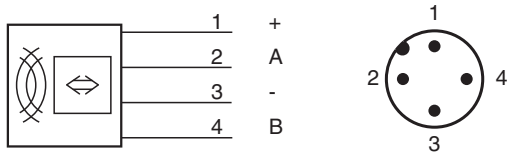
Release date: 2021-09-28 Date of issue: 2021-09-28 Filename: 70113814\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.comUSA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.comGermany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

## Connection



## Parameterization

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

## 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  |
|  | <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>V1-G-2M-PUR-ABG-V1-W</b>        | Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded |
|  | <b>V1-G-5M-PUR-ABG-V1-W</b>        | Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded |
|  | <b>V1-G-10M-PUR-ABG-V1-W</b>       | Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded |

Release date: 2021-09-28 Date of issue: 2021-09-28 Filename: 70113814\_eng.pdf