

# Read/write head

#### IUH-F190-V1-FR2-07

- Flexible UHF read/write head 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
- For connection to IDENTControl control interface
- Multi-tag reading increases productivity

UHF read/write head for IDENTControl, Brazil

#### **Function**

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

The read/write head can be used in Brazil.

Wide range of options supported for filtering data. The read/write head is connected to the IDENTControl interface using an M12 connector. The user can monitor the status of the read/write head using the integrated LEDs.

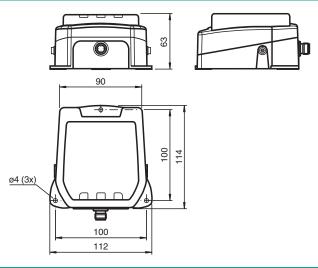
The read/write head has a typical detection range of around 2 meters; this range is determined by the tag used and can be adjusted by configuring the transmission power. Other influencing factors include the setup and installation of the specific application and the surrounding materials, particularly 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 head and tag must be tested in the desired 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**



#### **Technical Data**

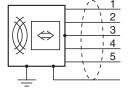
**General specifications** 

## **Technical Data**

| Operating frequency                  |                | 915 MHz 928 MHz: Brazil<br>Transmission licenses for other countries on request                                                 |
|--------------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------|
| Emitted power                        |                | 3 1250 mW EIRP adjustable                                                                                                       |
| Operating distance                   |                | typ. 2 m                                                                                                                        |
| Functional safety related parameters |                |                                                                                                                                 |
| MTTF <sub>d</sub>                    |                | 210 a                                                                                                                           |
| Indicators/operating means           |                |                                                                                                                                 |
| LED green                            |                | Power on                                                                                                                        |
| LED yellow                           |                | Read/write operation successful                                                                                                 |
| LED blue                             |                | Transmission mode                                                                                                               |
| Electrical specifications            |                |                                                                                                                                 |
| Current consumption                  |                | ≤ 450 mA                                                                                                                        |
| Power consumption                    | P <sub>0</sub> | ≤9 W                                                                                                                            |
| Supply                               |                | from the IDENTControl                                                                                                           |
| Surge protection                     |                | category 2                                                                                                                      |
| Standard conformity                  |                |                                                                                                                                 |
| Electromagnetic compatibility        |                | EN 301489-1<br>EN 301489-3                                                                                                      |
| Degree of protection                 |                | EN 60529                                                                                                                        |
| Safety                               |                | EN 62368-1                                                                                                                      |
| 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                                 |                | 860 g                                                                                                                           |

### Connection





Α В do not connect Shield

#### **Accessories**



IC-KP-B17-AIDA1

IDENTControl control interface with Ethernet interface for TCP/IP, PROFINET, EtherNet/IP, and MODBUS TCP protocols



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# **Accessories** IC-KP2-2HRX-2V1 Control interface unit IDENTControl Compactwith serial interface RS-232 and RS-485 IC-KP2-2HB6-V15B Control interface unit IDENTControl Compact with interface for PROFIBUS DP IC-KP2-2HB17-2V1D IDENTControl Compact control interface with Ethernet interface for TCP/IP, PROFINET, EtherNet/IP, and MODBUS TCP protocols IC-KP2-2HB21-2V1D Control interface unit IDENTControl Compact with EtherCAT interface IUC76-34-M-FR2 Data carrier IUC76-50-FR2 Data carrier IUC76-F157-T17-M-FR2 Data carrier for standard applications IUC76-F157-T18-M-FR2 Data carrier for paint shop applications IUC76-F157-T19-M-FR2 Data carrier for autoclave applications IUC76-28L90-M-FR2 Data carrier 25pcs IUC77-25L100-GBL Data carrier 1000pcs 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 Connecting cable, M12 to M12, PUR cable 4-pin, shielded V1-G-5M-PUR-ABG-V1-W Connecting cable, M12 to M12, PUR cable 4-pin, shielded V1-G-10M-PUR-ABG-Connecting cable, M12 to M12, PUR cable 4-pin, shielded V1-W