

# RFID read/write device

## IUT-F191-IO-V1-FR1-01



- Flexible UHF read/write device with short detection range
- Ready-made PLC function blocks designed for quick and easy system integration
- 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
- For connection to IO-Link master
- Degree of protection IP67

UHF RFID read/write device with IO-Link, Europe



### Function

The read/write device 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 device is compliant with the relevant transmission regulations.

Wide range of options supported for filtering data. The read/write device has an IO-Link interface and is connected via a M12 connector. The user can monitor the status of the read/write device using the integrated LEDs.

The read/write device 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 device and tag must be tested in the desired application.

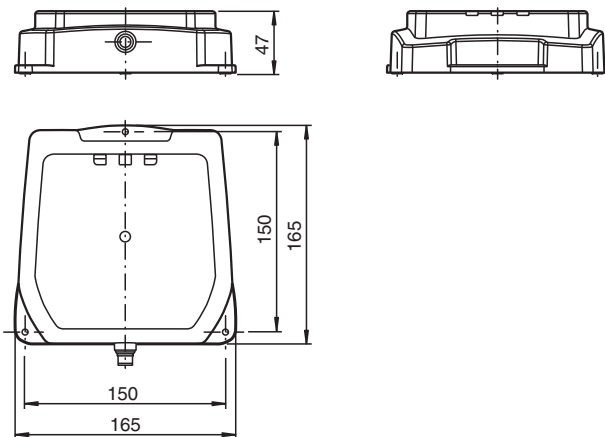
### Application

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



### Technical Data

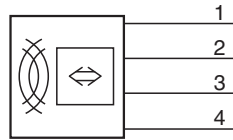
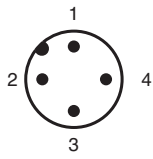
#### General specifications

Release date: 2024-04-22 Date of issue: 2024-04-22 Filename: 70113810\_eng.pdf

## Technical Data

Operating frequency	865 ... 868 MHz: EU, Turkey Transmission licenses for other countries on request	
Emitted power	3 ... 100 mW ERP adjustable	
MTBF	127 a (Operation at +40 °C)	
<b>Indicators/operating means</b>		
LED green/red	Solid green: Ready for operation, no IO-Link communication Flashing green (1 Hz): IO-Link operation	
LED yellow	Read/write operation successful	
LED blue	Transmission mode	
<b>Electrical specifications</b>		
Operating voltage	U <sub>B</sub>	18 ... 30 V DC (IO-Link)
Current consumption	≤ 90 mA ( at 24 V DC )	
<b>Interface</b>		
Interface type	IO-Link	
IO-Link revision	1.1	
Device profile	Identification and Diagnosis - I&D	
Process data	Input 32 Byte Output 32 Byte	
Vendor ID	1 (0x0001)	
Device ID	4194817 (0x400201)	
Data transfer rate	COM3 (230.4 kbits/s)	
Min. cycle time	4 ms	
SIO mode support	no	
Compatible master port type	Class A Class B	
<b>Directive conformity</b>		
Radio equipment		
Directive 2014/53/EU	EN 301489-1 EN 301489-3 EN 302208 EN 62368-1 EN 50364	
RoHS		
Directive 2011/65/EU (RoHS)	IEC/EN 63000	
<b>Standard conformity</b>		
Degree of protection	EN 60529	
Communication interface	IEC 61131-9 / IO-Link V1.1.3	
RFID	ISO/IEC 18000-63	
<b>Ambient conditions</b>		
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F) (Operation with nontransmission periods) -25 ... 60 °C (-13 ... 140 °F) (Continuous transmission mode)	
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)	
<b>Mechanical specifications</b>		
Degree of protection	IP67	
Connection	connector M12 x 1	
Material		
Housing	PA 6.6	
Base	Aluminum	
Mass	700 g	
Dimensions		
Height	47 mm	
Width	165 mm	
Length	165 mm	

## Connection



1 L+  
2 n.c.  
3 L-  
4 C/Q