# Release date: 2023-08-04 Date of issue: 2023-08-04 Filename: 309849\_eng.pdf



# RFID read/write device IUT-F190-R4-V1-FR2-13

- Flexible UHF read/write device with medium detection range
- Compact and robust housing for harsh industrial environments
- Switchable antenna polarization guarantees reliable tag detection and enhances process flow
- Connection via integrated RS-485 interface
- Multi-tag reading increases productivity

UHF RFID read/write device, Malaysia

### **Function**

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

The read/write station can be used in Malaysia.

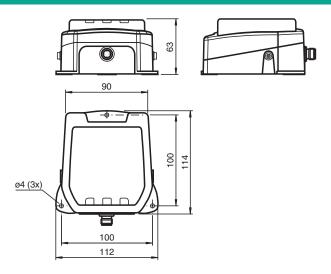
The read/write station can be used in Malaysia. Wide range of options supported for filtering data. The read/write station has an RS-485 interface and is connected via an M12 connector. The user can monitor the status of the read/write station using the integrated LEDs.

The read/write station has a typical detection range of around 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 station and tag must be tested in the desired application.

### **Parameterization**

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

# **Dimensions**



# **Technical Data**

# **General specifications**

Operating frequency

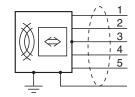
919 MHz ... 923 MHz: Malaysia Transmission licenses for other countries on request



Technical Data		
Emitted power		3 800 mW ERP adjustable
Operating distance		typ. 2 m
MTBF		105 a (Operation at +40 °C)
Indicators/operating means		
LED green		Power on Pow
LED yellow		Read/write operation successful
LED blue		Transmission mode
Electrical specifications		
Rated operating voltage	U <sub>e</sub>	20 30 V DC , ripple 10 %ss
Current consumption		≤ 450 mA
Power consumption	$P_0$	≤9 W
Surge protection		category 2
Interface		
Physical		RS-485 point-to-point connection
Protocol		ASCII
Transfer rate		1200, 2400, 4800, 9600, 19200, 38400 (default) Bit/s
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 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

# **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.

# Accessories

	IUC76-F157-T19-M-FR2	Data carrier for autoclave applications
第2章	IUC77-25L100-GBL 1000pcs	Data carrier
11111	IUC77-28L90-M-FR2 25pcs	Data carrier
•	IUC77-34-M-FR2 10pcs	Data carrier
	IUC77-50-FR2 10pcs	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
66	V1-G-2M-PUR-ABG-V1-W	Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded
66	V1-G-5M-PUR-ABG-V1-W	Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded
66	V1-G-10M-PUR-ABG- V1-W	Cordset M12 socket straight to M12 plug angled A-coded, 4-pin, PUR cable grey, shielded