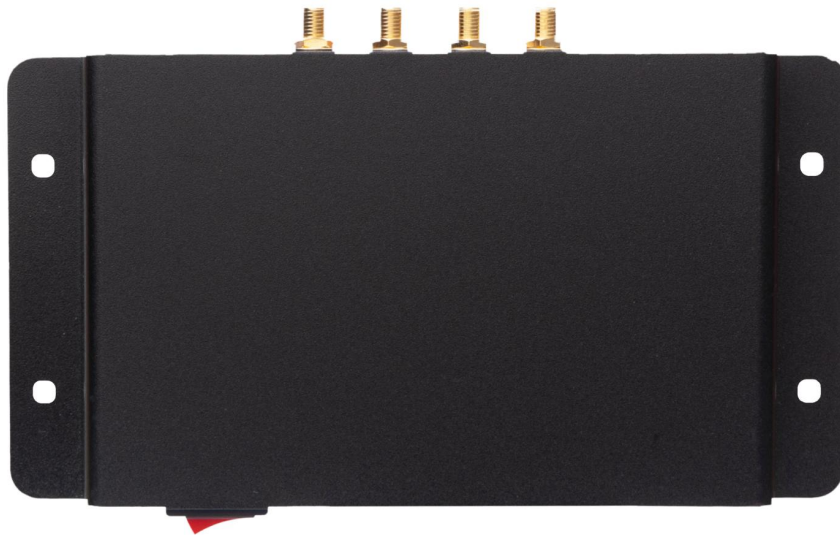


Ex10 Temp.Measuring Fixed Reader(4-Port)



Model: RRU7181DL

Size: 166.4mmx104mmx27.5mm

GENERAL DESCRIPTION

RRU7181DL is a high-performance UHF RFID reader with fully independent intellectual property design. It incorporates a proprietary efficient signal processing algorithm that ensures high read rates while enabling fast tag reading, writing, and temperature measurement. This reader is highly versatile and can be widely used in various RFID systems such as logistics, access control, power systems, and production process control.

FEATURES

- Self-intellectual property;
- 865~868MHz/902~928MHz frequency band(frequency customization optional);
- Designed with IMPINJ E710 and support ISO18000-6C(EPC C1G2) protocol tag;
- Supports temperature sensing functionality and is compatible with temperature measurement for various tag chips;
- FHSS or Fix Frequency transmission;
- Support RSSI;
- RF output power up to 33dbm(adjustable);
- SMA sockets for 4 external antennae ;
- Low power dissipation with single +9~24VDC power supply;
- Supports dual MODBUS channels (independent MODBUS addresses) with optional interfaces such as RJ45 (TCP/IP).
- High stability, air-cooled heat dissipation, no external heat sink required.
- Support on-the-site firmware upgrading.

CHARACTERISTICS

- **Absolute Maximum Ratings**

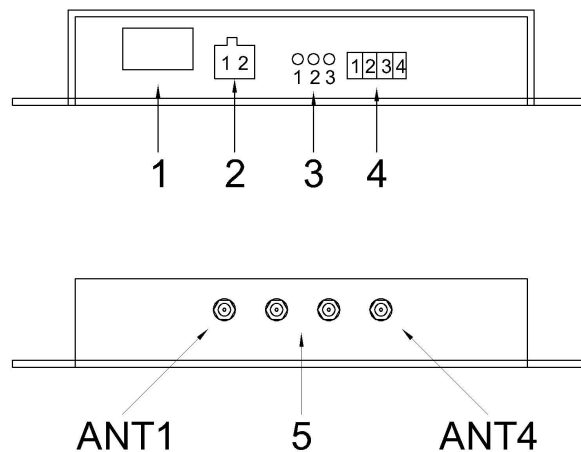
ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	26	V
Operating Temp	T _{OPR}	-20 ~ +65	°C
Storage Temp	T _{STR}	-40 ~ +85	°C

● Electrical and Mechanical Specification

Under $T_A=25^{\circ}\text{C}$, $V_{CC}=+9\text{V}$ unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	9	12	24	V
Current Dissipation	I_C	420 (5dBm)		1000(30dBm) 1500(33dBm)	mA
Frequency	F_{REQ}	-	865~868(ETSI) 902~928(FCC)	-	MHz
RF Output Power	P_{RF}	5		33	dBm
Receive Sensitivity	SR		-74(using E310) -81(using E510) -87(using E710)		dBm

INTERFACE



1. Power Switch

2. Power Interface

No.	SYMBOL	DESCRIPTION
1	PWR	Power Supply
2	GND	Ground

3. Status Indicators

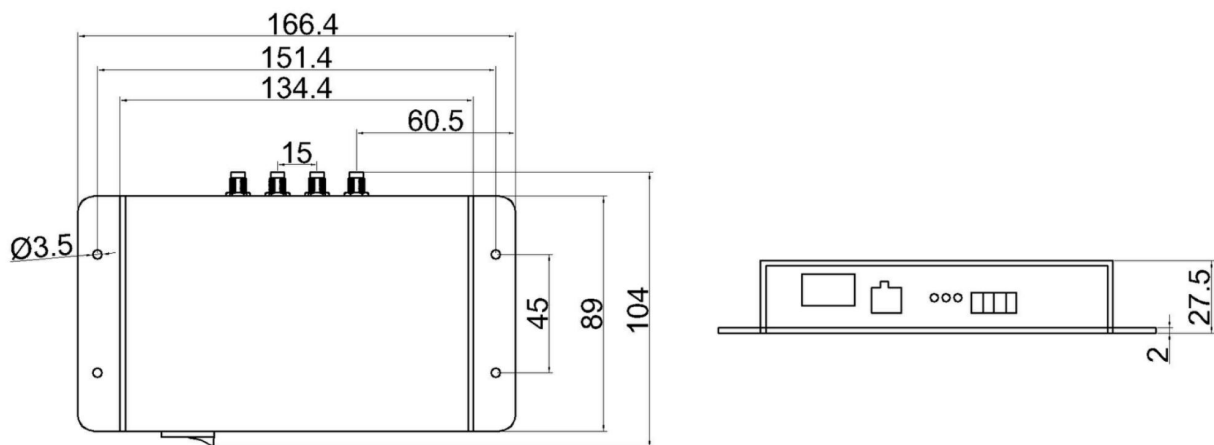
No.	SYMBOL	DESCRIPTION
1	Red	Power Indicator
2	Yellow	Auxiliary MODBUS Operation Indicator
3	Green	Main MODBUS Operation Indicator

4. Dual MODBUS Interface

No.	SYMBOL	DESCRIPTION
1	A2+	Auxiliary MODBUS Interface Data Line
2	B2-	Auxiliary MODBUS Interface Data Line
3	A1+	Main MODBUS Interface Data Line
4	B1-	Main MODBUS Interface Data Line

5. SMA Antenna Port (ANT1~ANT4)

MECHANICAL DATA (UNIT:mm)



ACCESSORY



Power Adapter*1



Power Cord*1



4PIN Green Terminal Block*1

Remark:

1. Specifications are subject to change, please pay attention to our latest version.
2. Shenzhen RoyalRay Science and Technology Co., Ltd. reserves the right to the final interpretation of the above terms.