

## Ex10 Temp.Measuring Fixed Reader(4-Port)



**Model: RRU7182DL**

**Size: 200 x 143.2 x 28.6mm**

## GENERAL DESCRIPTION

RRU7182DL 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;
- RF output power up to 33dbm(adjustable);
- SMA sockets for 4 external antennae ;
- Support RSSI;
- Low power dissipation with single +12~48VDC 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;
- Compact and refined design with IP65 protection, suitable for a variety of application scenarios;
- Support on-the-site firmware upgrading.

## CHARACTERISTICS

- **Absolute Maximum Ratings**

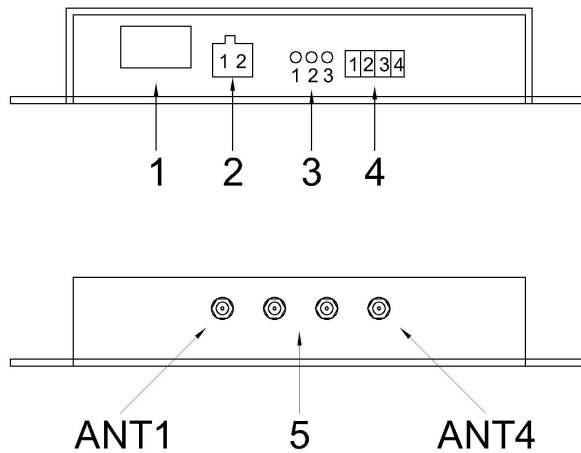
ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	50	V
Operating Temp	T <sub>OPR</sub>	-25 ~ +65	°C
Storage Temp	T <sub>STR</sub>	-40 ~ +85	°C

### ● Electrical and Mechanical Specification

Under  $T_A=25^{\circ}\text{C}$ ,  $V_{CC}=+12\text{V}$  unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	12		48	V
Current Dissipation	$I_C$	330 (5dBm)		850(30dBm) 1200(33dBm)	mA
Frequency	$F_{REQ}$	-	865~868(ETSI) 902~928(FCC)	-	MHz
RF Output Power	$P_{RF}$	5		33	dBm
Receive Sensitivity	SR		-87(using E710)		dBm

## INTERFACE



### 1. Power Interface

No.	SYMBOL	DESCRIPTION
1	GND	Ground
2	VCC	Power Supply

### 2. Power Switch

### 3. Status Indicators

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

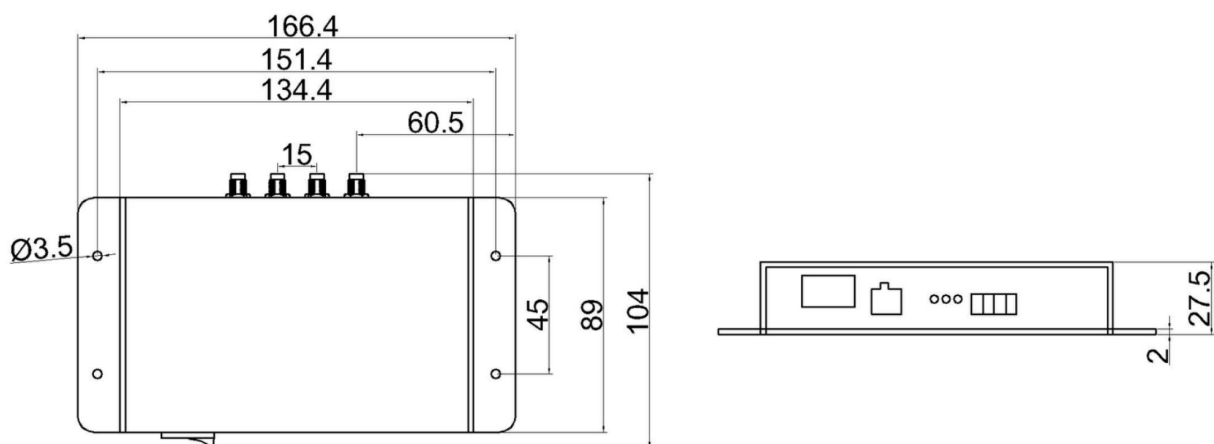
#### 4. Dual MODBUS Interface

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

#### 5. TCP/IP network interface (Optional)

#### 6. 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.