

# **UHF Middle Range Integrated Reader**



Model: RRU1861-9dBi

Size: 278.5 × 257 × 52 mm



#### GENERAL DESCRIPTION

RRU1861-9dbi is a high performance UHF RFID integrated reader. It is designed upon fully self-intellectual property. Based on proprietary efficient digital signal processing algorithm, it supports fast tag read/write operation with high identification rate. It can be widely applied in many RFID application systems such as Logistics, Access Control, Anti-counterfeit and Industrial Production Process Control System.

#### **FEATURES**

- Self-intellectual property;
- Support ISO18000-6B, ISO18000-6C (EPC C1G2) protocol tag;
- 860~868MHz, 902~928MHz frequency band (frequency customization optional);
- FHSS or Fix Frequency transmission;
- RF output power up to 30dbm (adjustable);
- 9dbi antenna optional with effect distance up to 5~9m\*;
- Support auto-running, interactive and trigger-activating work mode;
- Low power dissipation with single +9 DC power supply; POE is optional;
- Support RS232, RS485, Wiegand interface; provide RJ45(TCP/IP), WiFi for choice;
- Provide DLL and Demonstration Software Source code to facilitate further development.

### **CHARACTERISTICS**

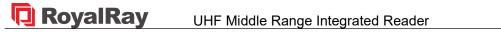
#### **Absolute Maximum Rating**

| ITEM            | SYMBOL    | VALUE     | UNIT   |
|-----------------|-----------|-----------|--|
| Power Supply    | VCC       | 16        | V  |
| Operating Temp. | $T_OPR$   | -20 ~ +60 | $^{\circ}\! \mathbb{C}$  |
| Storage Temp.   | $T_{STR}$ | -20 ~ +70 | $^{\circ}\!$ |

# **Electrical and Mechanical Specification** Under T<sub>A</sub>=25°C, VCC=+9V unless specified

| ITEM                | SYMBOL  | MIN | TYP                | MAX | UNIT |
|---------------------|---------|-----|--------------------|-----|------|
| Power Supply        | VCC     | 8   | 9                  | 12  | V    |
| Current Dissipation | Ic      |     | 350                | 650 | mA   |
| Frequency           | $F_REQ$ | 860 | 860~868<br>902~928 | 928 | MHz  |

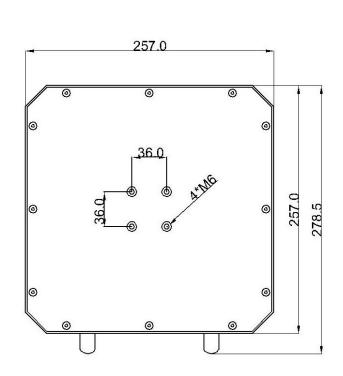
<sup>\*</sup> Effective distance depends on antenna, tag and environment.

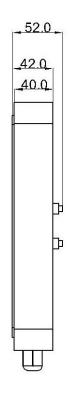


# **INTERFACE**

| ITEM   | COMMENT                   |
|--------|---------------------------|
| Red    | +9V                       |
| Black  | GND                       |
| L-Blue | Wiegand DATA0             |
| Blue   | Wiegand DATA1             |
| Purple | RS485 R+                  |
| Orange | RS485 R-                  |
| Brown  | GND                       |
| White  | RS232 RXD                 |
| Pink   | RS232 TXD                 |
| Grey   | Trigger input (TTL level) |

# **MECHANICAL DATA (UNIT:mm)**







## **ACCESSORY**



#### Remark:

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