

UHF Long Range RFID Reader



Quick Details

LDR-RI02 is a high-performance UHF UHF electronic label integrated machine, completely independent intellectual property design, combined with proprietary efficient signal processing algorithm, while maintaining high literacy rate, to achieve fast reading and writing processing of electronic labels. It can be widely used in various radio frequency identification (RFID) systems such as logistics, vehicle management, anti-counterfeiting systems and production process control.

Feature

1. Completely independent intellectual property design;
2. Electronic labels that comply with ISO18000-6B and EPC CLASS1 G2 standards are fully supported.
3. Working frequency 902 ~ 928MHz(can be adjusted according to different countries or regions)
4. Work with broad spectrum frequency hopping (FHSS) or fixed frequency transmission;
5. Output power up to 30dBm (adjustable);
6. 12dbi antenna configuration, typical reading distance 0~10 meters *;
7. Support automatic mode, interactive response mode, trigger mode and other working modes;
8. Low power consumption design, single +9V power supply;
9. Support a variety of user interfaces such as RS232, RS485, Wiegand, optionally TCP/IP or WIFI interface;
10. Provide dynamic link library (DLL) and demo software source code to support secondary development.

* Effective distance depends on protocol format, external antenna, electronic tag and working environment.

Description

| RFID Parameter | |
|------------------------|---|
| Model No. | LDR-RI02 |
| Type | Passive UHF RFID Reader |
| Protocol | ISO/IEC 18000-6C and 6B, EPC Class1 Gen2 |
| Frequency | US 902 ~ 928MHz |
| Antenna | Built-in 12dbi linearized polarization RFID antenna |
| Transmit power | 0 ~ 30dBm adjustable |
| Working Mode | Read&Write supported |
| Read&Write Range | Read 1-15m adjustable, tag and environment dependent |
| Read Prompt | Buzzer |
| Anti-collision | Support multiple tags reading |
| Reading Speed | Max. 100tags/s |
| Software Kits | Provide free Demo for testing and SDK for development |
| Software Compatibility | Win XP, Win7, Win8 or Win10 |

| Physical Parameter | |
|-----------------------|--|
| Size | 445x445x55mm(L×W×T) |
| Material | ABS Waterproof |
| Mounting | Bracket |
| Data Interface | RS232/UART, Wiegand26/34, RS485 |
| Power supply | Single +9V~12V DC |
| Operating temperature | -10℃ ~ +60℃ |
| Operating humidity | 20% ~ 90%RH |
| Accessories | 1×Bracket, 1×Power cable |
| Package | 1unit/carton |
| Customized Service | Ethernet/WIFI port; Cable meters; Relay; External Antenna; Module; Led indicator; Circular Antenna; |

Electrical characteristic

Limiting parameter

| Item | Symbol | Numerical value | Unit |
|----------------|--------|-----------------|------|
| Supply voltage | VCC | 16 | V |

| | | | |
|-----------------------|------------------|---------|----|
| Operating temperature | T _{OPR} | -10~+60 | °C |
| Storage temperature | T _{STR} | -25~+80 | °C |

Specification

Unless otherwise specified, the specifications shown are taken from TA = 25 ° C and VCC = +9V operating conditions

| Item | Symbol | minimum | model | Max | Unit |
|---------------------|------------------|---------|-------|-----|------|
| Supply voltage | VCC | 8 | 9 | 12 | V |
| Working current | I _C | | 350 | 650 | mA |
| Operating frequency | F _{REQ} | 902 | | 928 | MHz |
| Effective distance | DIS | 300 | 600 | | mm |

Port

Note: For models with TCPIP network interfaces UHFREADER18TCP, a standard RJ45 network jack is attached.

| Item | Description |
|------------|------------------------------|
| Red | +9V |
| Black | GND |
| Light blue | Wiegand DATA0 |
| Blue | Wiegand DATA1 |
| Purple | RS485 R+ |
| Orange | RS485 R- |
| Brown | GND |
| White | RS232 RXD |
| Pink | RS232 TXD |
| Gray | External trigger (TTL level) |

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Application

- ✓ Intelligent traffic management, such as custom clearance, parking lot;
- ✓ Logistics such as container management, pallet management
- ✓ Ticketing, school attendance, asset tracking;
- ✓ Access control, automatic weighing;
- ✓ Animal tracking;