

## 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 865 ~ 858MHz(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	EU 865 ~ 858MHz
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°C ~ +60°C
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 <sub>OPR</sub>	-10~+60	°C
Storage temperature	T <sub>STR</sub>	-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 <sub>c</sub>		350	650	mA
Operating frequency	F <sub>REQ</sub>	865		868	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)

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

### 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;