

UHF RFID INTEGRATED READER

Model: UReader-B



General Description

UReader-B is an industrial grade high-performance UHF RFID integrated reader, with patented double-layer drainage and waterproof structure. It is designed with low power dissipation and high integrated RFID chip solution, which has features of long reading distance, high identification speed, multiple interfaces and ease installation. It can be widely used in logistics tracking, commodity inventory, cargo sorting, vehicle management, personnel management, asset management, medical systems, cold chain management, temperature monitoring, power

monitoring, anti-counterfeiting systems and production process control and many other applications.

Features

- * Designed with low power dissipation and high integrated RFID chip solution
- * Support EU 840~868MHz, US 902~928MHz working frequency (or Customized)
- * Support EPC Global UHF class 1 gen2 / ISO18000-6C protocol RFID tags.
- * Support temperature sensor RFID tag, moisture Sensor RFID tag and some other sensor RFID tags.
- * Optimized multiple tags inventory algorithm, speed is more than 100 per second
- * FHSS or Fix Frequency transmission
- * RF output power up to 30dBm (1dbm step adjustable)
- * Support command, polling and trigger mode
- * Support EPC, TID and USER inventory in independently or conjunctively
- * Support IAP firmware upgrading
- * Low power dissipation with single +12 DC power supply
- * Support USB、RS232、RS485、Weigand、RJ45(TCP/IP, UDP) and WIFI, 4G at option
- * Built-in 8 dBi circular polarized antenna with effective distance up to 20 m (adjustable)
- * Provide DEMO and SDK for development
- * Support development based on Windows, Android, Linux etc. and C, C#, JAVA etc.
- * Waterproof class: I67 Double layer patent drainage and waterproof, IP67

Specifications

Main Function		
Protocol	EPC Global UHF Class 1 Gen 2 / ISO 18000-6C	
Support tags	Normal tag; Temperature sensor tag; Moisture sensor tag	
RSSI	Support	
RF Parameter		
Frequency	840~960MHz at option; Fixed or FHSS	
RF output power	30dBm±1dB (MAX)	
Step power	1dBm	
Signal width	< 250KHz	
Antenna	Built-in 9dBi circular polarized antenna	
Tag Reading		
Reading distance	≥8m	8dBi circular polarized antenna, 30dBm, Standard E41 testing card
Writing distance	≥4m	
Multiple tag reading speed	≥100pcs/s	
Communication Parameter		
Interface	USB, RS232, RS485, Weigand; RJ45(TCP/IP, UDP), WIFI, 4G at option	
Baud rate	115200bps	

Power Parameter	
Operating Voltage	DC 12.0V (+9~24V)
Operating Current	≤600mA / DC12V
Standby Current	≤200mA / DC12V
Working Environment	
Operating Temperature	-20~+55°C
Storage Temperature	-30~+85°C
Operating Humidity	<95%RH (+25°C) Non-condensing

Interface Definition

Item	Comment
Red	+12V
Black	GND
Yellow	Wiegand DATA0
Blue	Wiegand DATA1
Purple	RS485 R+
Orange	RS485 R-
Brown	GND
White	RS232 RXD
Green	RS232 TXD
Grey	Trigger input (TTL level)

Built-in Antenna Specification

Electrical Specifications	
Freq Range	865~940MHz
Gain	8dBi
Horizontal Beam width	65±5°
Vertical Beam width	63°
F/B Ratio	≥23dB
VSWR	≤1.3
Impedance	50 Ω
Max. Power	50W
Polarization	Circular polarization
Lightning Protection	Direct Ground
Mechanical Specifications	
Dimension	226*226*68mm
Weight	1.7kg
Rated Wind Velocity	30m/s
Reflector material	Aluminum
Radome Color	White
Radome material	ABS
Operating temperature	-40 ~ 80 °