

## UHF RFID INTEGRATED READER

### Model: UReader-D



### General Description

UReader-D a high-performance UHF RFID integrated reader. 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 12 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.

## Specifications

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Main Function		
Protocol	EPC global UHF Class 1 Gen 2 / ISO 18000-6C	
Support tags	Normal RFID tags; Temperature sensor or Moisture sensor RFID tag	
RSSI testing	Support	
RF Parameter		
Frequency	840~960MHz Frequency hopping	
RF output power	30dBm±1dB ( MAX )	
Step power	1dBm	
Channel occupied bandwidth	< 250KHz	
Antenna	Built-in 12dBi vertical linear /circular polarized antenna	
Tag Reading		
Reading distance	≥25m	12dBi circular polarized antenna, 30dBm, Standard E41 testing card
Writing distance	≥6m	
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	≤100mA / DC12V
<b>Working Environment</b>	
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

Gain	12dBi
Horizontal Beam width	42°
Vertical Beam width	38°
F/B Ratio	≥23dB
VSWR	≤1.3
Impedance	50 Ω
Max. Power	100W
Polarization	Linear polarization
Waterproof	IP65
Lightning Protection	Direct Ground
<b>Mechanical Specifications</b>	
Dimension	445*445*56mm
Weight	2.6kg
Rated Wind Velocity	30 m/s
Reflector material	Aluminum
Radome Color	White
Radome material	ABS
Operating temperature	-40~80°C