UHF Long Range Integrated Reader

Name: UHF Long Range Integrated Reader

Model Number: UHF5112

Size: 450 x 450 x 70mm

General Description:

UHF5112 is a high performance UHF RFID integrated reader. It is designed upon fully self-intellectual property. Based on efficient DSP 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.

Application:

♦Vehicle no-stop toll management (car parking lot)

♦Logistics and warehouse management

♦Production flew-line management

♦Animals' recording management

♦Products anti-counterfeiting detection

Other field:

♦Club management

♦Library management

♦School and factory access control

♦Attendance management and more

Features:

1. Self-intellectual property;

2. Support ISO18000-6C (EPC C1G2) protocol tag;

3. 865~868MHz, 902~928MHz frequency band (frequency customization optional by Soft);

4. FHSS or Fix Frequency transmission;

5. RF output power up to 30dBm (adjustable);

6. 12dBi Linear antenna with effect distance up to 0m~30m*;

7. Support active mode, answer mode, trigger-activating and password work mode;

8. Low power dissipation with single +12V DC power supply;

9. Support RS232, RS485, Wiegand interface, Relay, USB, RJ45, WIFI, POE;

10. One Relay (Optional) can control Beep, Motor, Light.

11. Support ModBus (only RS232, RS485, RJ45 interface).

Effective distance depends on antenna, tag and environment.

Product mode explanation:

Model	Interface
SW1912	Standard(RS232, RS485, Wiegand,Trigger)
SW1912T	Standard with RJ45
SW1912W	Standard with WIFI
SW1912TW	Standard with RJ45 and WIFI
SW1912TP	Standard with RJ45 and POE
SW1912TPW	Standard with RJ45 and POE and WIFI
SW1912R	Standard with Relay
SW1912U	Standard with USB(HID & Keyboard)
SW1912G	Standard with 4G
-T: RJ45 -W:WIFI -P:POE –R: Relay –U:USB –G: 4G	

Characteristics:

Absolute Maximum Rating

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	24	V
Operating Temp.	T_{OPR}	-20～+60	℃
Storage Temp.	T_{STR}	-40～+85	℃

Electrical and Mechanical Specification

Under TA = 25℃，VCC = +12V unless specified

ITEM	SYMBOL	MIN	TYPE	MAX	UNIT
Power Supply	VCC	8	12	24	V
Current Dissipation	I_C		600	1000	mA
Frequency	F_{REQ}	865		928	MHz

Product Technical Parameters

Type	
Model Number	UHF5112
Type	UHF Long Range Integrated Reader
Physical parameters	
Dimensions	450x450x70mm
Net Weight	4.5Kg
Gross Weight	5.0Kg
Package size	60*48*11cm
Shell material	ABS
Color	Gray White
Environmental parameters	
Operation Temperature	-20~+60℃
Storage Temperature	-40~+85℃
Humidity	5%～95% RH, Non-condensing
Waterproof Rank	IP65
Performance	
Frequency	902~928MHz,860~868MHz(frequency customization optional)
Ant.	12 dBi Linear polarization antenna
RF Power	0 - 30dBm
Read Distance *	0-30m * Effective distance depends on antenna, tag and environment.
Write Distance *	0-15m * Effective distance depends on antenna, tag and environment.
Read Rate	200cnt / second
Read Type	ISO18000-6C(EPC Gen2)
Reading Prompt	Buzzer
Working Voltage	DC +9 - 24V, 12W
Work Mode	Active mode, Answer mode, Trigger mod, Password mode
Communication	RS232, RS485, WG26, WG34, Trigger, Relay(Optional), RJ45(Optional), WIFI(Optional), POE(Optional),USB(Optional),4G(Optional)

Net	RJ45 support TCP Client/Server, Modbus, DNS, DHCP. WIFI support TCP Client. 4G support TCP Client. HTTP Protocol(Optional), MQTT(Optional), LLRP(Optional)
SDK	
SDK	Support X86 & X64, C++, C#, VB, Delphi, Linux, ARM, Python, NodeJS, QT, JAVA, Android.

Interface

Item	Comment
Red	VCC (DC 9V – 24V)
Black	GND
White	RS232 TXD
Purple	RS232 RXD
Brown	GND
Yellow	Wiegand DATA0
Green	Wiegand DATA1
Gray	GND
Pink	RS485 A+
Orange	RS485 B-
Aqua	Trigger input+（TTL level）
Blue	Trigger input-（TTL level）