

UHF Middle Range Integrated Reader



Name: UHF Middle Range Integrated Reader

Model Number: UHF5111

Size: 220 x 220 x 60mm

General Description:

UHF5111 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 flow-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. 7dBi circular antenna with effect distance up to 0m~8m*;
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,4G;
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 |
|---|---|
| SW1907 | Standard(RS232, RS485, Wiegand,Trigger) |
| SW1907T | Standard with RJ45 |
| SW1907W | Standard with WIFI |
| SW1907TW | Standard with RJ45 and WIFI |
| SW1907TP | Standard with RJ45 and POE |
| SW1907TPW | Standard with RJ45 and POE and WIFI |
| SW1907R | Standard with Relay |
| SW1907U | Standard with USB(HID & Keyboard) |
| SW1907G | 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 | °C |
| Storage Temp. | T _{STR} | -40~+85 | °C |







Electrical and Mechanical Specification

Under TA = 25°C, 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 | SW1907 |
| Type | UHF Middle Range Integrated Reader |
| Physical parameters | |
| Dimensions | 220x220x60mm |
| Net Weight | 2.0Kg |
| Gross Weight | 2.5Kg |
| Package size | 40.5*30.5*10.5cm |
| Shell material | ABS |
| Color | Gray White |
| Environmental parameters | |
| Operation Temperature | -20~+60°C |
| Storage Temperature | -40~+85°C |
| Humidity | 5%~95% RH, Non-condensing |
| Waterproof Rank | IP65 |
| Performance | |
| Frequency | 902~928MHz,860~868MHz(frequency customization optional) |
| Ant. | 7 dBi circular polarization antenna |
| RF Power | 0 - 30dBm |
| Read Distance * | 0-8m * Effective distance depends on antenna, tag and environment. |
| Write Distance * | 0-4m * 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) |