SM928 4 Channel UHF RFID Reader



Specification

SM928 is a professional-grade, 4 channels , high-performance UHF electronic tag fixed reader based on the Impinj R2000 platform. With complete independent intellectual property rights, the reader's default working frequency band is 902MHz ~ 928MHz or 865-868mhz supports ISO18000-6C (EPC C1 GEN2) protocol, has strong multi-tags recognition capability, long card reading distance, high protection performance and convenient installation and configuration. Features.

Features

- ☆ Patent design, independent intellectual property rights;
- $\cancel{2}$ POE power supply be customized;
- $\stackrel{\wedge}{\curvearrowright}$ 4 channels of RF channels superior to the industry level;
- \cancel{x} Based on the Impini R2000 platform;
- \Rightarrow Support RSSI value detection;

 $\,\, \bigstar \,$ Adopt standard API interface, provide DEMO and source code, support VC, CS, JAVA and other development routines;

Performance parameter

| Technology para | imeter |
|----------------------|---|
| Working frequency | 902~928MHz; 865~868 MHz |
| Protocol | EPC C1 Gen2 ISO18000-6C |
| RF power | 0~33dBm(adjustable) |
| Reading distance | 0~30m (Depend on antenna and environment) |
| Read rate | >300times/second |
| Flash Power off save | 8Mbit (Power off save the data, customized) |

| Time recording | Clock chip records card reading time(customized) |
|-----------------------|--|
| Label detection | Support RSSI value detection |
| Communication | parameters |
| RF interface | 4 TNC connector |
| RS232 connector | 115200 bps (default) |
| TCP/IP | 230400 bps (default) |
| I/O interface | 2 way-road relay output,2 way -road I/O input |
| Power parameter | r |
| power supply | 12VDC / 3A |
| POE Power | customized |
| Environmental p | arameters |
| Operating temperature | -20℃~55℃ |
| storage temperature | -30℃~80℃ |
| Storage humidity | 5%~95%RH No condensation |
| Physical parame | ter |
| Size | 246X160X30mm |
| weight | about2kg |
| material | Aluminum alloy |
| | |

Interface

| No | Picture | description |
|----|---------|--------------------|
| 1 | | DC power interface |
| 2 | | RS232 interface |
| 3 | | TCP/IP |

| 4 | I/O interface : 12road (1-12 is from left to right), the detailed interface is defined as follows |
|---|---|
| 5 | I/O interface : 8road (1-8 is from left to right), the detailed interface is defined as follows |

I/O Interface definition

| No | Name | Description |
|----|--------|--|
| 1 | DCIN | +12V input/output |
| 2 | GND | GND ground |
| 3 | TIN | Trigger input (low level available) |
| 4 | NO1 | Relay 1 output (Open) |
| 5 | COM1 | Relay 1 input |
| 6 | NC2 | Relay 2 output (Close) |
| 7 | COM2 | Relay 2 input |
| 8 | NO2 | Relay 2 output (Open) |
| 9 | WGB | Wiegand (trigger input be customized), low level available |
| 10 | WGA | Wiegand (trigger input be customized), low level available |
| 11 | RS485A | RS485A |
| 12 | RS485B | RS485B |

| No | Name | Description |
|----|------|--------------------------------|
| 1 | GND | GND ground |
| 2 | +5V | +5V output |
| 3 | IOV3 | I/O (customized) |
| 4 | IOV2 | I/O (customized) |
| 5 | IOV1 | I/O (customized) |
| 6 | ANT1 | Antenna switch pin(customized) |
| 7 | ANT0 | Antenna switch pin(customized) |
| 8 | GND | GND ground |

Product accessory

1.Power adapter

Power supply is 12V/3A, industrial grade adapter



2. RF 9dbi Antenna (need purchase separately)

The RF antenna mainly implements RF signal transmission and tag reflection signal reception. And transmitting the received signal label to the reader through the RF cable for processing.



3.RF Antenna(9dbi)

The standard RF cable of the SM928 reader is equipped with a TNC at both ends of a coaxial cable. The type of RF connector, the standard length of the coaxial cable is 3 meters.



Demo(C#) RS232 interface

| English 👻 | | | Setting CommPa | irams Set | ting Spe | ecial function | | |
|---------------|---|---|--|---|--|--|---|--|
| | | Inventory | Start | s | top | Clear | - | TagsReadingTime: |
| 48 👻 | Single | Dev | | | | | | |
| OpenServer | No | EPC | Counts | Rssi | Ant | Dir Dev | IP/COM | 00:00:09 |
| openderver | 1 | 300833B2DDD9014020170916 | 38 | 61 | 1 | | COM5 | |
| | 2 | 300833B2DDD9014020170912 | 14 | 62 | 1 | | COM5 | |
| Disconneo | 3 | E2003098060C020226900A1E | 14 | 68 | 1 | | COM5 | Counts of EPC |
| Disconneo | 4 | E2000016661401610240F2BB | 18 | 61 | 1 | | COM5 | 100000000 |
| Port State ID | 5 | E200001B2116006024901D86 | 2 | 67 | 1 | | COM5 | 16 |
| | 6 | E200001B211602292570D242 | | 64 | 1 | | COM5 | a second second |
| U UN U | 7 | 4D312D31303031000000000 | 12 | | 1 | | COM5 | Tim |
| | 8 | | | | 1 | | COM5 | |
| | 9 | | | | 1 | | | Counts of TID |
| | | | | | 1 | | | |
| | | | | | 1 | | | 0 |
| | | | | | 1 | | | 0 |
| | | | () () () () () () () () () () | | 1 | | | Tin |
| | | | S | | 1 | | | |
| | | | | | 1 | | | Counts of Tags |
| | 16 | E20041374606023416600014 | 3 | 62 | 1 | | COM5 | Lounts of lags |
| | | | | | | | | 161 |
| | | | | | | | | Tin |
| | | | | | | | | Speed |
| | | | | | | | | 0 |
| Get Refresh | | | | | | | | Tim |
| | OpenServer Disconnec Port State ID 0 0K 0 | No 0penServer Disconnec 4 Port State ID 0 0K 0 11 12 3 4 9 10 11 12 13 14 15 16 | OpenServer No EPC Disconnec 1 30083382DDD9014020170912 Disconnec 2 30083382DDD9014020170912 Port State ID 5 E20000182116006024901086 6 E20000182116006024901086 6 7 4031201303031000000000 8 9 341587A2680000005765694 10 10 E20030980600013126900977 12 341587A2680111111157565099 13 E2000017515023419704D49 14 E200001908126013308A85 15 3008338268000000000000000000000000000000 | Main SingleDev Unce OpenServer No EPC Counts Disconnec 1 30083382DDD9014020170912 14 Disconnec 1 20083382DDD9014020170912 14 3 E2000016661401610240F2BB 18 5 E20000182116006024901D86 2 6 E2000018211002020570D242 6 7 4031203130301000000000 12 8 00000000000000000000000000000112 8 9 341587A2080000000565694 15 10 E2003098060021326900987 5 11 E200309806002013126900987 5 12 341587A2080111111556699 1 13 E20000170515023419704D49 7 14 E2000019081206013308A85 6 15 300833820800000000000000000000000000000 | Mage SingleDev Unce OpenServer No EPC Counts Resi Disconnec 1 300833820DD9014020170916 38 61 Disconnec 1 200833820DD9014020170912 14 62 Port State ID 6 E200001666140160240F2BB 18 61 5 E200001821160260229570D242 6 64 7 403120313030100000000 12 68 8 000000000000000000000000000000000000 | Main SingleDev Unce Corp OpenServer No EPC Counts Rssi Ant Disconnec 1 30083382DDD9014020170912 14 62 1 2 30083382DDD9014020170912 14 62 1 3 E2003098060020226900A1E 14 68 1 4 E2000016211401240F2BB 18 61 1 5 E20000182116006024901D86 2 67 1 6 E20000182116002025700242 6 64 1 7 40312D313003000000000 12 68 1 8 0000000000000000000000000000000 12 68 1 10 E20030980600013126900987 5 58 1 11 E200001908120601380845 6 5 1 13 E20000190812060138845 6 5 1 14 E200001908120601381600000000 7 62 1 15 300833820800000000000 7 62 1 16 E20041374606023416600014 3 <td< td=""><td>Main SingleDev Unce Litter Litter OpenServer No EPC Counts Rssi Ant Dir Dev Disconnec 1 30083382DDD9014020170912 14 62 1 2 30083382DDD9014020170912 14 62 1 3 E2003098060020226900A1E 14 68 1 4 E20000182116024072BB 18 61 1 5 E200001821160220270D242 6 64 1 6 E20000182110020000000 12 68 1 7 4031203130301000000000 12 68 1 8 000000000000000000000000000000000000</td><td>Max SingleDev Unce Line <thline< th=""> Line Line</thline<></td></td<> | Main SingleDev Unce Litter Litter OpenServer No EPC Counts Rssi Ant Dir Dev Disconnec 1 30083382DDD9014020170912 14 62 1 2 30083382DDD9014020170912 14 62 1 3 E2003098060020226900A1E 14 68 1 4 E20000182116024072BB 18 61 1 5 E200001821160220270D242 6 64 1 6 E20000182110020000000 12 68 1 7 4031203130301000000000 12 68 1 8 000000000000000000000000000000000000 | Max SingleDev Unce Line Line <thline< th=""> Line Line</thline<> |

| etwork Mode ballp 192.168.88.248 • rt 20058 OpenServer erialPort rialPort COM5 • Disconneo | Operation Bank EPC Start Address 2 Reserve Data 34158 EPC 94 TID User | ✓ Length | 6 |
|--|--|---------------|-------------|
| rialPort COM5 - Disconnec | | | |
| IP/SerialPort Port State ID | Access Password 00 00 00 00 Read | Write | Clear |
| 0005 0 0K 0 | Lock/Unlock | 1/0 Operation | |
| | Operation Bank Set | 🗐 In1 | 🗖 In2 🛛 Get |
| | Access Password | 🔲 Out1 | 🔲 Out2 Set |
| | Destroy Password (Use For Kill Tag) | | |
| | | | |
| | | | |
| III | | | |
| 6.1/V1118-04 Get Refresh | | | |

| utoAccessToConn 语言(Language) Get English ▼ | General Tag Access Reader Params Setting CommParams Setting Special funct | ion |
|---|---|---------------------------------------|
| | | Network Params |
| etwork Mode | No. IP Port MAC | Network Params |
| cal IP 192. 168. 88. 248 - | | |
| t 20058 OpenServer | | IP Mode |
| rialPort | | IP Address |
| rialPort COM5 👻 Disconnec | | |
| IP/SerialPort Port State ID | | SubnetMask |
| COM5 0 OK 0 | | |
| | | Port |
| | | Gateway |
| | | |
| | | |
| | | Below setting only use in TCP Client: |
| | | |
| | SerialPort Params | Local IP |
| | Search Dev | Local IP |
| | Baud Rate Parity Search Dev | LocalIP - |
| | Baud Rate Parity | LocalIP - |
| | Baud Rate Parity | Local IP |
| | Baud Rate Parity | Local IP |
| | Baud Rate Parity | Local IP |
| 6.1/V1118-04 Get Refresh | Baud Rate Parity | Local IP |

Size (Unit: mm)

