SANRAY

RFID HARDWARE/RFID SOFTWARE

UHF RFID READER F6195

The new generation of industrial-grade UHF RFID desktop card issuance platform is based on the new generation ARM-COTEXM3 processor, adopts industrial-grade design, and embodies 10 years of RFID research and development experience. The card issuance platform is equipped with the new generation of ultra-high frequency M2210/M2100 modules developed by our company, and is integrated with communication interfaces such as RS232 and 100M network port. The desktop card issuance platform is an RFID reader and writer designed to cooperate with users in the background or management center to perform card issuance management applications. It is suitable for data initialization, tag data modification, and tag function test applications in RFID integrated systems. It can also be used independently as a short-range RFID reader and writer. The reader and writer is the ultra-high frequency reader and writer with the longest reading distance and the most stable performance among similar products. UHF supports EPC global UHF Class1 GEN2/ISO 18000-6C air interface protocol.

F6195 has Mini USB, Ethernet and other communication interfaces, as well as 6 input and output IO ports. The software provides users with a comprehensive software development kit (SDK) and interface (API), which is easy to integrate with the user's software. With simple and easy-to-operate server software, it is convenient to use and configure our equipment quickly.

F6195 adopts a sandblasted oxidation design on the bottom plate, with a simple and beautiful appearance, sturdy and durable, full of technological and modern sense. The device has various communication interfaces for quick connection with the host. It has a fast speed of reading and writing tags, which is particularly suitable for desktop application needs.

MODEL NO	MODULE
F6195-H	M2210
F6195-L	M2100

Product advantages

The new generation of high-performance ARM-COTEXM3 processor has more powerful product functions, built-in master-slave mode and automatic mode, more scalability, and can meet more customer needs;

It adopts industrial-grade chip design and adds external watchdog circuit to improve product reliability;

It integrates network port, Mini USB, RS485 functions, and integrates rich communication interfaces, which is convenient for users to choose the appropriate interface for connection and use. The Mini USB interface can be connected at any time, which is convenient for configuring device parameters. If the serial port and network port are connected normally, the same tag data can be read at the same time. If the network connection is not successful, data can be transmitted through the serial port;

When the original network port connection is disconnected, it has the function of device buzzer alarm fault reminder. At the same time, the indicator light is designed with a flashing alarm function;

The device is designed with 6 IO ports (4 outputs and 2 inputs) for users to expand applications. The 2 input IO ports can be set to trigger the reading of EPC, and can be set to trigger high level and reverse stop; or the working time after triggering can be set, and then automatically stop. The card reading mode can be set to stop after reading only one card, or to read cards continuously;

The RF part adopts carrier suppression technology, which has strong anti-interference ability;

Provide the most comprehensive software development kit (SDK) and interface (API) to facilitate users to carry out software integration development;

Provide simple and easy-to-operate server software to facilitate the quick use and configuration of our equipment;

Adopt ultra-high isolation technology to perfectly solve the problem of cross-reading between ports.

Definition of wiring terminal interface

PIN	NAME	Parameter
1	5V	5V power output
2	RS-485-A	RS-485 Interface
3	RS-485-B	RS-485 Interface
4	GPIO_IN1	IO input control interface
5	GPIO_IN2	IO input control interface
6	TXD	RS-232 communication port
7	RXD	RS-232 communication port
8	GND	Ground
9	GPIO_OUT1	GPIO port output terminal (configurable Wigan DATA0 output)
10	GPIO_OUT2	GPIO port output terminal (configurable Wigan DATA0 output)
11	GPIO_OUT3	GPIO port output terminal, which can be controlled by program to output high and low levels. The output high level is 5V and the low level is 0V. The maximum output current is 100mA. (Default output level is low level 0V)
12	GPIO_OUT4	GPIO port output terminal, which can be controlled by program to output high and low levels. The output high level is 5V and the low level is 0V. The maximum output current is 100mA. (Default output level is low level 0V)

Product Technical Parameters

NAME	Parameter
Sensor	ARM-COTEXM3
Air interface protocol	EPC global UHF Class 1 Gen 2/ISO 18000-6C
Working frequency	840～960MHz（ Default frequency band 920～925MHz）
Supported regions	China, Europe, United States, South Korea, Japan, etc.
working voltage	DC12V
Working current	H series ＜2.5A L series ＜700mA
Standby current	＜50mA
output power	Software adjustable: The step interval is 1.0dB, and each channel can be individually adjusted from+5dBm to 30dBm
Maximum receiving sensitivity	-82dBm
operation temperature	-25℃～+65℃
Working humidity	≤95%（+25℃）
storage temperature	-30℃～+70℃
DRM mode	Support
RSSI	Support
High temperature automatic protection	Support
External watchdog	Support
GPIO port	Input IO port: 2 channels Output IO port: 4 channels
buzzer	Support
LED indicator light	Power indicator light: 1 LED (red) Status indicator light: 1 LED (green)
communication function	Mini USB interface Network port RS-485 WIFI (optional) Bluetooth (customizable) 232 serial port Wiegand
Size	400X300X35mm