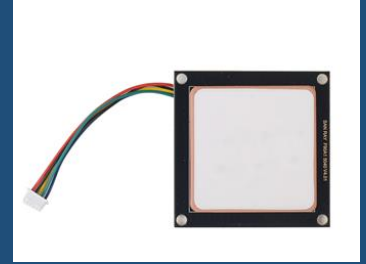
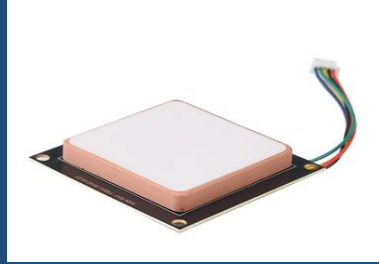


UHF RFID MODULE F90A1-S

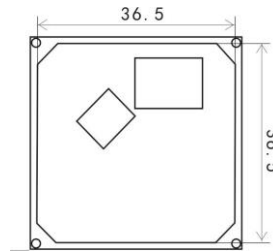
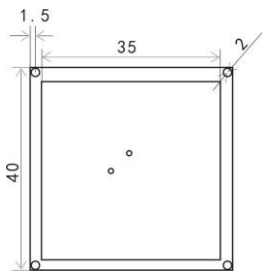


F90A1-S is an ultra-high frequency integrated read-write module designed based on PHYCHIPS PR9200. The maximum output power of the module can reach +25 dBm, and it is equipped with a 1dBi circularly polarized ceramic antenna. The reading distance can reach 2.5m and the tag recognition rate can be greater than 200tags/s. It has stable multi tag reading and anti-interference ability.

The F90A1-S integrated read-write module has undergone extensive testing and long-term uninterrupted operation (180 consecutive days), and its stability and reliability fully meet the usage requirements

Product advantages

- The receiving sensitivity of F90A1-S can reach -62dBm, which is more suitable for harsh application environments than traditional readers;
- Provide comprehensive software development kits (SDKs) and interfaces (APIs) that are easy to integrate with software;
- Adopting integrated RF chips, the module performance is stable and more suitable for harsh and demanding application environments;
- Using carrier cancellation technology, the accuracy and range of tag reading are good;
- Enhanced noise suppression function for reliable data capture;
- Has high-precision return signal strength (RSSI).



Product Technical Parameters

Name	F90A1
Sensor	PHYCHIPS PR9200
Air Interface Protocol	EPC global UHF Class 1 Gen 2/ISO 18000-6C
Working Frequency	840 ~ 960MHz (920 ~ 925MHz)
Support Area	China, Europe, United States, South Korea, Japan, Taiwan.....
working voltage	DC 5.0V
Working current	500mA
Standby current	≤30mA
Sleep current	≤0.5mA
Maximum output power of RF port	25dBm
Working Temperature	-25°C ~ +65°C
Working humidity	≤95% (+25°C)
storage temperature	-30°C ~ +70°C
Maximum receiving sensitivity	-62dBm
Antenna interface impedance	50Ω
Serial communication parameters	Baud rate adjustable (default 115200bps), parity: none, Data bit: 8 bits, stop bit: 1 bit
Power output setting	15-25dBm adjustable/adjustable with a minimum interval of 1dBm
DRM mode	Support
RSSI	Support
High temperature automatic protection function	Support
Power Enable	Support

PIN	Name	Description
1	GND	GND
2	P_EN	Module power enable, this pin defaults to a high level of 5V. When an external low level (0V) is connected, the F90A1 module enters sleep mode.
3	RXD	Serial interface reception, TTL level, low level is 0V, high level is 3.3V~5.0V
4	TXD	Serial interface transmission, TTL level, low level is 0V, high level is 3.3V
5	5V	DC power supply, input voltage of 5.0V, maximum operating current of F90A1 is 500mA.