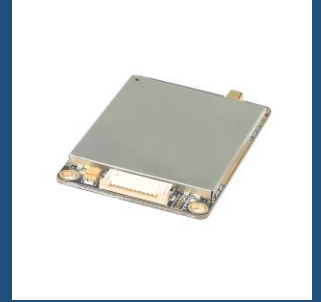


UHF RFID MODULE M7131



M7131 is a high-performance ultra-high frequency read-write module with a wide range of adjustable output power that can reach 0dBm~+33dBm. M7131 has the advantages of industry multi label algorithm, module adaptability, and fast tag recognition. It can achieve a stable reading speed of over 800 times per second (in specific modes) for a single tag; The dense tag group reading performance is super strong, and in scenarios with over 1000 tags, it can read more than 1000 tags in 5 seconds.

At the same time, M7131 adopts a compact structural design with a small volume (56.5 * 36.0 * 4.2 mm), and its operating voltage is a wide voltage design (DC4.0-5.5V), suitable for various handheld and fixed devices;

Product advantages

- 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 suitable for harsh and high demand application environments;
- Using carrier cancellation technology, the accuracy and range of tag reading are good;
- The module has the smallest volume in the industry and is designed with a wide voltage range;
- Enhanced noise suppression function for reliable data capture;
- Has high-precision return signal strength (RSSI).

Product Technical Parameters

Name	Parameters
Air Interface Protocol	EPC global UHF Class 1 Gen 2/ISO 18000-6C
working Frequency	840 ~ 960MHz (Default frequency band 902 ~ 928MHz)
support area	China, Europe, United States, South Korea, Japan, Taiwan
working voltage	DC4.0V ~ 5.5V
Peak operating current	≤2.5A
Standby current	≤20mA
Sleep current	≤1mA
Maximum output power of RF port	33dBm
operation temperature	-20°C ~ 60°C
Working humidity	≤95% (+25°C)
storage temperature	-40°C ~ 85°C
Maximum receiving sensitivity	-82dbm
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	0~33dBm adjustable/adjustable minimum interval is 1dBm (default 33dBm)
DRM mode	support
RSSI	support
High temperature automatic protection function	support
Power Enable	support
GPIO connector	support
antenna interface	MMCX
Antenna detection function	support
FPC connector	10PIN/1.0mm/up connection
Optional development board kit	<p>Our company has developed a corresponding development board kit for single channel read-write modules, equipped with ultra-high frequency demonstration software DEMO. Customers can easily and quickly familiarize themselves with and use single channel modules, and carry out related hardware and software development to shorten the development cycle; Single channel read-write module development board peripheral interface: RS-232;The development board kit includes: single channel read-write module+1 set of development board, 1 12V power adapter, and 1 interface connection cable; Development board size: 22.0 * 12.0 * 3.5CM;Note: Development board related configurations must be purchased separately;</p>

Product Interface Definition

PIN	Name	Description
1	UART TX	Serial interface transmission, TTL level, low level is 0V, high level is 3.3V
2	UART RX	Serial interface reception, TTL level, low level is 0V, high level is 3.3V~5.0V
3	GPIO3	reserved
4	GPIO2	reserved
5	GPIO1	reserved
6	P_EN	Module power enable, this pin defaults to a high level of 5V. When an external low level (0V) is connected, the M7131 module enters sleep mode;
7	GND	GND
8	GND	GND
9	VCC	DC power supply, input voltage is 4.0V~5.5V, M7131 has a maximum operating current of 2.5A under 5V power supply, so sufficient power supply current should be considered when designing the circuit;
10	VCC	DC power supply, input voltage is 4.0V~5.5V, M7131 has a maximum operating current of 2.5A under 5V power supply, so sufficient power supply current should be considered when designing the circuit;

Note: 10PIN connector, spacing of 1.0mm, top up type

Product Size

