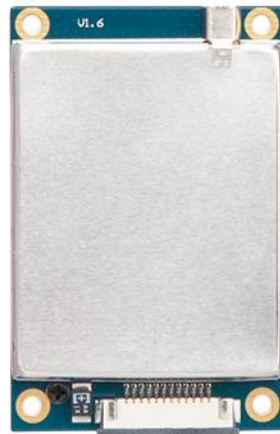


R2000 UHF RFID Module(1-Port)



Model: RRU9880M

Size: 57 x 36.8 x 7.6 mm

Weight: 23g

GENERAL DESCRIPTION

RRU9880M is an excellent performance UHF Indy2000 RFID Reader Module. It is designed upon fully self-intellectual property. Based on proprietary efficient digital signal processing 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, attendance system, anti-counterfeit and industrial production process control system.

FEATURES

- Self-intellectual property;
- Support EPC C1G2 (ISO18000-6C) , ISO18000-6B protocol tag;
- 865~868MHz, 902~928MHz frequency band (frequency customization optional);
- FHSS or Fix Frequency transmission;
- RF output power is adjustable from 0~33dbm with 1db step;
- Effective reading distance more than 9 meters* (with 6dBiL antenna and E41 tag);
- Support RSSI;
- Peak Inventory Speed > 700pcs/s;
- Buffering memory 1000pcs @ 96bits EPC;
- MMCX-J antenna sockets;
- Low power dissipation with single +3.7V ~ +5V DC power supply;
- Support RS232 (3.3V TTL level TTL level);
- High stability with natural cooling;
- Support firmware on-the-site upgrading;
- Provide SDK and demo software to facilitate further development.

** Effective distance depends on antenna, tag and working environment.*

CHARACTERISTICS

● Absolute Maximum Rating

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	5.5	V
Operating Temp.	T _{OPR}	-20 ~ +65	°C
Storage Temp.	T _{STR}	-40 ~ +85	°C

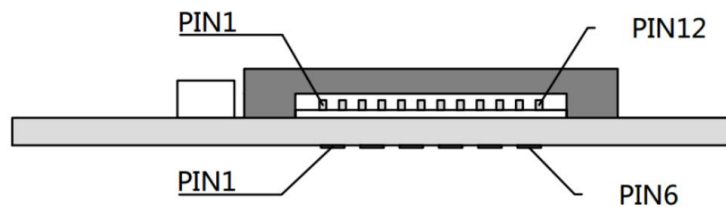
● Electrical and Mechanical Specification

Under $T_A=25^{\circ}\text{C}$, $V_{CC}=+5\text{V}$ unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	3.7	5	5.25	V
Current Dissipation	I_c			1500	mA
Frequency	F_{REQ}	860	865~868 902~928	960	MHz
RF Output Power	P_{RF}	0		33	dBm
Receive Sensitivity	SR		-85		dBm

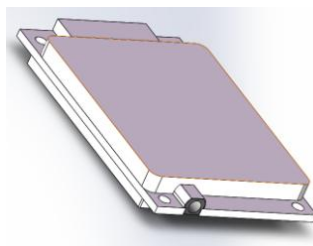
Interface

1. Module PIN Description

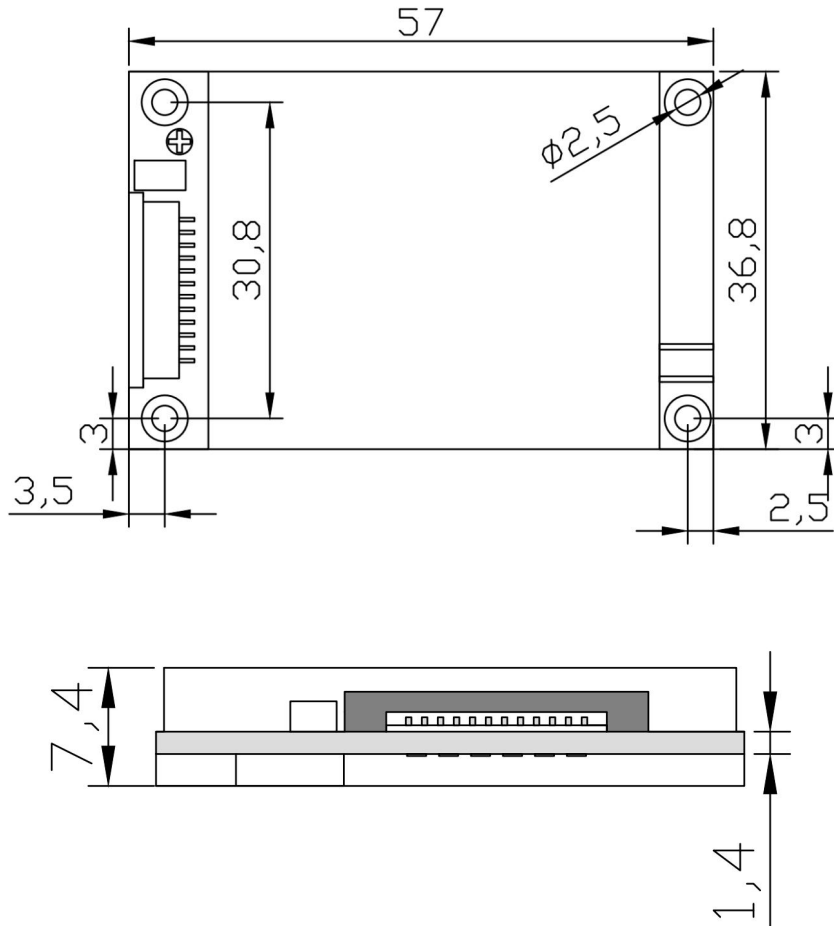


No.	Solder Pad No.	Symbol	Comment
1	1	VCC	Power Supply
2	1	VCC	+3.7~5VDC
3	2	GND	Ground
4	2	GND	GND
5	3	EN	Enable (High Level effective with internal 10K pull-up resistor to VCC)
6	4	Reserved	
7		Reserved	Reserved
8		Reserved	
9	5	RXD	Serial Data Input
10	6	TXD	Serial Data Output
11		USB-DM	
12		USB-DP	Reserved for test only

2. Antenna Interface



MECHANICAL DATA (UNIT:mm)



Application Information

1. When designing fixed reader with RRU9880M, please take care of heat sinking and remember to make sure the heat sinker of the module is closely and stably attached to the reader's bottom plate;
2. Please refer to user's manual for detailed protocol description.

Remark:

1. Specifications are subject to change, please pay attention to our latest one.
2. Shenzhen RoyalRay Science and Technology Co., Ltd. reserve the right to the final interpretation of the above terms.