

**Product name: UHF RFID Reader Module**

**Model: CF-MU904**

**Size: 8\*12cm**

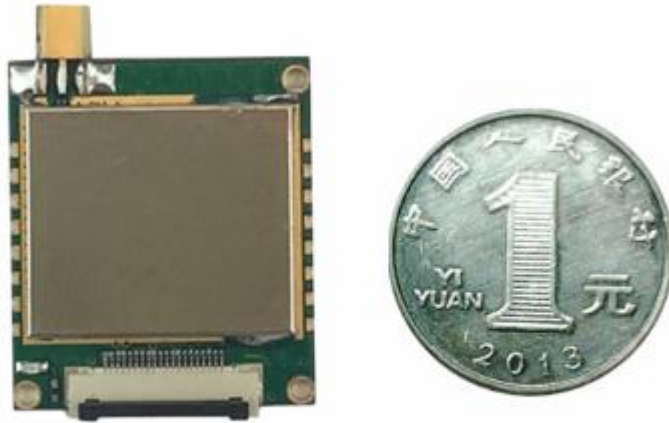
**Gross weight: 56g**

#### **GENERAL DESCRIPTION**

CF-MU904 is a high performance UHF RFID reader module. It is designed upon dedicated RFID Engine ASIC with 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, anti-counterfeit and industrial production process control system.

#### **FEATURES**

- Self-intellectual property;
- Support ISO18000-6C(EPC C1G2) protocol tag;
- 902~928MHz or 865~868MHz frequency band(frequency customization optional);
- FHSS or Fix Frequency transmission;
- Effective range up to 15m (with 12dbi antenna);
- Multiple tag anti-collision>50pcs/s;
- Multiple tag inventory speed>50pcs/s;
- Tag buffer size: 370PCS@Max.128bitsEPC or 120PCS@Max.496bitsEPC;
- Low power dissipation with single +3.5V~5V power supply;
- Support RSSI;
- MMCX socket for external antenna;
- Support 4 GPIOs (2Inputs 2outputs);
- Support UART interface;
- High reliability design without extra heat-sinking measure;
- 7x24 continuous working design;



## CHARACTERISTICS

- Absolute Maximum Rating**

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	6	V
Operating Temp.	T <sub>OPR</sub>	-20~+70	°C
Storage Temp.	T <sub>STR</sub>	-20~+85	°C

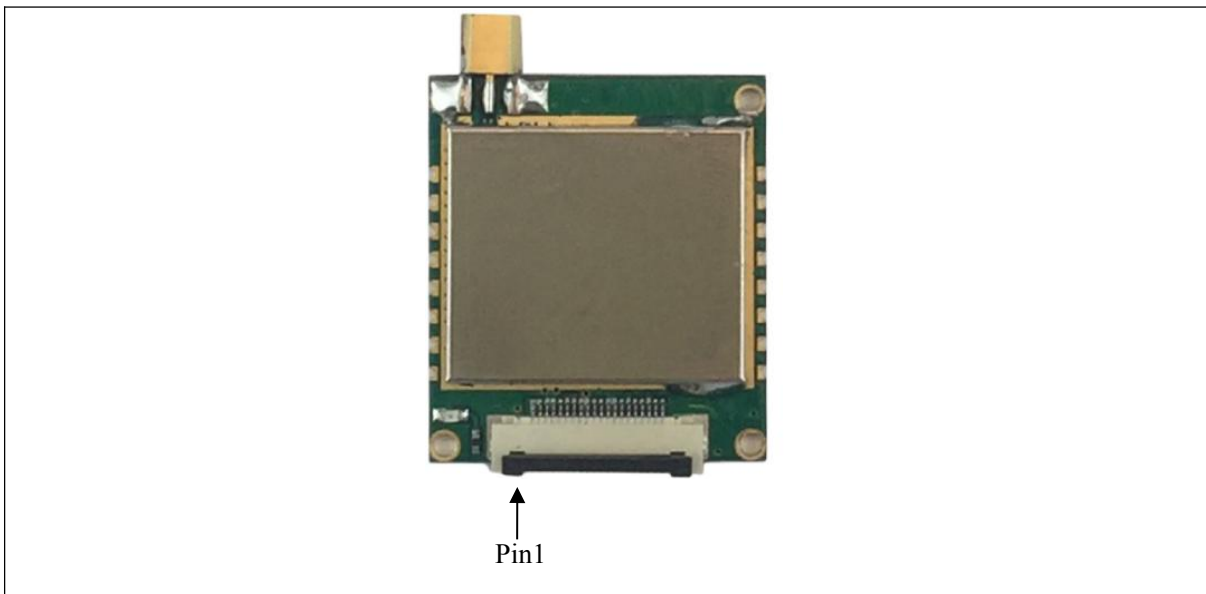
- Electrical Specification**

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	3.5	5	5.5	V
Current dissipation	I <sub>C</sub>		180	360	mA
Frequency*	F <sub>REQ</sub>	902		928	MHz
RF power	P <sub>RF</sub>	18		26	dBm
RF power Accuracy	AP		+/-1		dB
RF power Flatness	FP		+/-0.2		dB
Receiving Sensitivity	SR		-70		dBm
Size	L x W x H		28 x 25 x 3.5		mm

\*European Frequency band (865M~868MHz) optional

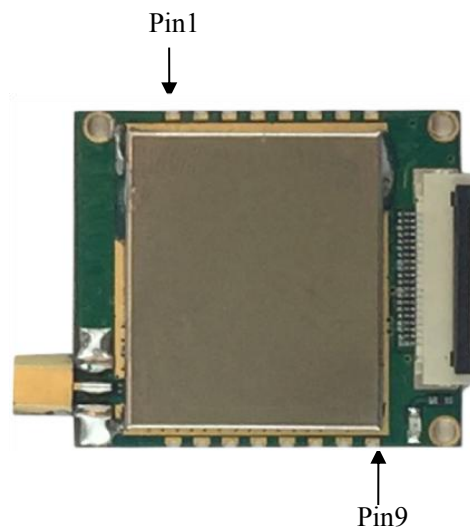
### MECHANICAL DATA(UNIT mm):

## INTERFACE

**1.Socket Definition**


No.	Symbol	Comment
1	VCC	Power supply
2	VCC	
3	GND	Ground
4	GND	
5	EN	Enable (high level effective)
6	Reserved	Reserved
7	Reserved	Reserved
8	GND	Ground
9	GND	
10	GPI1	General input1
11	GPI2	General input2
12	GND	Ground
13	GND	
14	Reserved	Reserved
15	Reserved	Reserved
16	RXD	Serial communication data input
17	TXD	Serial communication data output
18	BEEP	Buzzer control (external driver needed)
19	GPO1	General output1
20	GPO2	General output2

**2.SMT Pad Definition**



No.	Symbol	Comment
1	Beeper	Buzzer control (external driver needed)
2	Reserved	Reserved
3	RXD	Serial communication data input
4	TXD	Serial communication data output
5	GPO2	General output1
6	GPO1	General output2
7	GPI2	General input2
8	GPI1	General input1
9	VCC	Power Supply
10	GND	Ground
11	EN	Enable (high level effective)
12	GND	Ground
13	GND	
14	GND	
15	GND	
16	GND	