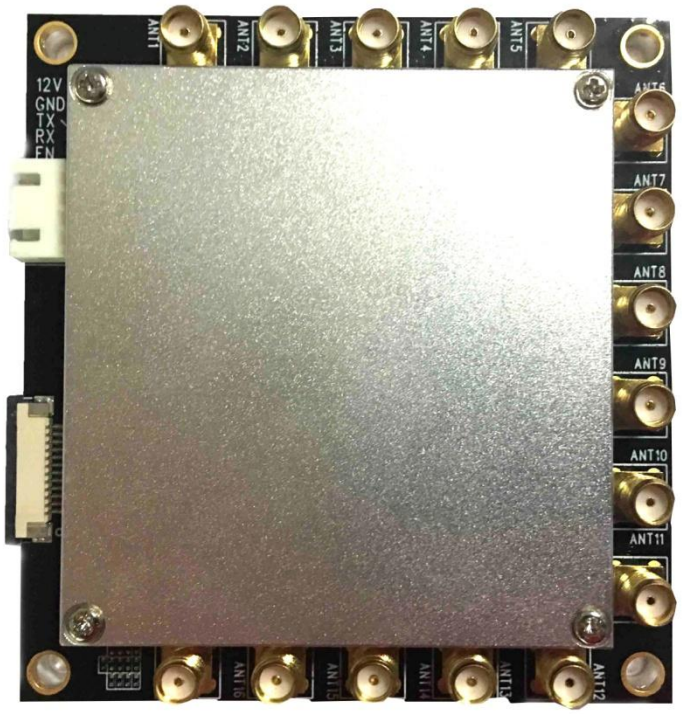
UHF RFID Reader Module
HYM780



Brief introduction

HYM780 UHF RFID reader uses R2000 chip, which complies with EPC C1G2 protocol, its working frequency is 840~960MHz. It supports dense reader working mode.With standard 8dBi antenna,the reading distance can reach up to 10meters, maximum identifying speed can reach 400/S; with simple power supply and interface circuit, a high-performance RFID system can be established. It is suitable for retail application.

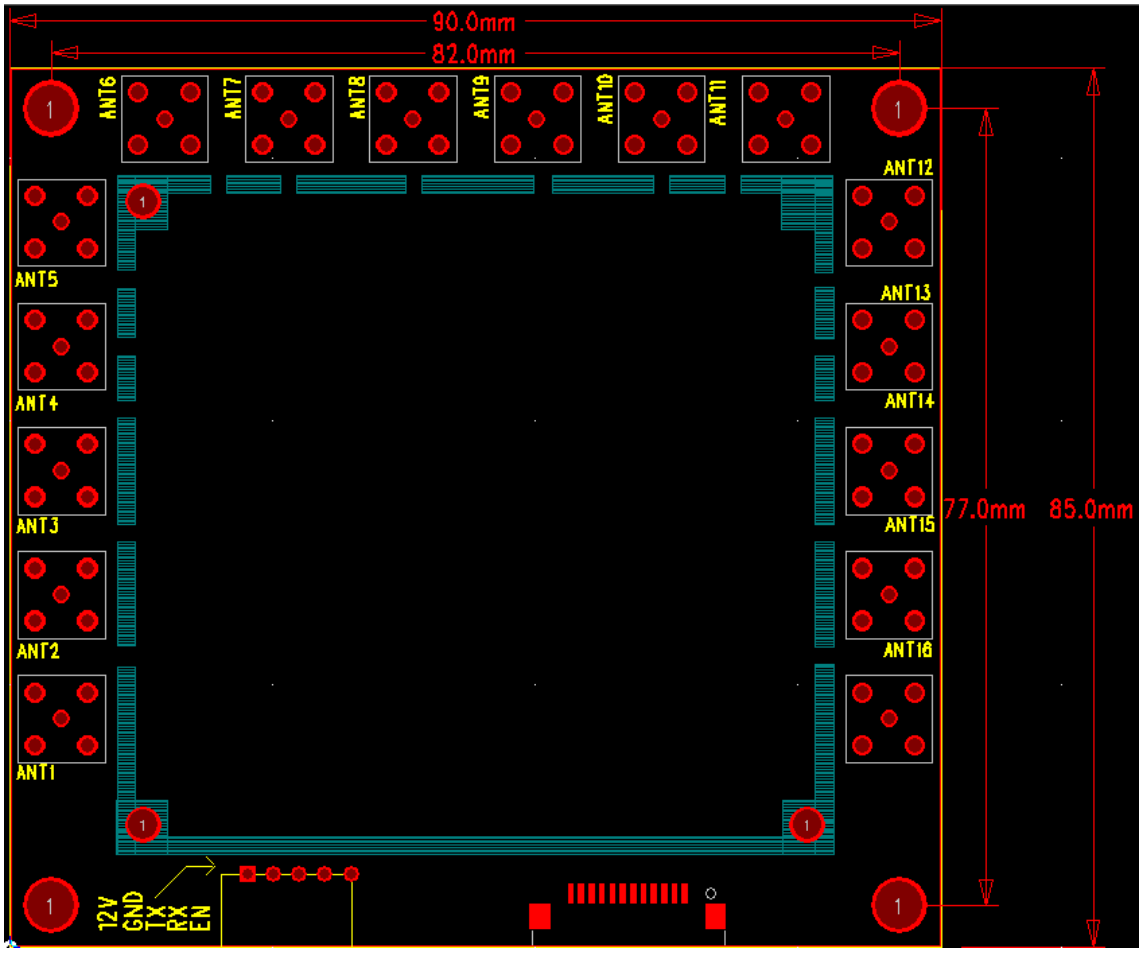
Technical data

No	Item	Technical data	Unit	Remark
1	Fixed current	700	mA	Max power output@12V
2	Standby current	≤1	mA	EN pin low level
3	Frequency range	840～960	MHz	
4	Default working frequency	Frequency hopping	MHz	Frequency interval 250KHz
5	Channel bandwidth	250	KHz	
6	Frequency hopping speed	≤2	s	
7	Fixed power	31.5 ±1	dBm	
8	Stepping interval	1	dB	
9	Label protocol	EPC C1G2 /ISO18000-6C		
10	Communication protocol	Asynchronous serial ports protocol		RS232 Label
11	Starting time	≤50	ms	
12	Radio-frequency power rising time	≤500	μs	
13	Radio-frequency power dropping time	≤500	μs	
14	Adjacent channel power leaking ratio	≤-40	dB	±1CH
		≤-60	dB	±2CH
15	Frequency stabilizing ratio	±10	ppm	-25℃ ～+40℃
		±20	ppm	-40℃ ～+60℃
16	Max reading range	10	m	8dBi antenna
17	Multi-tags	>400/s		

Characteristics of DC

Data	Mini value	Typical value	Max value	Unit	Remark
Voltage of power	9	12	14	V	Direct current
Communication level		15		V	Rs232

Appearance and structure



- Size（L×W×H）：105×95×25mm（90degree SMA connector）
- Weight：100g
- Positioning hole：82*77mm φ4mm screw

4/5PIN Interface definition

4/5pin interface type：Horizon XH2.54mm

P/N	ITEM	TECHNICAL DATA	Unit	Remark
PIN	Signal name	Signal direction	Function and compatibility description	
1	VCC	Input	12V power	
2	GND	-	Ground	
3	RS232_TX	output	RS232 Serial interface transmission	
4	RS232_RX	input	RS232 Serial interface Receiving	
5	EN	input	Module power supply enable	5PIN available

RF interface

SMA female

Requirement on antenna

No	Item	Technical data	Unit	Remark
1	Standing wave ratio	≤1.5		

Environment requirement

No	Item	Technical data	Unit	Remark
1	Working temperature	-10～+70	℃	
2	Storage temperature	-40～+85	℃	
3	Relative humidity	10%～90%	RH	