

# **Ci-RM253 PCIE 2.45GHz Active RFID Module**



Ci-RM253 PCIE connector active RFID module operates in 2.4Ghz ISM band, it is featured with high reading speed, flexible expansion, reliable data transmission, reading range can reach around 100meters. It is mainly embedde into industrial device for data capturing, sensor data acquisition and other system integration applications.

### **FEATURES**

- ☑ 2.4-2.5Ghz ISM Frequency Band
- $\ensuremath{\boxdot}$  TTL RS232 Communication Port
- ☑ Mini PCI-E Connector
- ☑ 100m Reading Range Adjustable
- ☑ 3.3V DC Power Supply



#### **RF PARAMETER**

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<b>Operating Frequency</b>	2.400-2.48GHz		
Output Power	Max +18dBm, adjustable		
Receiving Sensitivity	-96dBm		
Rssi(receive Signal Strength Indicator)	-50dBm~-80dBm, accuracy+-1dB		
Antenna Port	MMXCK-KE antenna connector		
Port	MINI-PCIE		
<b>Communication Port</b>	TTL RS232		
lo Port	2 TTL level (optional)		
Software Platform	Communication protocol		

#### **BASIC PARAMETER**

Tag Protocol	Private	
Operating Mode	Active operating mode	
Reading Range	0-200m adjustable (depends on antenna type and environment)	
Reading Speed	200pcs/s	

## **MECHANICAL & ELECTRICAL PERFORMANCE**

Dimensions	30mm *50.96mm		
Weight	20g		
Power Supply	3.3V DC		
Power Consumption	300mW		
Operating Temperature	-40°C~+80°C		
Humidity	5%~95% (non-condensing)		



## WRITING INSTRUCTION

 $\mathbb{R}^{n} = \mathbb{R}^{n}$ 

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PIN	Function	Description
2, 24, 39, 41, 52	VCC	Power input, DC 3.3V
4, 9, 15, 18, 21, 26, 27, 29, 34, 35, 37, 40, 43, 50	GND	Power GND
38	UART_RXD	UART RXD, COM data receiving, TTL level
36	UART_TXD	UART TXD, COM data sending, TTL level
28	UART_RTS	Reserved IO port, UART_RTS COM request to send data
30	UART_CTS	Reserved IO port, UART_CTS COM allow to send data
51	IOT_DFX	DFX loopback signal, when high level UART TX/RX loop back, need connect to pull-down resistor
22	IOT_RST	Reset module, low level validity, need connect to pull-up resistor
3	IO_ON	Module exist signal, used for outer device/operator to check if module is exist, need connect to 10K pull-up resistor.
46	IO_ON_AS	Module exist secondary signal, used for outer operator to checkifmodule is exist, connect to PIN3 (IOT_ON), need connect to $500\Omega$ pull-down resistor
Other	NC	None