



Ci-RH272 Active RFID Handheld Reader



Ci-RH272 is an industrial android mobile data terminal with high integration of iot functions. The build-in 2.4Ghz active rfid reading distance reach around 50meters in open area, it is widely used for asset tracking, intelligent transportation, production line management, personnel tracking etc.

FEATURES

- ☑ Android 7.0 OS, 4 Core 1.3Ghz Processor
- ☑ Support 4G, WIFI, Bluetooth, GPS and Camera
- ☑ 2.4Ghz RFID Range Around 50m
- ☑ 5 Inch High-Resolution Screen, Corning Gorilla Third-Generation Touch
- ☑ Screen Resolution 720* 1280, Visible in the Sun
- ☑ Barcode, UHF, HF, Fingerprint Functions Optional
- ☑ Small in Size but Highly Integrated



GENERAL PARAMETER

Cpu	4 core 64 bit Coretex-A53, 1.3GHz
Operation System	Android 7.0
Memory	RAM:2GB ROM:16G; support 128GB Micro SD card
Screen	5 inch IPS screen, resolution 720*1280
Touchscreen	Corning Gorilla 3rd generation industrial multi-touch capacitive Screen
Expansive	1 sim card slot, 2 PSAM card slot
Communication Port	USB 2.0; 3.5 plug charging port
Audio	Support voice broadcast
Keyboard	Scan key, function key
Gps	Build-in GPS, accuracy±5m
Camera	Rear 8 million pixel camera with flash, auto focus function

COMMUNICATION PARAMETER

4g	TD-LTE Band38/39/40/41 FDD-LTE Band 1, 2, 3, 4, 7, 17, 20
Wifi	2.4G/5G dual frequency, support IEEE802.11a/b/g/n
Bluetooth	Bluetooth 4.0

BARCODE PARAMETER (OPTIONAL)

1d Barcode Module	Honeywell N431X
Support 1d Type	Code 39/Code 93/Code128/Codebar/EAN-13/EAN-8/UPC-A/UPC-E/ITF 14/UCC/EAN-128/ITF25/Matrix 25/EAN-128/ISBN etc
2d Barcode Module	Honeywell-6603
Support 2d Type	PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode, Postal Codes,US PostNet,US Planet, UK Postal, Australian Postal,Japan Postal, Dutch Postal etc



FINGERPRINT PARAMETER (OPTIONAL)

Module Function	Fingerprint capture/contrast/deletion, image processing, etc
Sensor	TCSI biometric fingerprint/FBI fingerprint authentication
Sensor Type	Capacitive inductance 256 *360pixel, 500 DPI
Storage Capacity	1000pcs

RFID PARAMETER

Working Frequency	ISM 2.4-2.48GHz
Rf Output	Max+15dBm, step -2dB, software adjustable
Receive Sensitivity	-90dBm
Antenna	PCB antenna
Tag Protocol	Private
Reading Distance	0-80m (open area, tag type matters)
Reading Speed	200pcs/s
Api	APK and source code

UHF RFID(OPTIONAL)

Working Frequency	865-868MHz or 902-928MHz
Protocol	EPC C1 GEN2 /ISO18000-6C
Reading Distance	4-7m (tag type matters)

HF RFID(OPTIONAL)

Working Frequency	13.56Mhz
Protocol	ISO15693/ISO14443



MECHANICAL & ELECTRICAL PERFORMANCE

Dimensions	170 *85 *23±2mm (Cradle excluded)
Weight	400g default active
Battery	4500mAh Lithium polymer battery (more than 12 hours working time)
Power Consumption	200mw standby, 400mw working
Working Temperature	-20°C~+50°C
Storage Temperature	-40°C~+70°C
Ip Rating	IP66, withstand 1.5m drop

ACCESSARY

Standard Accessary	Lithium battery, power adaptor, DC charging cable, USB cable
Optional	Bag, cradle



Ci-RF231 Omni-directional Active Reader



Ci-RF231 is omni-directional reader with the wide reading range and high reading speed, feature with more than 100m reading radius, high reliability suitable for tunnel personnel tracking, industrial data acquisition, asset monitoring and tracking etc.

FEATURES

- ☑ ISM 2400-2480Mhz Working Frequency, Private Protocol
- ☑ Reading Radius 3-100m in Open Area, Range Adjustable by Software
- ☑ Antenna Connect Outside
- ☑ Support RS-232, Ethernet Communication Ports
- ☑ Support GPIO
- ☑ C#/C++ API Provided



RF PARAMETER

Working Frequency	ISM 2.4-2.48GHz
Output Power	Max +15dBm, step -2dB, software adjustable
Receive Sensitivity	-93dBm
Antenna Port	1 SMA connector
Antenna Gain	Default 6dBi omni-directional, other type optional

COMMUNICATION PARAMETER

Data Ports	RS232, Ethernet
Data Ports(optional)	RS485, Wiegand 26/34 (customizable)
Gpio	2 channel trigger (optical isolated) input (5V, <20mA); 2 channel relay output (30V, <1000mA)
Firmware Upgrade	Support RS 232 connection updating with specified software
Application Software	API in C++/C#

TAG OPERATION

Tag Protocol	Private
Reading Distance	0-150m radius (antenna/tag type matter)
Reading Speed	300pcs/s



MECHANICAL & ELECTRICAL PERFORMANCE

Dimensions	168 *145 *42.5mm (antenna excluded)
Weight	500g
Power Supply	DV 5V/2A
Power Consumption	200mw standby, 400mw working
Working Temperature	-30°C~+70°C
Storage Temperature	-40°C~+80°C
Working Humidity	5% ~ 95% (non-condensing)
Ip Rating	IP 55
Installation	Ceiling or desktop



Ci-E262 125Khz LF Activator



Ci-E262 125Khz activator is an important component in active RFID RTLS system. E262 LF activator work as a locator in the system, it sends LF signal to activate the standby active tags within its area, then the active tag send together the activator address and tag ID to RFID reader. E262 can activate the tags around it like a round area. Together with the help of Active RFID reader, LF Activator and LF Wake Up Active Tag, this combination can realize the regional location and detect direction of movement. At the same time, the wake-up tag has longer battery life.

FEATURES

- Working on 125KHz±1KHz
- Built-in Antenna
- Modulation: ASK
- Waking Up Tag Range: < 6m (Semi-Diameter, Adjustable by Software)
- RF Output Power < 5W
- RS485 Port



APPLICATION

- Personnel Location
- Vehicle in/Out Management
- Asset Management
- School & Family Communication System

RF PARAMETER

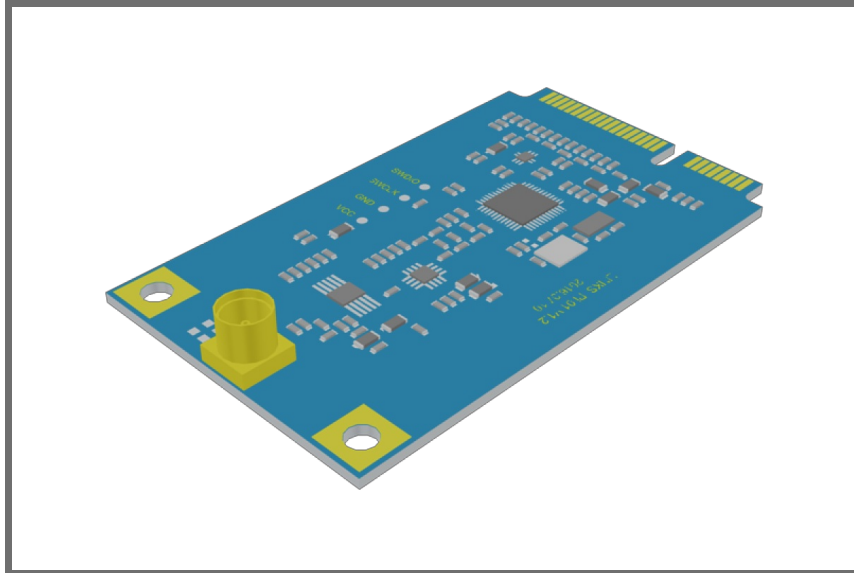
Operating Frequency	125KHz ±1KHz
Tag Activating Area	1-6m (Activating radius adjustable)
Modulation Type	Adjustable by software (RS485) or set by hardware
Antenna Output Power	<5W
Activator Id	8 bit
Working Indicator	LED, Buzzer

MECHANICAL & ELECTRICAL PERFORMANCE

Dimensions	189mm *90mm *40mm (L×W×H)
Weight	225g
Working Voltage	DC 12V (compatible with DC 9-18V)
Power Consumption	5W
Operating Temperature	-20°C ~+55°C
Storage Temperature	-40°C ~+80°C
Humidity	5%~95% (non-condensing)
Waterproof	IP64



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 embeded into industrial device for data capturing, sensor data acquisition and other system integration applications.

FEATURES

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



RF PARAMETER

Operating Frequency	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
Communication Port	TTL RS232
Io 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

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 check if module is exist, connect to PIN3 (IOT_ON), need connect to 500Ω pull-down resistor
Other	NC	None