Mobile Data Terminal

MC21 User Manual

Content

Content 1
Statement 3
Chapter 1 Product intro 4
1.1 Intro 4
1.2 Precaution before using battery 5
1.3 Notes 6
Chapter 2 Installation instructions 7
2.1 Appearance 7
2.2 Install Micro SD and SIM cards 7
2.3 Battery charge 9
2.4 Buttons and function area display 10
Chapter 3 Call function 11
3.1 Calling numbers 11
3.2 Contacts 11
3.3 5G Function 11
3.4 SMS and MMS 11
Chapter 4 Barcode reader-writer 12
Chapter 5 RFID reader 14
5.1 NFC 14
Chapter 6 Other functions 15
6.1 PING tool 15
6.2 Bluetooth 16
6.3 GPS 17
6.4 Volume setup 18
6.5 Sensor 19

6.6 Keyboard 20
6.8 Network 21
6.8 Keyboard emulator 22

Statement

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Chapter 1 Product intro

1.1 Intro

Chainway MC21 is a lightweight and portable mobile computer with keyboard. With Android 12, high-performance processor, 3.5-inch touchscreen, multi-function keyboard, and 5000mAh removable battery, the excellent configuration delivers highly efficient operation. It supports barcode scanning, NFC, 13MP camera, multiple wireless connections, and features high protection rating. The mobile computer is thus widely applicable in various fields including warehousing, logistics, retail, and asset management.

1.2 Precaution before using battery

- Do not leave battery unused for long time, no matter it is in device or inventory. If battery has been used for 6 months already, it should be check for charging function or it should be disposed correctly.
- The lifespan of Li-ion battery is around 2 to 3 years, it can be circularly charged for 300 to 500 times. (One full battery charge period means completely charged and completely discharged.)
- When Li-ion battery is not in used, it will continue discharge slowly. Therefore, battery charging status should be checked frequently and take reference of the related battery charging information on the manuals.
- Observe and record the information of a new unused and non-fully charged battery. On the basis of operating time of new battery and compare with a battery that has been used for long time. According to product configuration and application program, the operating time of battery would be different.
- Check battery charging status at regular intervals.
- When battery operating time drops below about 80%, charging time will be increased remarkably.
- If a battery is stored or otherwise unused for an extended period, be sure to follow the storage instructions in this document. If you do not follow the instructions, and the battery has no charge remaining when you check it, consider it to be damaged. Do not attempt to recharge it or to use it. Replace it with a new battery.
- Store the battery at temperatures between 5 °C and 20 °C (41 °F and 68 °F).

1.3 Notes

Note:
Using the incorrect type battery has danger of explosion.
Please dispose the used battery according to instructions.

Note:
Due to the used enclosure material, the product shall only be connected to a USB Interface of version 2.0 or higher. The connection to so called power USB is prohibited.

Note:
The adapter shall be installed near the equipment and shall be easily accessible.

Note:
The suitable temperature for the product and accessories is -20℃ to 50℃ (while charging is 40℃ only).

Note:
CAUTION RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

Chapter 2 Installation instructions

2.1 Appearance

2.2 Install Micro SD and SIM cards

The cards sockets are showing as follows:

NANO
SIM1
NANO
SIM2/TF

2.3 Battery charge

By using USB Type-C contact, the original adaptor should be used for charging the device. Make sure not to use other adaptors to charge the device.

2.4 Buttons and function area display

No.	Designation	Comments
①	SCAN Button	Keyboard SCAN button
②	Direction Button	Operate direction of cursor
③	Keyboard	Type numbers and characters
④	Power Button	Power ON/OFF
⑤	Function Button	Self-define buttons
⑥	Lock Key	Lock screen
⑦	SCAN Button	Side scan buttons

Chapter 3 Call function

3.1 Calling numbers

1. Click icon .
2. Click number key to input phone numbers.
3. Click icon to call.
4. Click icon to end call.

3.2 Contacts

1. Click contacts to open contacts list.
2. Click icon to add new contacts.

3.3 5G Function

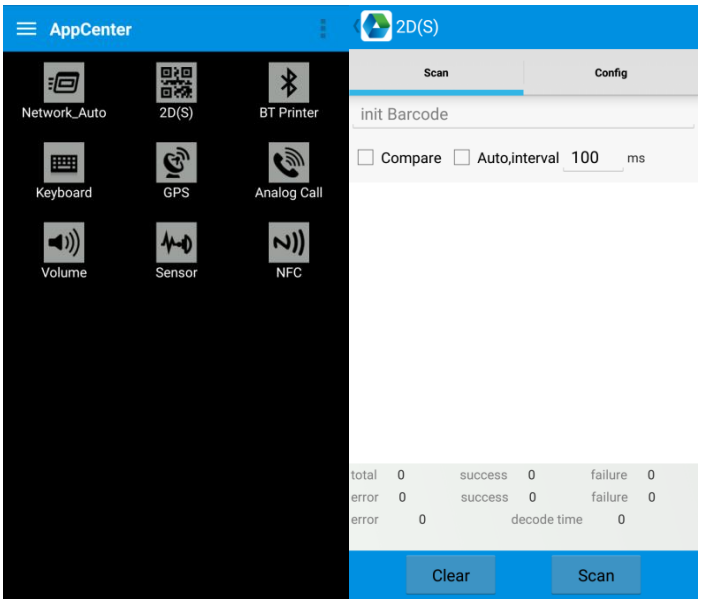
1. Open Settings
2. Select Network and Internet
3. Select SIM card
4. Enable 5G

3.4 SMS and MMS

1. Click to open message window.
2. Click to input message receiver and contents.
3. Click to send out messages.

Chapter 4 Barcode reader-writer

1. In App Center, to open 2D barcode scan test.
2. Press “SCAN” button or click scan key to start scanning, the parameter “Auto interval” can be adjusted.



Caution: Please scan codes in correct way otherwise the scanning will be failed.

2D code:

Correct

Incorrect

Max. radiant power: 0.6mW

Wave length: 655nM

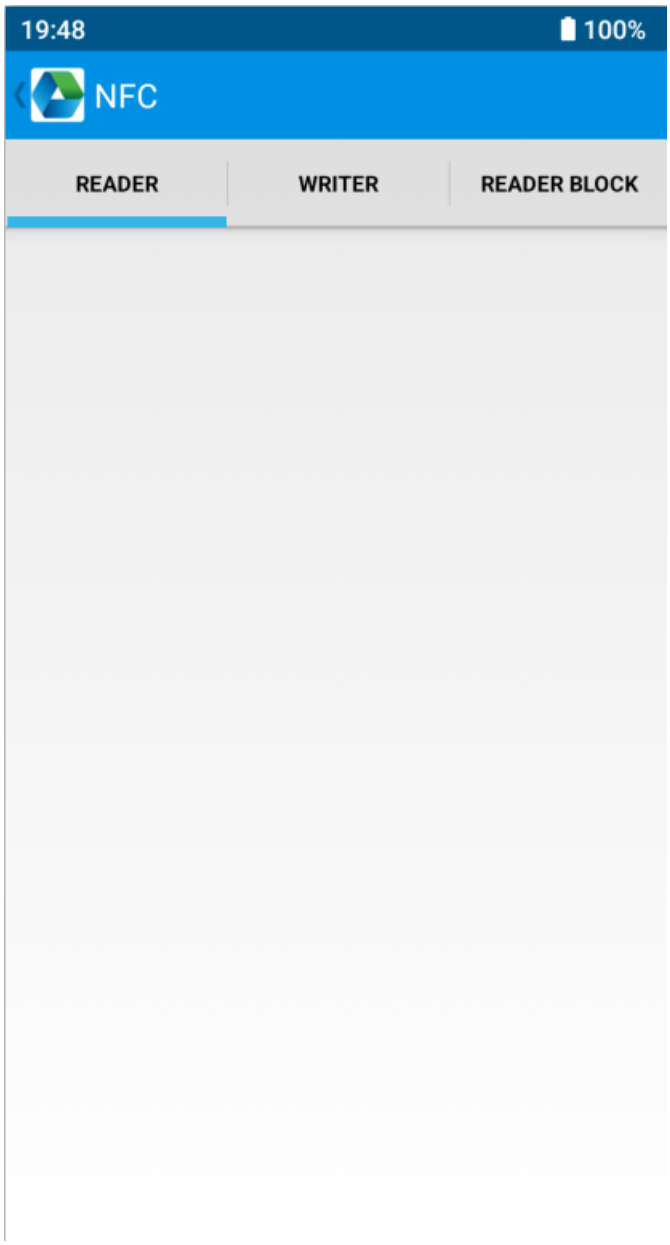
IEC 60825-1 (Ed.2.0).

21CFR 1040.10 and 1040.11 standard.

Chapter 5 RFID reader

5.1 NFC

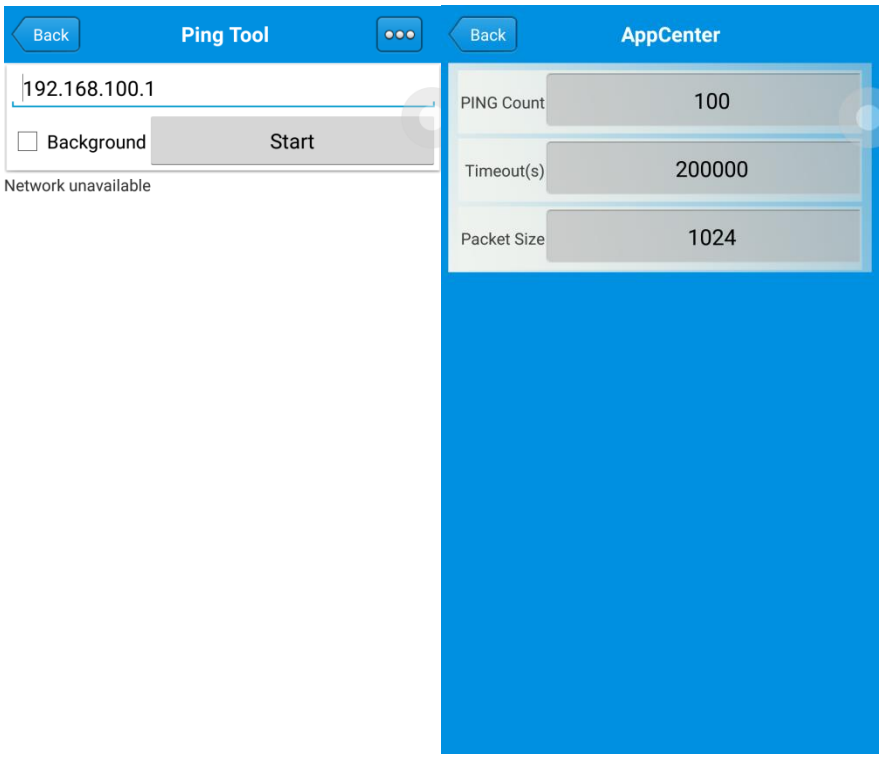
Click App Center, open “NFC” to read and write tag information.



Chapter 6 Other functions

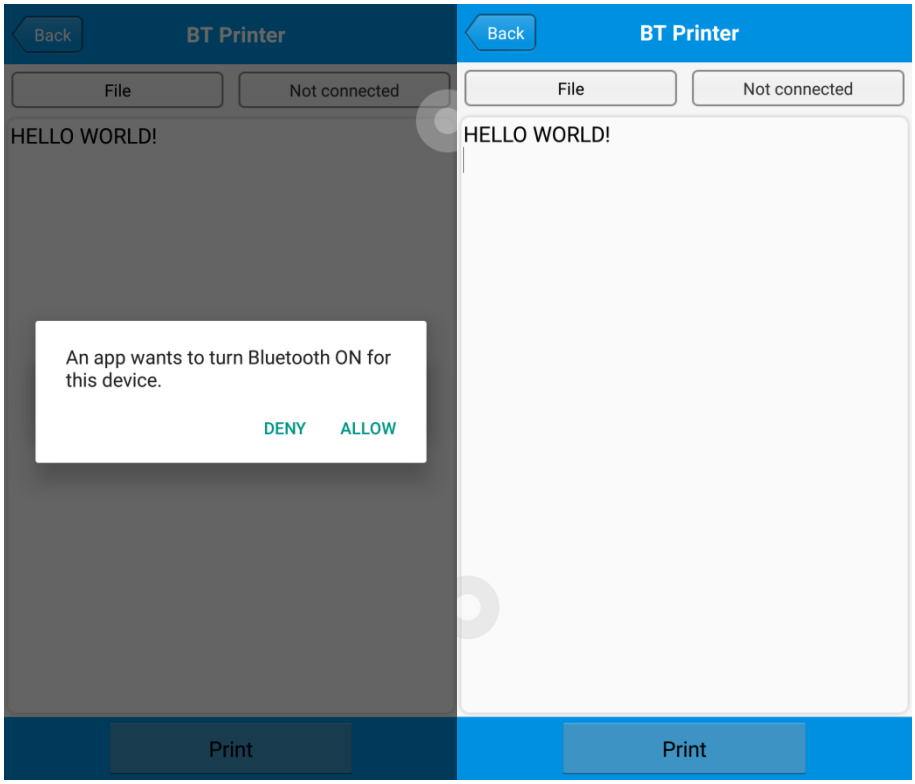
6.1 PING tool

1. Open “PING” in App Center.
2. Setup PING parameter and select external/internal address.



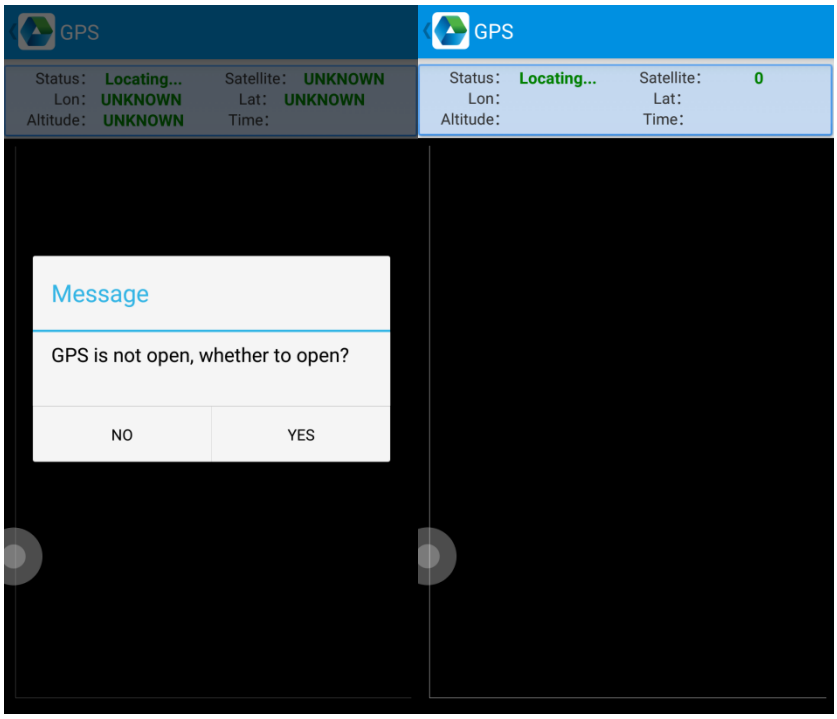
6.2 Bluetooth

1. Open “BT Printer” in App Center.
2. In the list of detected devices, click the device that you want to pair.
3. Select printer and click “Print” to start printing contents.



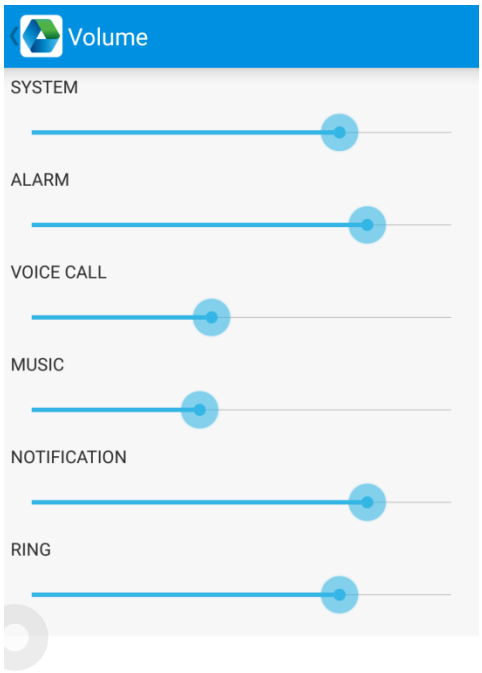
6.3 GPS

1. Click “GPS” in App Center to open GPS test.
2. Setup GPS parameters to access GPS information.



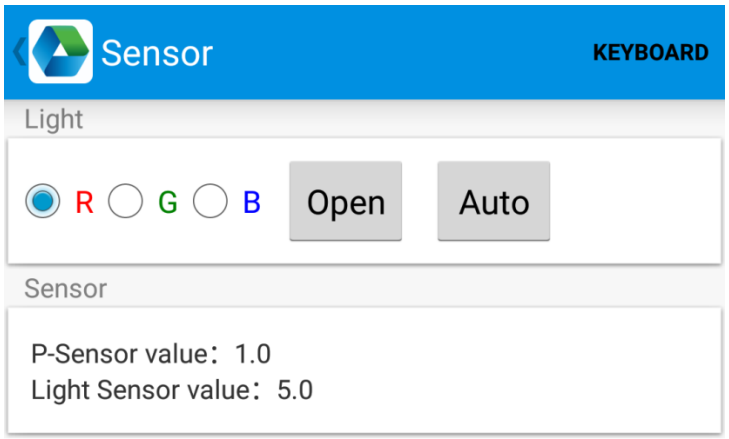
6.4 Volume setup

1. Click “Volume” in App Center.
2. Setup volume by requirements.



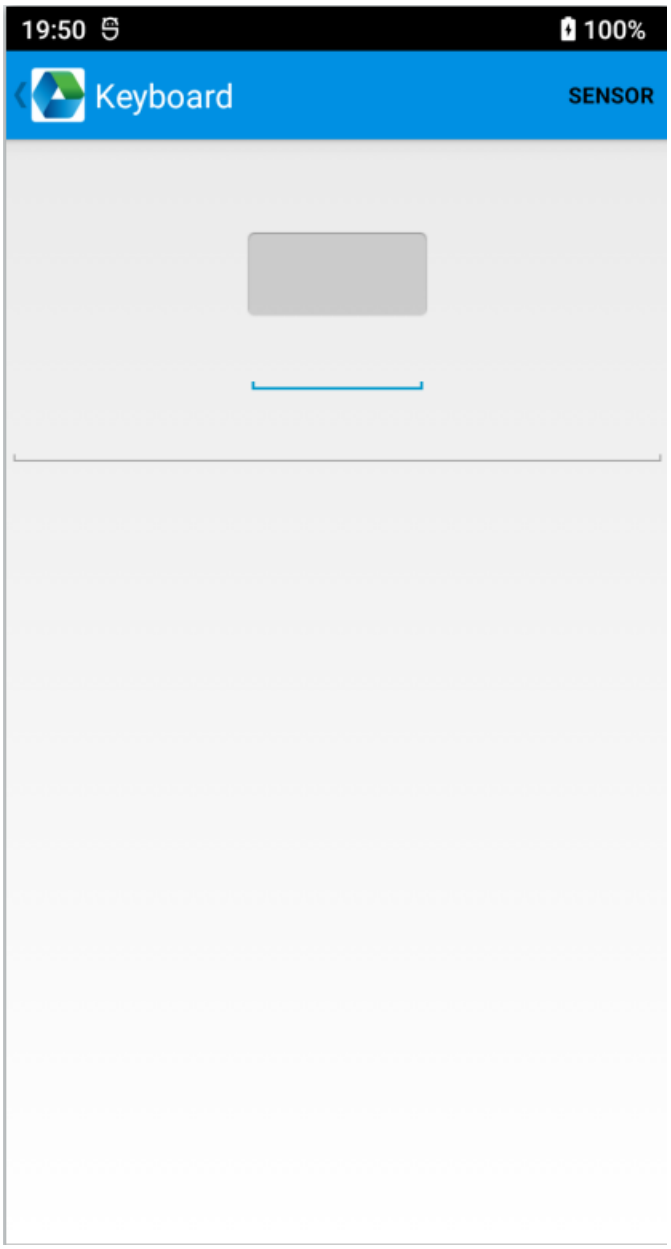
6.5 Sensor

1. Click “Sensor” in App Center.
2. Setup the sensor by requirements.



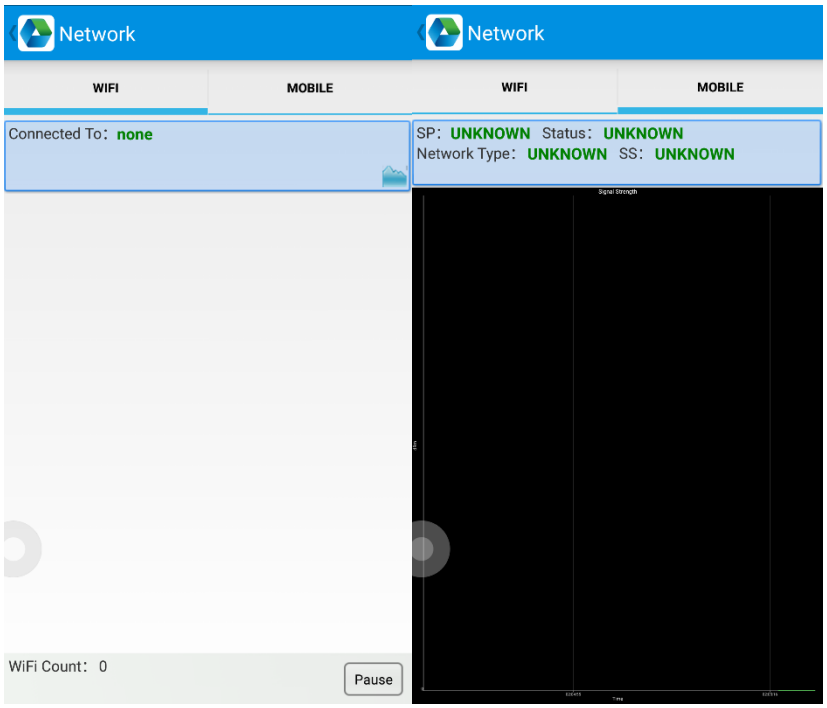
6.6 Keyboard

1. Click “Keyboard” in App Center.
2. Setup and test the main value of the device.



6.8 Network

1. Click “Network” in App Center.
2. Test WIFI/Mobile signal by requirements.



6.8 Keyboard emulator

The keyboard emulator can be used in multiple operating background and output formats directly. And it includes Prefix/Suffix/Enter/TAB.

Please check Keyboard emulator manual for more details.

Note: For each model, keycode of side button would be different, user needs to use keyboard in appcenter to check keycode and bind in Barcode2D.

19:52
100%
keyboardemulator v7.4.0.6
Function
AppSettings
2DSettings
Test
Enable Scanner
ON
Barcode
KeyCode
Barcode2D
291
293
294
296
UHF
KeyCode
UHF
291
294

CE Statement

1. RF Frequency and power

WWAN		
Frequency Band		Maximum output power(dBm)
GSM 900		33.50
GSM 1800		30.50
WCDMA Band I/VIII		23.00
LTE Band 1		22.50
LTE Band 3		22.50
LTE Band 7		23.50
LTE Band 8		22.50
LTE Band 20		22.50
LTE Band 28		22.50
LTE Band 34		22.50
LTE Band 38		22.50
LTE Band 40		22.50
WLAN		
Standard	Frequency	EIRP Power(dBm)
WIFI 2.4G	2.4~2.4835GHz	17.16
WIFI 5G	5.15~5.25GHz	16.32
	5.25~5.35GHz	14.93
	5.47~5.725GHz	15.16
	5.725~5.825GHz	9.69
BLUETOOTH		
Bluetooth Version		EIRP Power(dBm)
EDR		7.94
LE		-0.33

2. The SAR limit of Europe is 2.0 W/kg. This device was tested for typical body-worn operations with the back of the device kept 0.5cm from the body. To maintain compliance with RF exposure requirements, use accessories that maintain a 0.5cm separation distance between the user's body and the back of the device. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with RF exposure requirements, and should be avoided.

3. The Wi-Fi function is restricted to indoor use only when operating in the 5150 MHz to 5350 MHz frequency range.

BE	BG	CZ	DK	DE	EE	IE
EL	ES	HR	IT	CY	LV	LT
LU	HU	MT	NL	AT	PL	PT
RO	SI	SK	FI	SE		

Manufacturer Information

Shenzhen Chainway Information Technology Co., Ltd

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EU Regulatory Conformance

Hereby, Shenzhen Chainway Information Technology Co., Ltd. declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:

This device meets the government's requirements for exposure to radio waves.

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. Tests for SAR are conducted using standard operating positions (10mm) accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

FOR COUNTRY CODE SELECTION USAGE (WLAN DEVICES)

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.