

ShenZhen Chainway Information Technology Co., Ltd

Mobile Data Terminal

MC95 User Manual



Content

Content.....	2
Statement	4
Chapter 1 Product intro	6
1.1 Intro	6
1.2 Precaution before using battery	7
1.3 Notes	8
Chapter 2 Installation instructions	9
2.1 Appearance.....	9
2.2 Install Micro SD and SIM cards	9
2.3 Battery charge.....	11
2.4 Buttons and function area display	12
Chapter 3 Call function	13
3.1 Calling numbers	13
3.2 Contacts	13
3.3 5G Function.....	13
3.4 SMS and MMS.....	13
Chapter 4 Barcode reader-writer	14
Chapter 5 RFID reader	16
5.1 NFC	16
Chapter 6 Other functions	17
6.1 PING tool.....	17
6.2 Bluetooth	18
6.3 GPS.....	19
6.4 Volume setup	20
6.5 Sensor	21
6.6 Keyboard.....	22

6.8 Network	23
6.8 Keyboard emulator.....	24
Chapter 7 Device characteristic	26

Statement

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Chapter 1 Product intro

1.1 Intro

Chainway MC95 is a new high-performance and highly durable mobile computer. With Android 12 operating system, high-performance octa-core processor, optional large memory, 5.45-inch HD screen, 5000mAh removable battery, the excellent configuration delivers highly efficient operation. It supports optional barcode scanning, NFC, front and rear cameras, and features IP68 protection rating, 1.5 meters drop resistance. This device perfectly adapts to applications for retail, logistics, warehousing, electricity, finance, transportation, manufacturing, etc.

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 checked 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 use, it will continue to 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°C to 50°C.

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

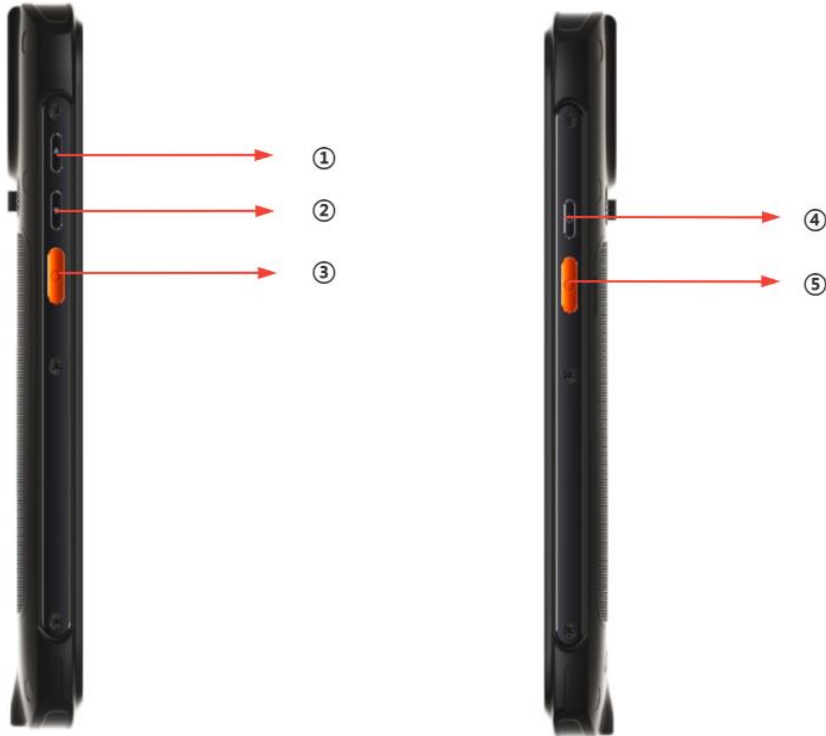
The cards sockets are showing as follows:



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



Code	Function	Comment
1	Volume+	Volume up
2	Volume-	Volume down
3	SCAN	SCAN button (LEFT)
4	POWER	Power ON/OFF
5	SCAN	SCAN button (RIGHT)

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

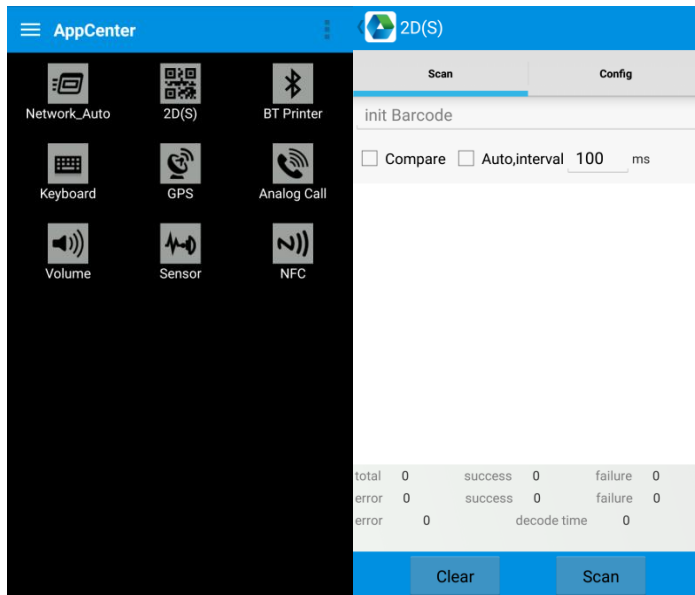
1. Open Settings
2. Select Network and Internet
3. Select SIM card
4. Enable 5G

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

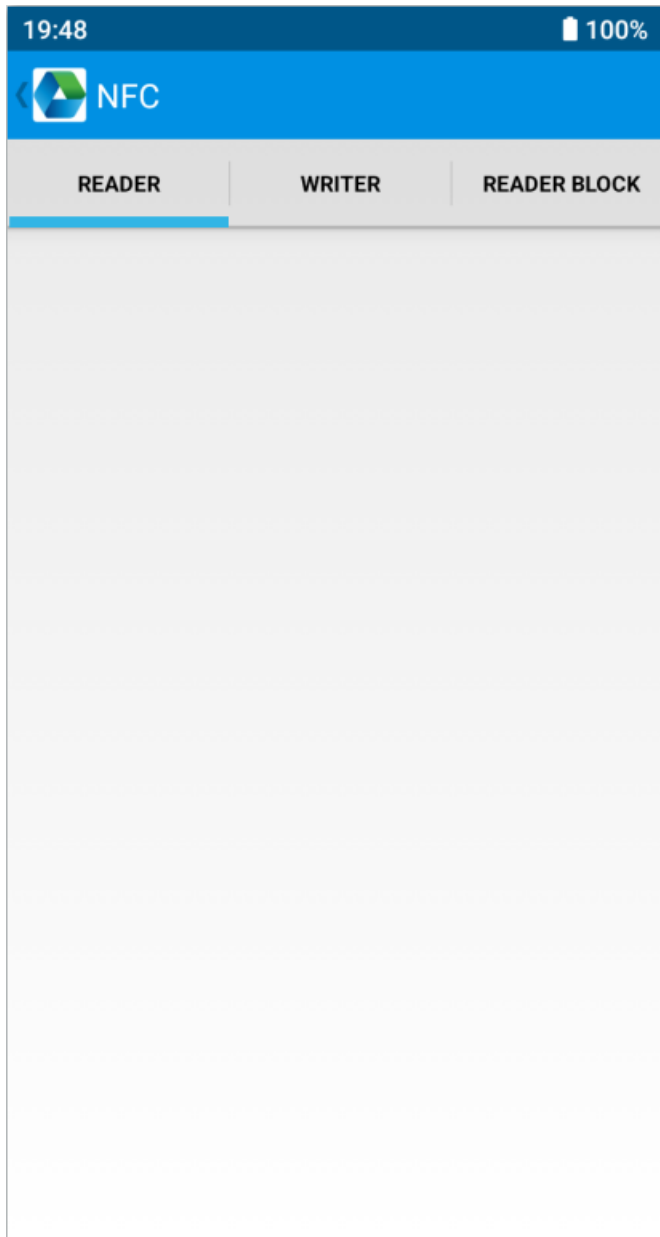
IEC 60825-1 (Ed.2.0).

21CFR 1040.10 and 1040.11 standard.

Chapter 5 RFID reader

5.1 NFC

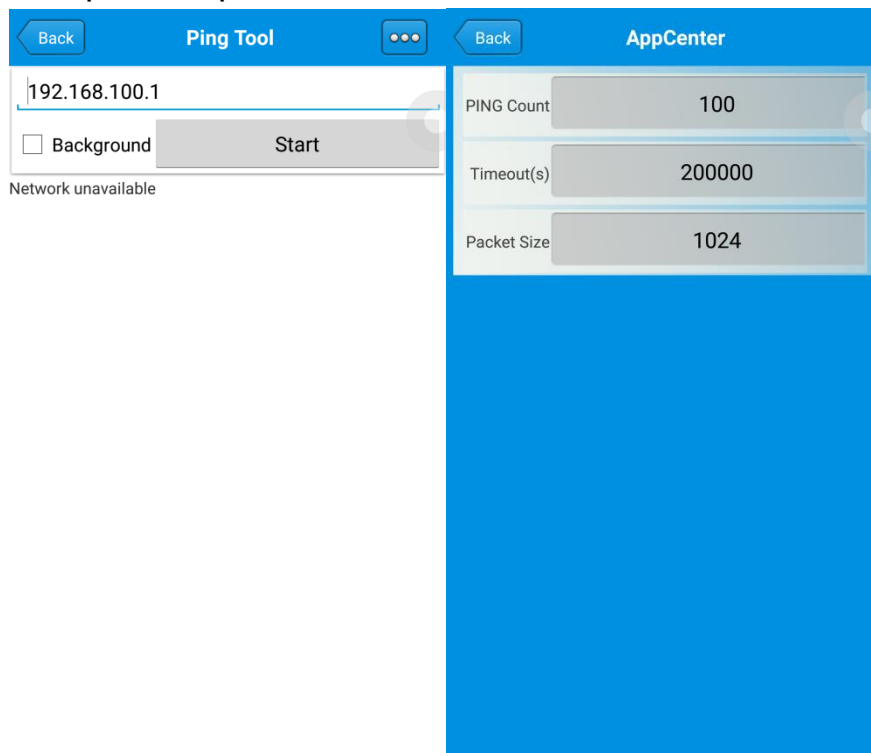
Click App Center, open “NFC” to read and write tag information.



Chapter 6 Other functions

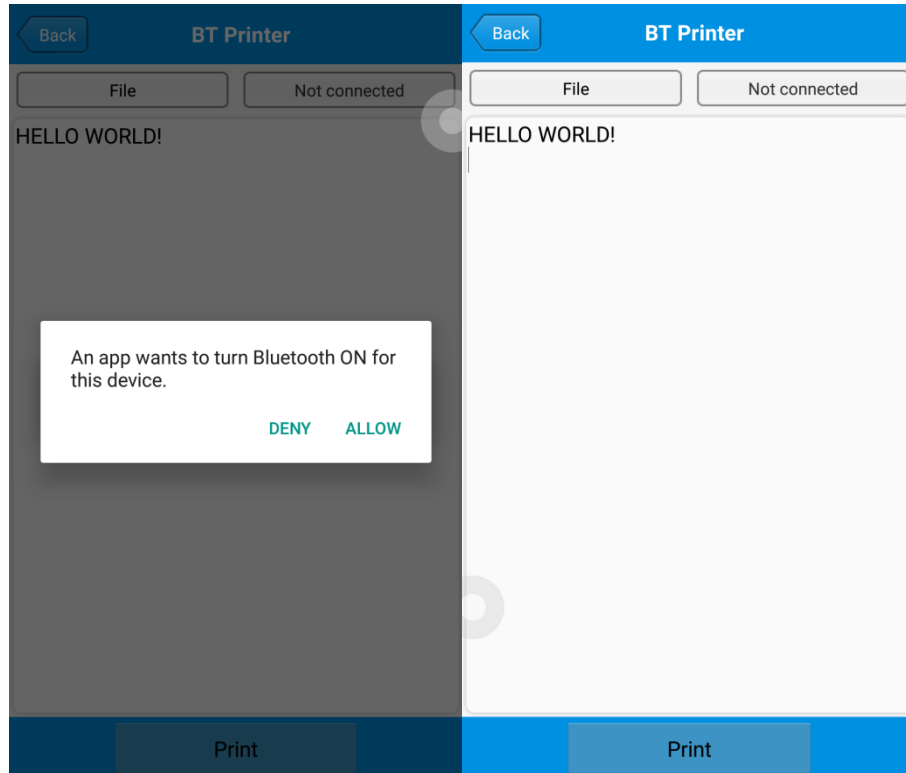
6.1 PING tool

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



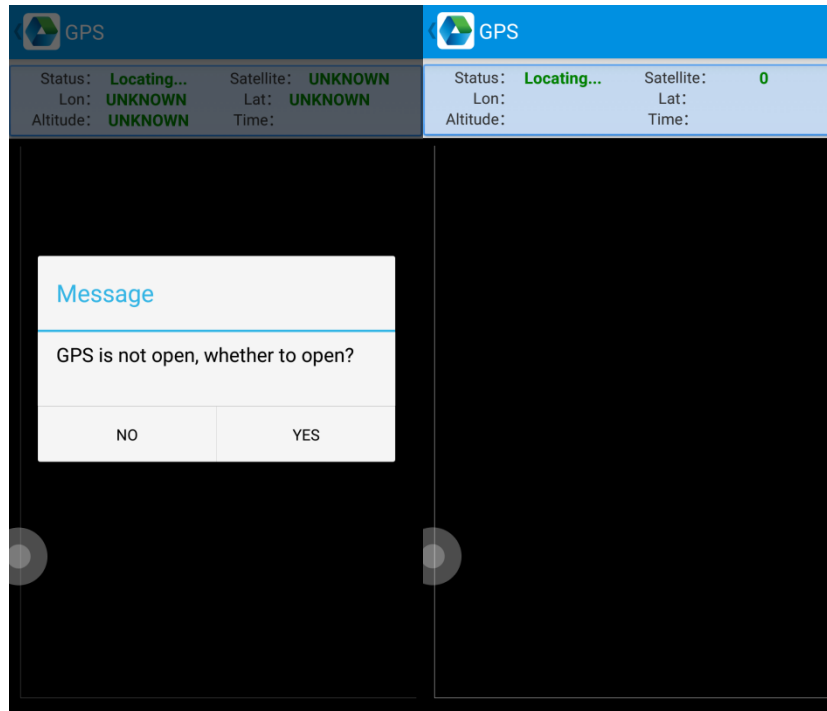
6.2 Bluetooth

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.



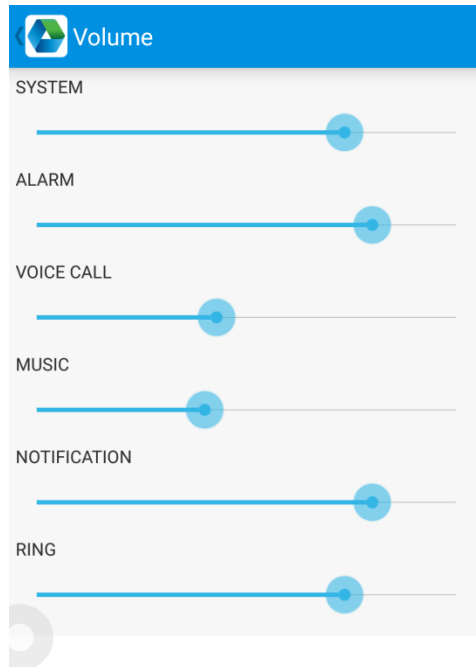
6.3 GPS

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



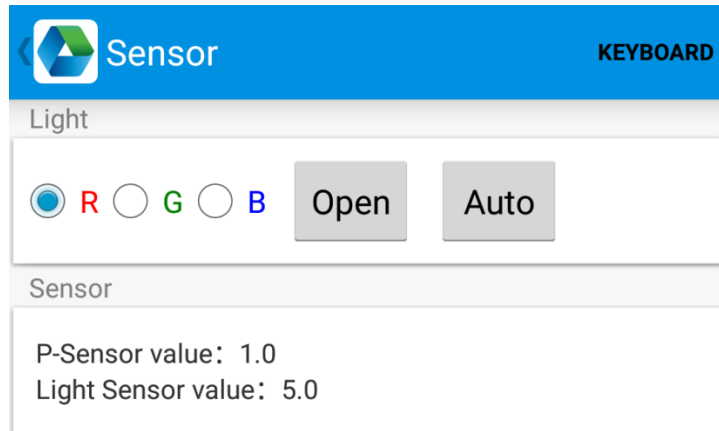
6.4 Volume setup

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.

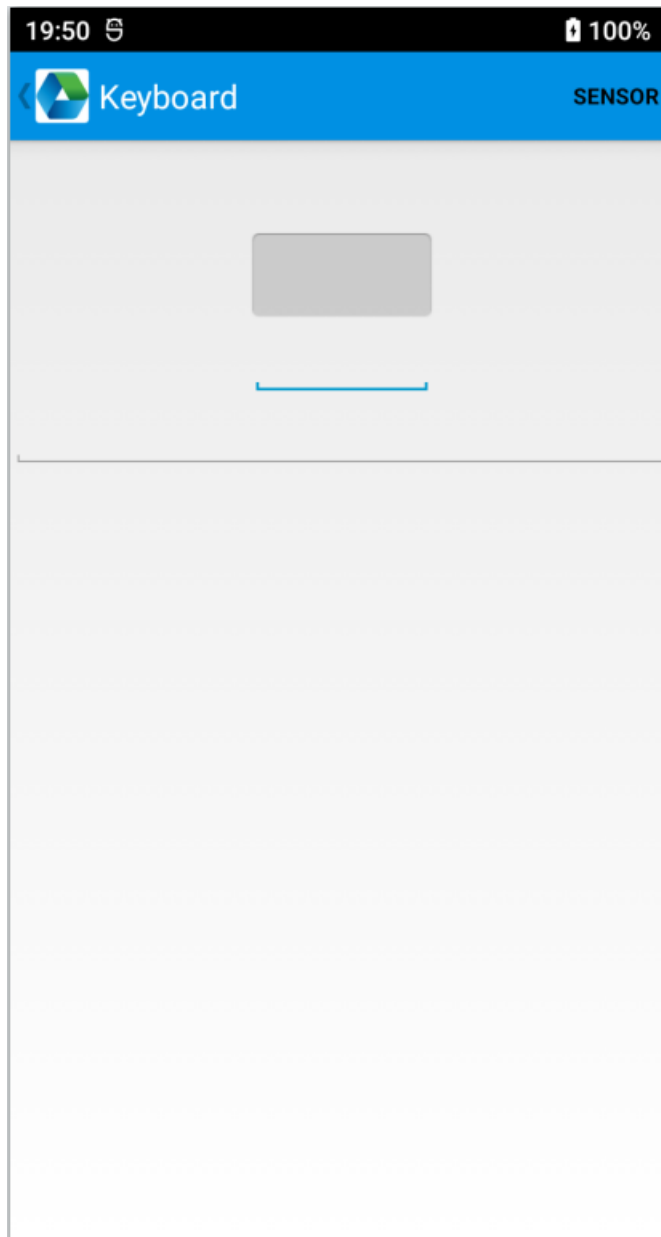


The screenshot shows the 'Sensor' app interface. At the top is a blue header with a back arrow, a sensor icon, the text 'Sensor', and the word 'KEYBOARD' on the right. Below the header is a section titled 'Light' in a light gray bar. Under 'Light', there are three radio buttons labeled 'R' (red), 'G' (green), and 'B' (blue). The 'R' radio button is selected. To the right of these buttons are two gray buttons labeled 'Open' and 'Auto'. Below the 'Light' section is another section titled 'Sensor' in a light gray bar. Under 'Sensor', the text 'P-Sensor value: 1.0' and 'Light Sensor value: 5.0' is displayed.



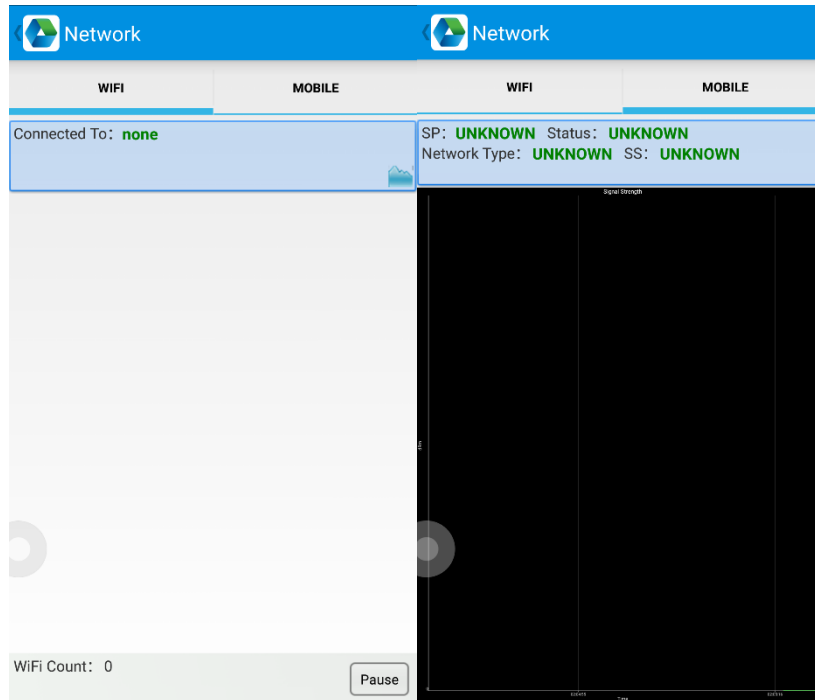
6.6 Keyboard

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

Chapter 7 Device characteristic

Physical characteristics

Size	160.0 x 75.0 x 16.4mm / 6.30 x 2.95 x 0.65in.
Weight	288g / 10.16oz (device with battery)
Keypad	Power key, 2 scan keys, volume (+/-) keys
Display	5.45", 1440 x 720
Touch panel	Multi-touch panel, gloves and wet hands supported
Sensor	Light sensor, proximity sensor, gravity sensor
Battery	5000mAh removable main battery, support quick charge
Notification	Sound, LED indicator, vibrator
Expansion Slot	1 slot for SIM card, 1 slot for SIM or TF card
Interfaces	USB Type-C, USB 2.0, OTG

Performance

CPU	Cortex-A53 Octa-core, 2.0 GHz
OS	Android 12
RAM	3GB/2GB
Communication Interface	USB Type-C, USB 2.0, OTG
ROM	16GB/32GB
Max. expansion	Supports up to 256 GB Micro SD card

User environment

Operating temp.	-20°C to 50°C
Storage Temp.	-40°C to 70°C
Humidity	5%RH - 95%RH non condensing
Sealing	IP65, IEC sealing standard
Drop specification	Multiple 1.5 m / 4.9 ft. drops (at least 28 times) to the concrete across the operating temperature range
Tumble Specification	1000 x 0.5m / 1.64ft. falls at room temperature
Sealing	IP68 per IEC sealing specifications
ESD	±15 KV air discharge, ±8 KV conductive discharge

Communication

WAN	2G: GSM (B2 / B3 / B5 / B8) 3G: WCDMA (B1 / B2 / B4 / B5 / B8) TD-SCDMA (B34 / B39) 4G: FDD-LTE (B1 / B2 / B3 / B4 / B5 / B7 / B8 / B12 / B17 / B20 / B28A / B28B) TDD-LTE (B38 / B39 / B40 / B41)
Vo-LTE	Support
WLAN	IEEE802.11 a/b/g/n/ac, 2.4G/5G dual-band, 5G PA
Bluetooth	Bluetooth 5.0

Data collection

Barcode scanning	CM60
Camera	Rear: 13MP Autofocus with flash Front: 5MP
RFID	NFC 13.56Mhz

Developing Environment

SDK	Chainway software develop kit
Language	Java
Develop	Eclipse/Android Studio