

# Mobile Data Terminal

## C61 User Manual



# Content

Content.....	1
Statement.....	3
Chapter 1 Product intro .....	5
1.1 Intro.....	5
1.2 Precaution before using battery.....	6
1.3 Charger .....	7
1.4 Notes.....	8
Chapter 2 Installation instructions.....	9
2.1 Appearance .....	9
2.2 Install Micro SD and SIM cards.....	11
2.3 Battery charge .....	12
2.4 Buttons and function area display .....	13
Chapter 3 Call function.....	14
3.1 Calling numbers.....	14
3.2 Contacts .....	14
3.3 SMS and MMS.....	14
Chapter 4 Barcode reader-writer .....	15
Chapter 5 RFID reader.....	17
5.1 NFC .....	17
Chapter 6 Other functions .....	18
6.1 PING tool .....	18
6.2 Bluetooth .....	19
6.3 GPS.....	20
6.4 Volume setup.....	21

6.5 Sensor .....	22
6.6 Keyboard .....	23
6.7 Network .....	24
6.8 Keyboard emulator .....	25
Chapter 7 Device characteristic.....	26

# Statement

© 2013 by ShenZhen Chainway Information Technology Co., Ltd. All rights reserved.

No part of this publication may be reproduced or used in any form, or by any electrical or mechanical means, without permission written from Chainway. This includes electronic or mechanical means, such as photocopying, recording, or information storage and retrieval systems. The material in this manual is subject to change without notice.

The software is provided strictly on an “as is” basis. All software, including firmware, furnished to the user is on a licensed basis. Chainway grants to the user a non-transferable and non-exclusive license to use each software or firmware program delivered hereunder (licensed program). Except as noted below, such license may not be assigned, sublicensed, or otherwise transferred by the user without prior written consent of Chainway. No right to copy a licensed program in whole or in part is granted, except as permitted under copyright law. The user shall not modify, merge, or incorporate any form or portion of a licensed program with other program material, create a derivative work from a licensed program, or use a licensed program in a network without written permission from Chainway.

Chainway reserves the right to make changes to any software or product to improve reliability, function, or design.

Chainway does not assume any product liability arising out of, or in connection with, the application or use of any product, circuit, or application described herein.

No license is granted, either expressly or by implication, estoppel, or otherwise under any Chainway intellectual property rights. An implied license only exists for equipment, circuits, and subsystems contained in Chainway products. |



# Chapter 1 Product intro

## 1.1 Intro

Chainway C61 is a new generation rugged handheld computer with robust performance. Built with Android™ 9 OS and Qualcomm Octa-Core processor, it supports numeric/QWERTY keypad, abundant accessories like trigger handle, and features powerful removable battery. And it delivers optional barcode scanning, RFID, NFC, etc. This mobile computer can fulfill applications in logistics, warehousing, retail, 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 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 Charger

The charger type is GME10D-050200FGu, output voltage/current is 5V DC/2A. The plug considered as disconnect device of adapter.

## 1.4 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 0-10°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.

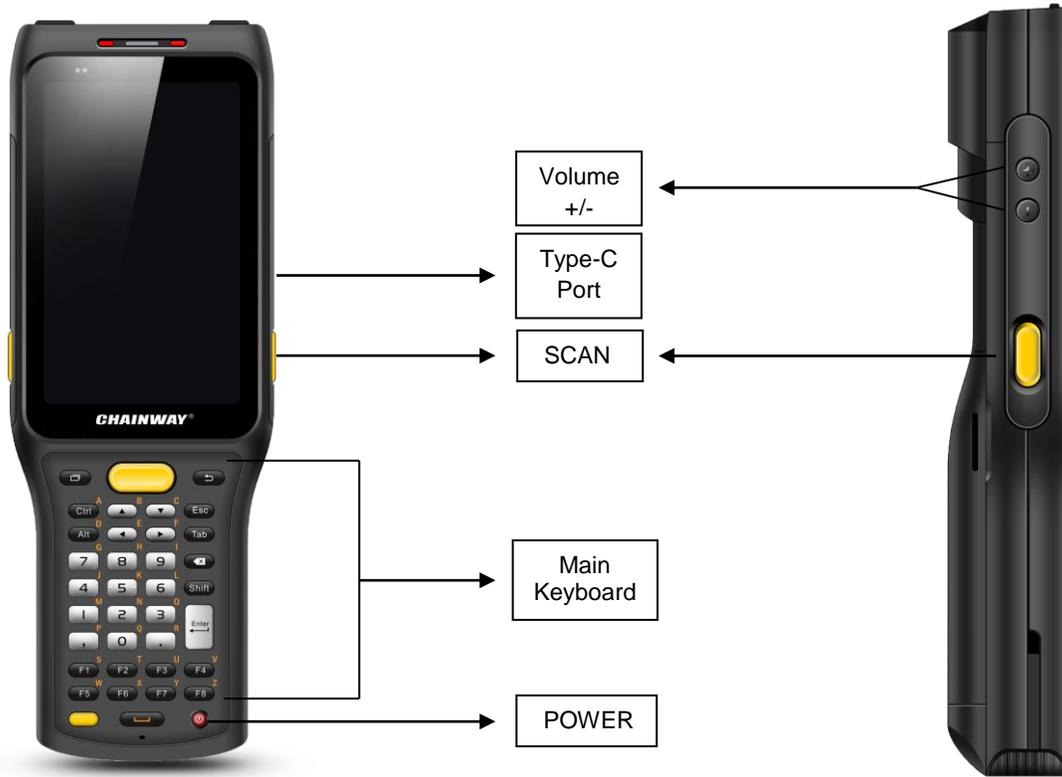
# Chapter 2 Installation instructions

## 2.1 Appearance

C61 back and front appearances are showing as follows:

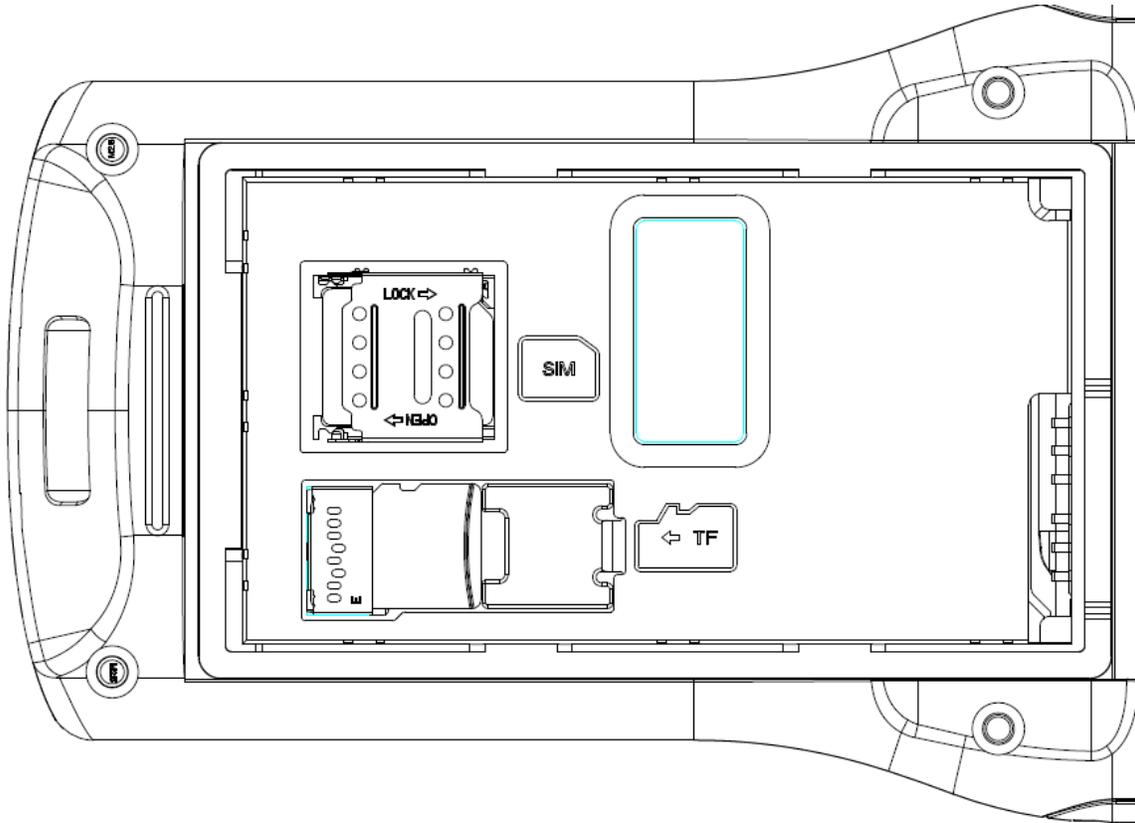


# Buttons instruction



## 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

C61 has main keyboard that contains 10 numeric keys+2 symbolic keys, 4 direction keys, 2 Android function keys, ENTER/ESC/TAB/ALT/CTRL/BACK/DELETE, 10 user-defined function keys (reuse with letter keys), 1 POWER key, 1 SCAN key, 1 Alt key, 38 keys in total.

Side keys: 2 SCAN keys+2 volume keys+1 user-defined key, 2D scanning module locates on the top. HD camera and flashlight locate at rear. NFC identification surrounds the camera.

# 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

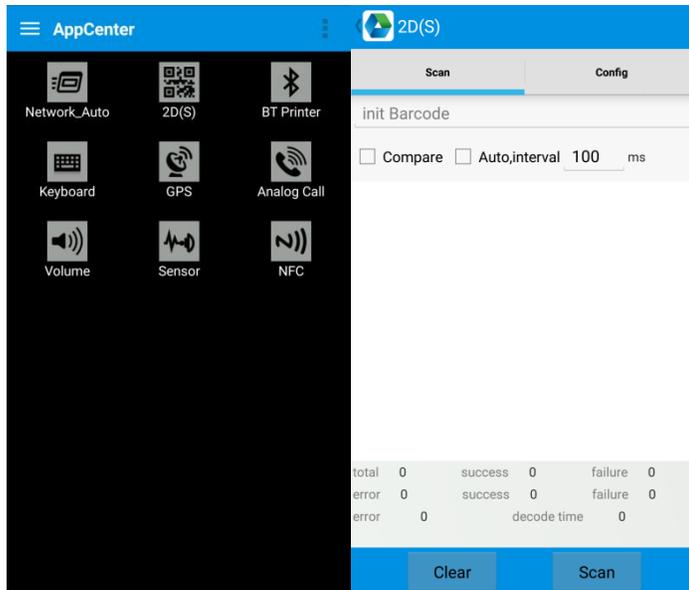
1. Click contacts to open contacts list.
2. Click icon  to add new contacts.
3. Click icon  to import/export contacts.

## 3.3 SMS and MMS

1. Click  to open message window.
2. Click  to input message receiver and contents.
3. Click  to send out messages.
4. Click  to add attachment pictures and videos.

# 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

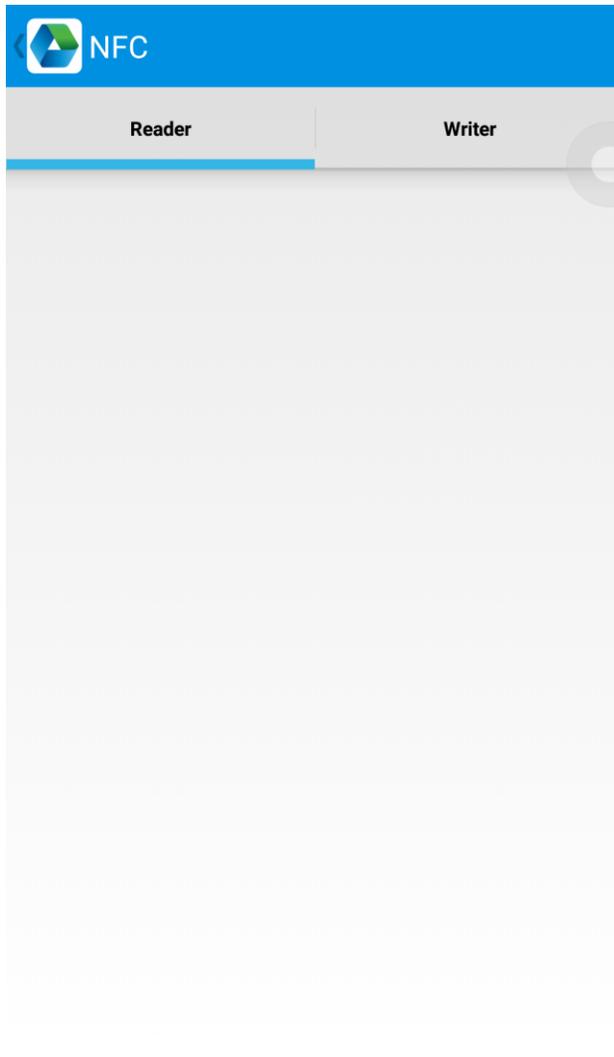
IEC 60825-1 (Ed.2.0).

21CFR 1040.10 and 1040.11 standard.

# Chapter 5 RFID reader

## 5.1 NFC

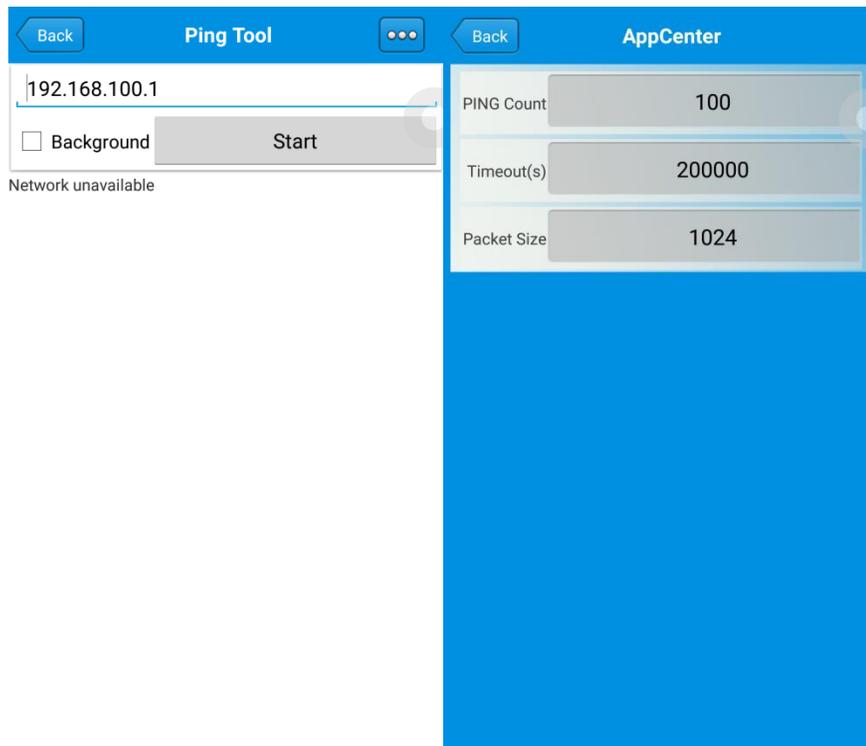
Click App Center, open “NFC” to read and write tag information.



# Chapter 6 Other functions

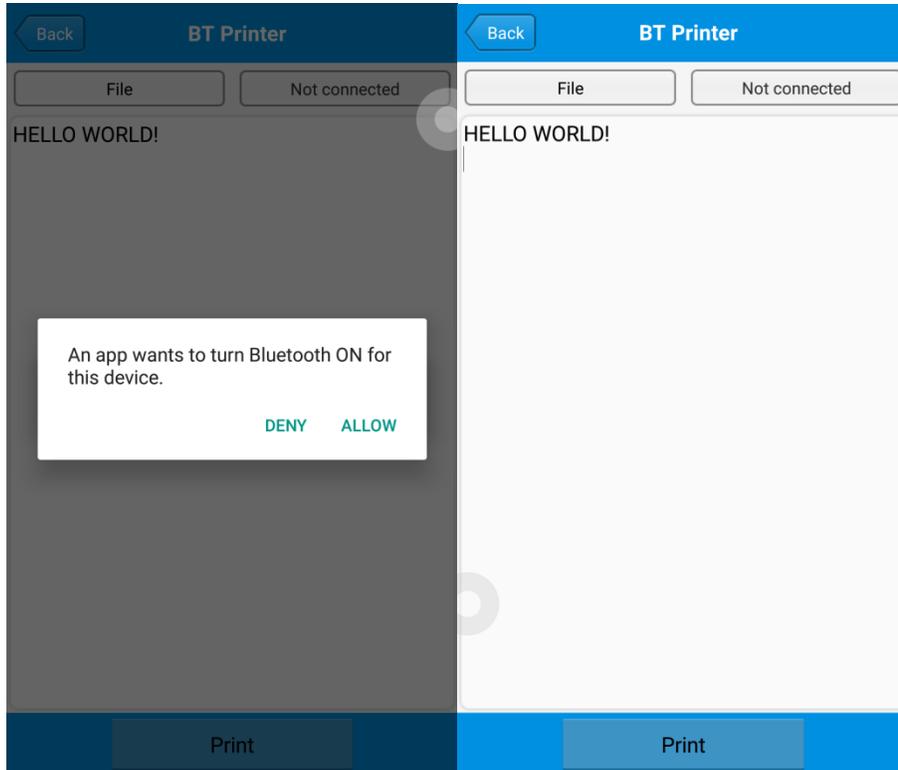
## 6.1 PING tool

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



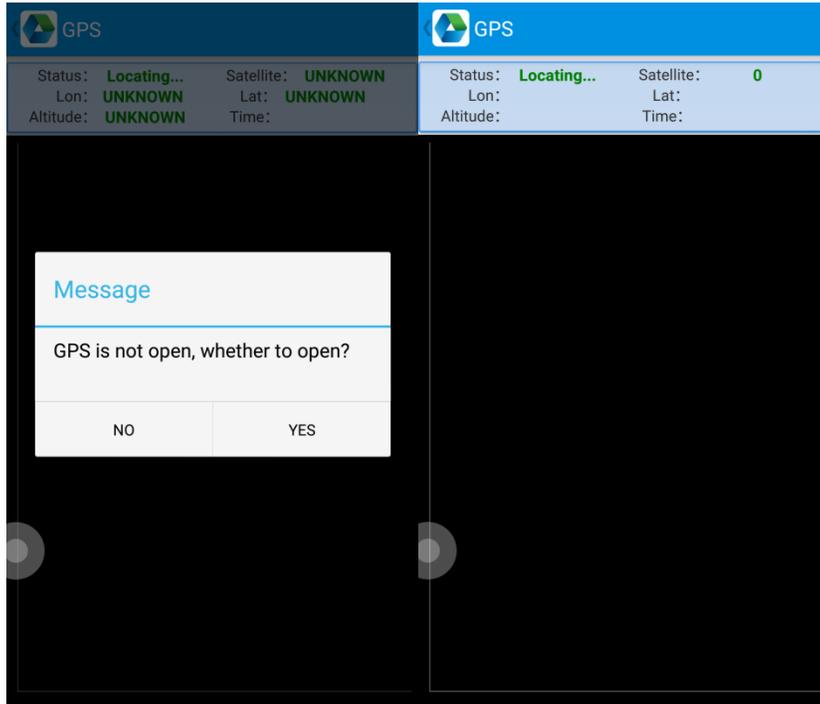
## 6.2 Bluetooth

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.



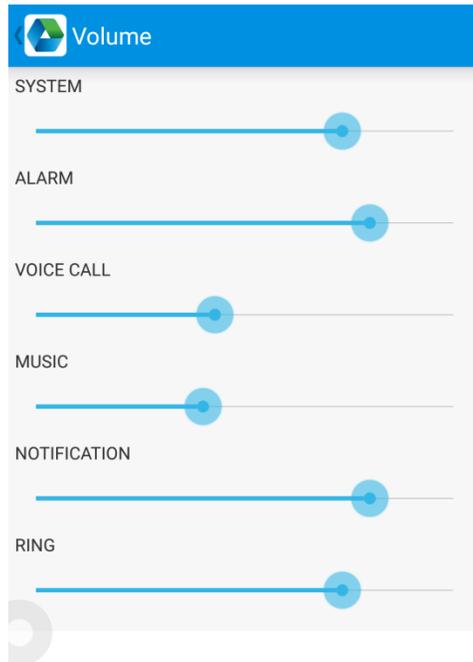
## 6.3 GPS

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



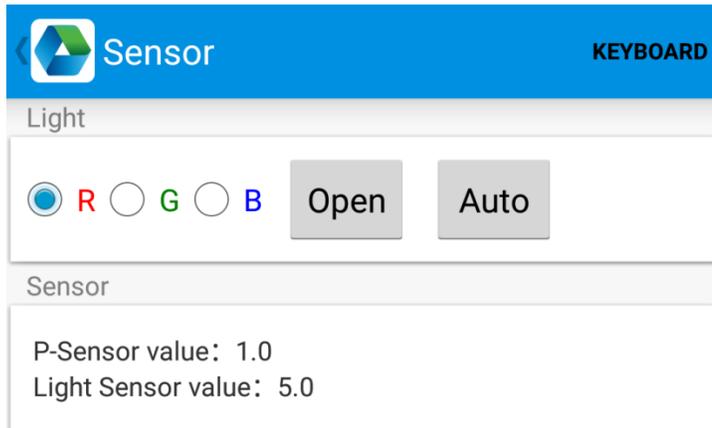
## 6.4 Volume setup

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.



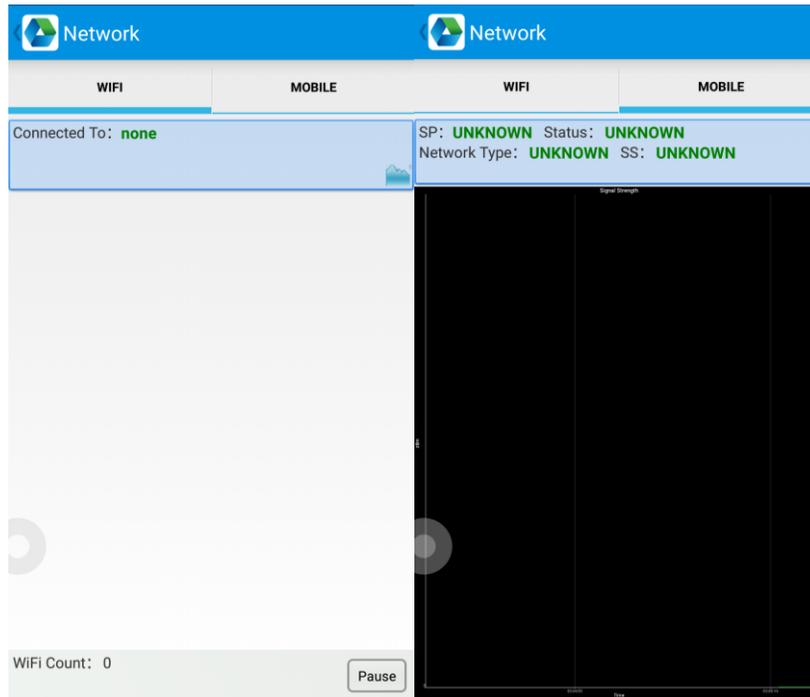
## 6.6 Keyboard

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



## 6.7 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.

The screenshot shows the 'keyboardemulator v2.2.9.6.2' application interface. At the top, there is a navigation bar with icons for 'Function', 'AppSettings', '2DSettings', and 'Test'. Below this, there is a toggle for 'Enable Scanner' which is currently 'OFF'. The main content area is divided into sections for different types of scanning: Barcode, RFID, UHF, and LF. Each section has a 'Barcode' or 'RFID' label and a 'KeyCode' field. The 'Barcode' section has two options: 'Barcode1D' (unchecked) and 'Barcode2D' (checked). The 'Barcode2D' option has a 'KeyCode' field with the value '280' and a '278' field. The 'RFID' section has two options: '14443A' (unchecked) and '15693' (unchecked). The '15693' option has a 'KeyCode' field with the value '280'. The 'UHF' section has one option: 'UHF' (unchecked). The 'UHF' option has a 'KeyCode' field with the value '280'. The 'LF' section has seven options: 'IDCard', 'Animal', 'HiTag', 'HDX', 'EM4450', 'TinyAniTag', and 'EM4305'. The 'HDX' option has a 'KeyCode' field with the value '280'.

Barcode	KeyCode
<input type="checkbox"/> Barcode1D	
<input checked="" type="checkbox"/> Barcode2D	280 278

RFID	KeyCode
<input type="checkbox"/> 14443A	
<input type="checkbox"/> 15693	280

UHF	KeyCode
<input type="checkbox"/> UHF	280

LF	KeyCode
<input type="checkbox"/> IDCard	
<input type="checkbox"/> Animal	
<input type="checkbox"/> HiTag	
<input type="checkbox"/> HDX	280
<input type="checkbox"/> EM4450	
<input type="checkbox"/> TinyAniTag	
<input type="checkbox"/> EM4305	

# Chapter 7 Device characteristic

## Physical characteristics

<b>Size</b>	202.0 x 72.5 x 32.0 mm / 7.95 x 2.85 x 1.26 in.
<b>Weight</b>	390 g / 13.76 oz.
<b>Display</b>	4-inch display, LTPS LCD screen
<b>Main Keyboard</b>	37 keys in total Side keys: 2 SCAN keys + 2 volume keys + 1 user-defined key
<b>Battery</b>	5200 mAh removable main battery, 5200 mAh optional pistol battery, support QC3.0 and RTC Standby: over 300 hours (only main battery) Continuous use: over 12 hours (depending on user environment) Charging time: 2.5hours (charge device by standard adaptor and USB cable)
<b>Expansion</b>	Supports up to 128 GB Micro SD card
<b>Expansion Slot</b>	1 slot for SIM card, 1 slot for TF card
<b>Audio</b>	1 Microphones, 1 Speaker
<b>Camera</b>	13MP autofocus camera with flashlight

## Performance

<b>CPU</b>	Qualcomm 1.8 GHz Octa-core
<b>OS</b>	Android 9
<b>RAM</b>	3GB
<b>Communication Interface</b>	USB3.0, Type-C
<b>ROM</b>	32GB
<b>Max. expansion</b>	Supports up to 128 GB Micro SD card

### User environment

<b>Operating temp.</b>	-20°C to 50°C
<b>Storage Temp.</b>	-40°C to 70°C
<b>Humidity</b>	5%RH - 95%RH non condensing
<b>Sealing</b>	IP65, IEC sealing standard
<b>Drop specification</b>	Multiple 1.8 m / 5.9 ft. drops (at least 20 times) to the concrete across the operating temperature range

### Communication

<b>WAN</b>	<p><b>EU/CH:</b>                  2G: 850/900/1800/1900 MHz                  3G: CDMA EVDO: BC0 WCDMA:                  850/900/1900/2100 MHz TD-SCDMA:                  A/F(B34/B39)                  4G: B1/B3/B5/B7/B8/B20/B38/B39/B40/B41</p> <p><b>US:</b>                  2G: 850/900/1800/1900MHz                  3G: 850/900/1900/2100MHz                  4G: B2/B4/B5/B7/B17/B38</p>
<b>WLAN</b>	Support 802.11 a/b/g/n/ac
<b>Bluetooth</b>	Bluetooth 4.2/4.1+HS/4.0/3.0+HS/2.1+EDR

### Data collection

<b>Barcode scanning</b>	SE4710/SE4750/SE4850
<b>RFID</b>	NFC 13.56Mhz

### Developing Environment

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

