

Mobile Data Terminal

H70 User Manual

FCC ID : 2ALPCH70



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1.1 Intro

H70 device is a smart mobile PDA that integrated with various features such as wireless communication, data acquisition, wireless transmission and data processing etc. It is configured with Andriod 6.0 OS and it possesses high reliability and expansibility. With a set of advanced data acquisition options, H70 can be operated in various industries to acquire precise and abundant datum automatically. Meanwhile, the device can match the options with staffs accordingly. The corporation which deployed H70 will realize the deployment work is simple and maintenance work will be remarkably decreased.

H70 is highly rugged, compact and durable. With IP67 water and dust proof capability, the device has met IEC sealing standard. Therefore, it can be operated by staffs such as railway inspector, road toll operator, vehicle inspector, delivery postman, power supply inspector, storage administrator, financial & insurance, police officers, security tracing etc. Wherever your staff' locations are, H70 can remain its connectivity with the system to make sure business inhigh-effective operating.

H70 smart mobile terminal adopted 4G LTE technology to realize multipath communication and calling function for field work, data exchange efficiency has been enhanced simultaneously. Therefore, H70 will bring the largest investment return for enterprises.

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 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 USBInterface 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

H70 back and front appearances are showing as follows:

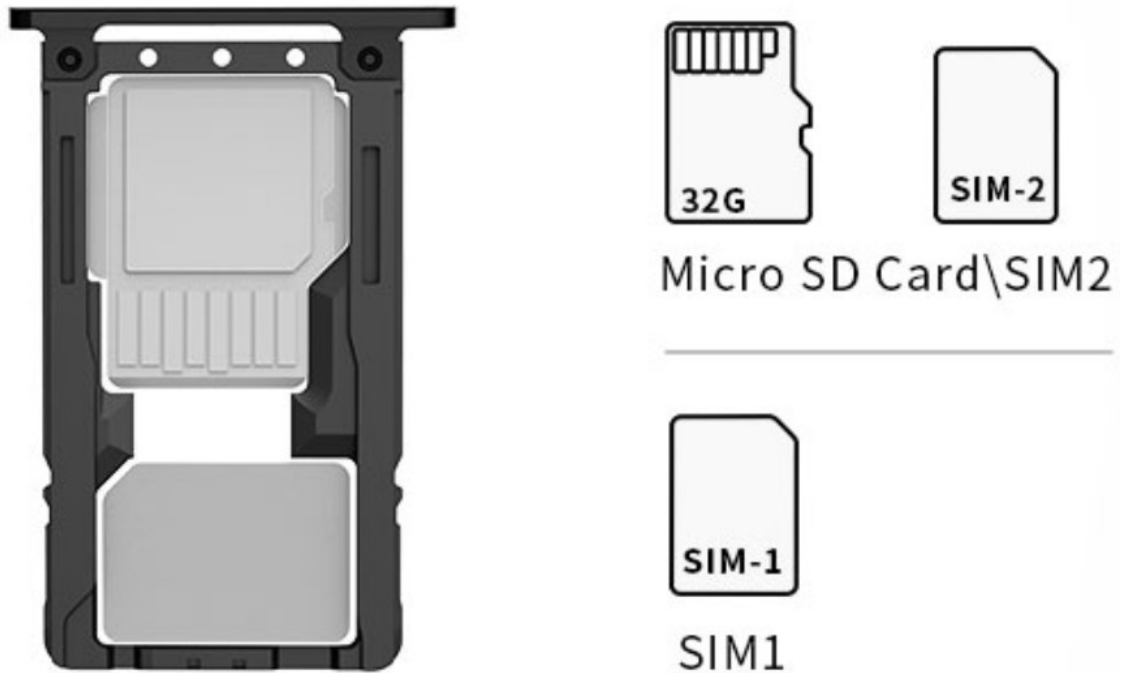


Buttons instruction

| Button | | Description |
|-------------|----------------|--|
| Side button | 1.Power | Located on left side, press to ON/OFF device. |
| | 2.Function key | Located on left side, its function can be defined by software. |
| | 3.SCAN | Scanning button located on both sides. There are two scanning buttons. |
| Main button | 4.Menu | Display main menu. |
| | 5.Home | Touch it back to main screen. |
| | 6.Enter | Press to confirm current selection. |
| | 7.Backspace | Return to last step to setup. |

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

H70 has 4 side buttons and 4 main buttons, NFC identification area and 2D scanning head locate at front. HD camera and flashlight locate at rear.





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

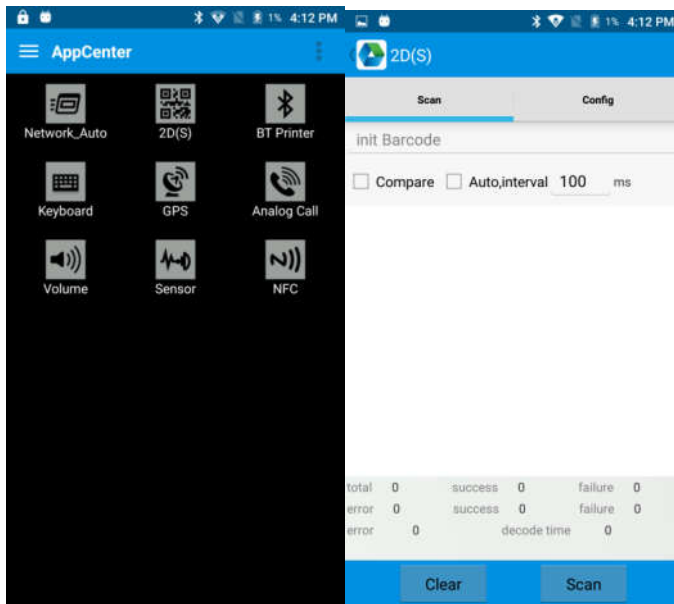
1. Click contacts to open contacts list.
2. Click icon  to add new contacts.
3. Click icon  to import/export contacts.


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

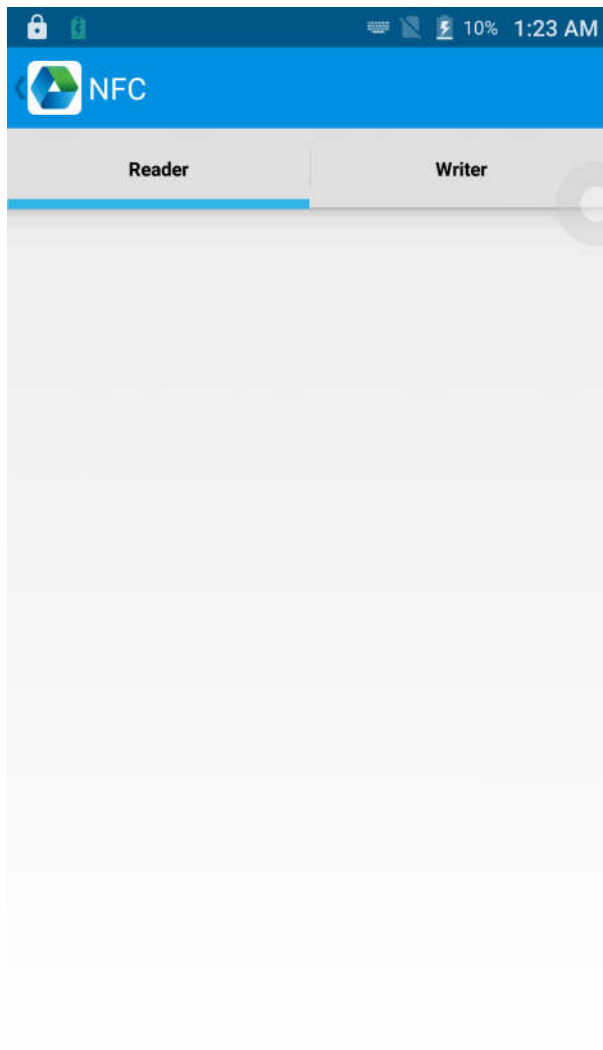
IEC 60825-1 (Ed.2.0).

21CFR 1040.10 and 1040.11 standard.

Chapter 5 RFID reader

5.1 NFC

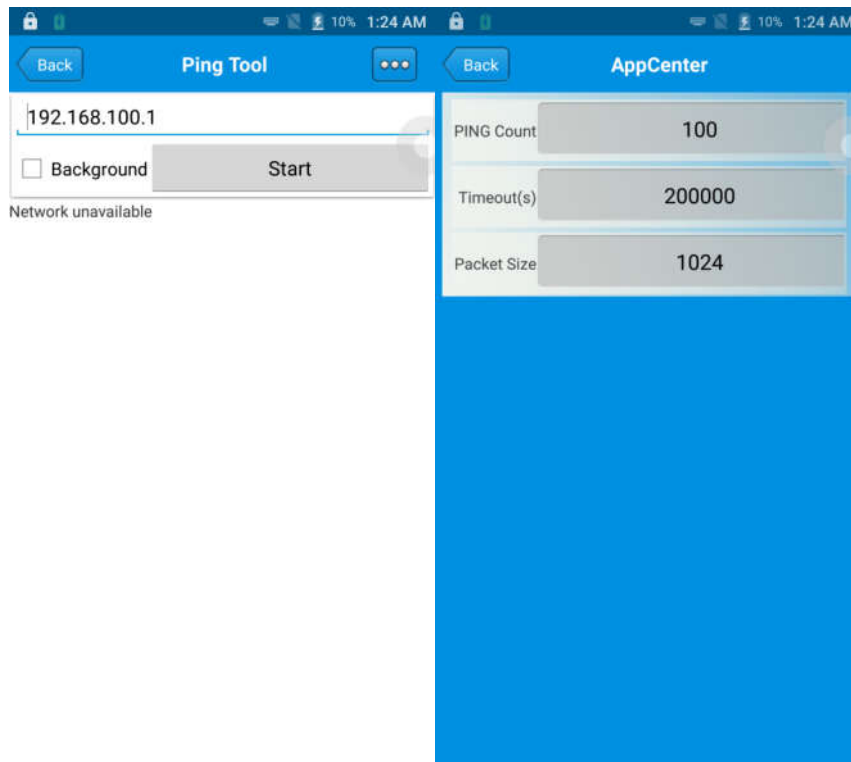
Click App Center, open “NFC” to read and write tag information.



Chapter 6 Other functions

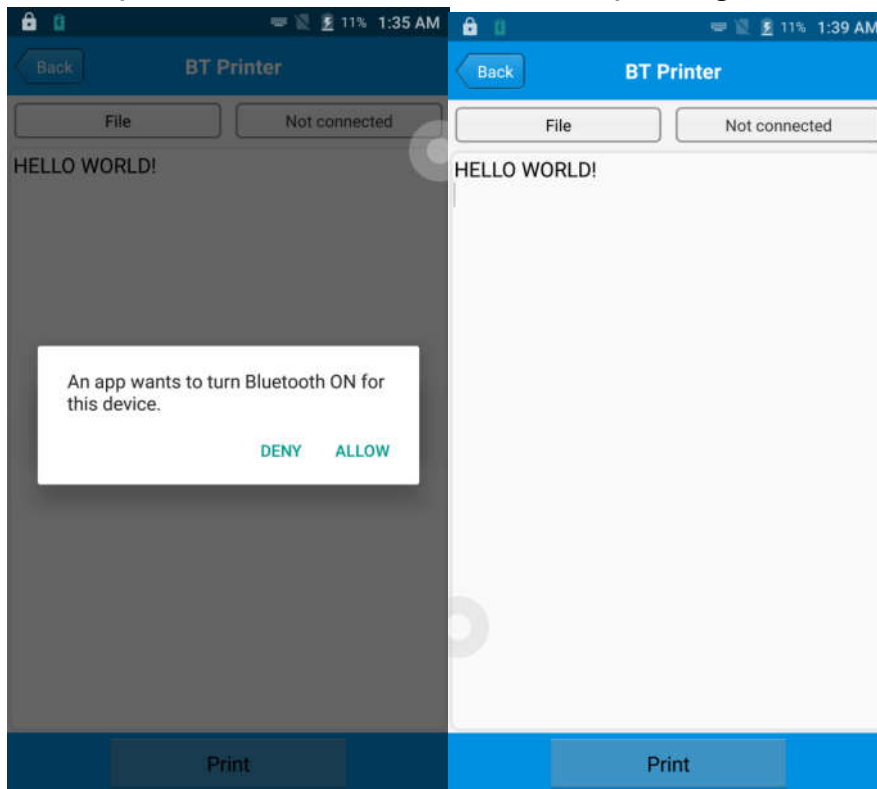
6.1 PING tool

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



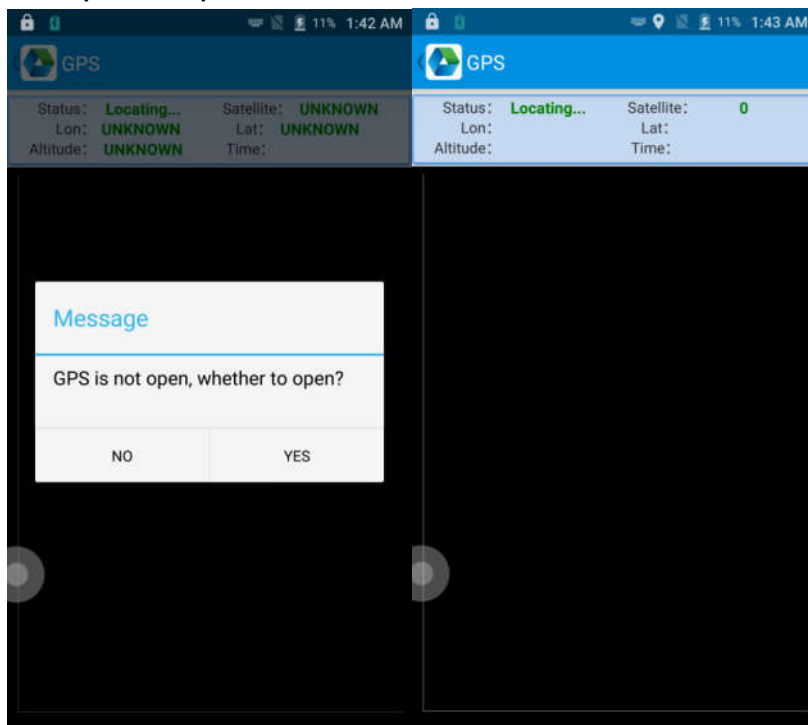
6.2 Bluetooth

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.



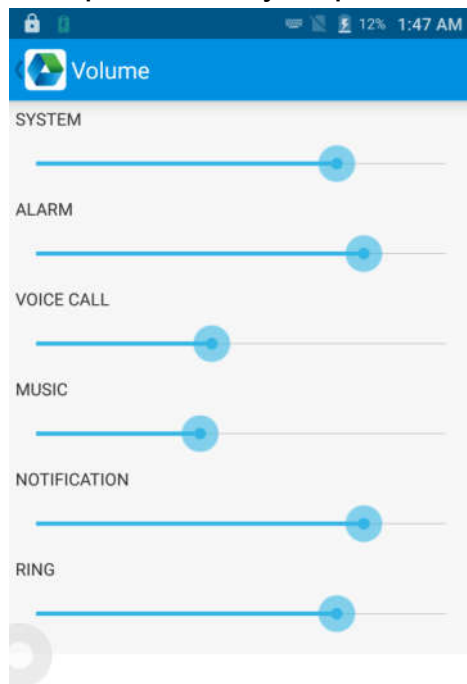
6.3 GPS

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



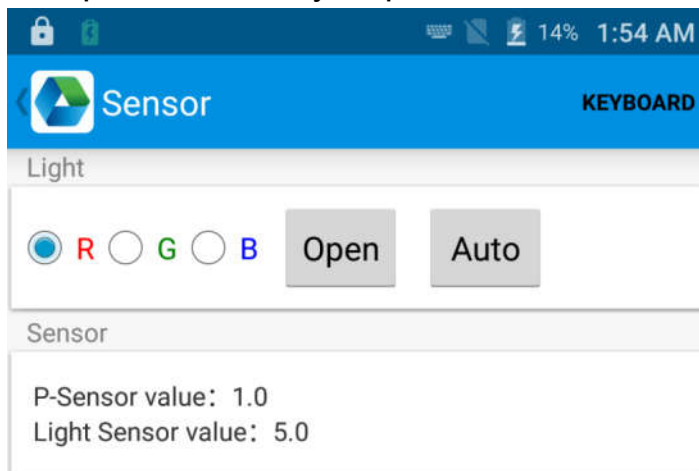
6.4 Volume setup

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



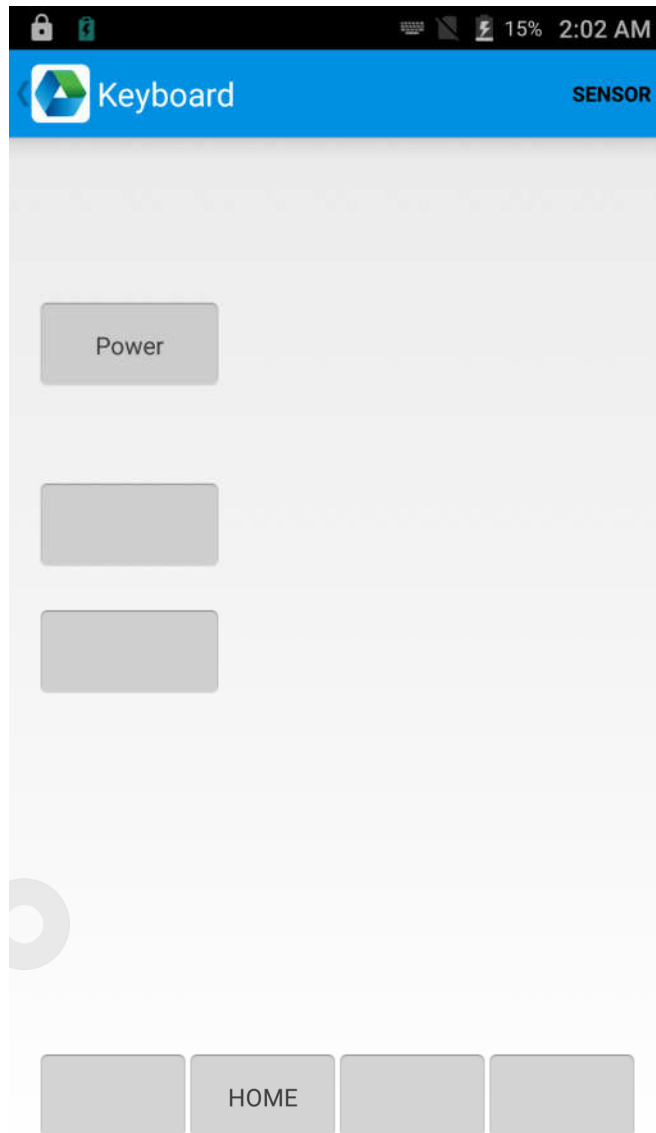
6.5 Sensor

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



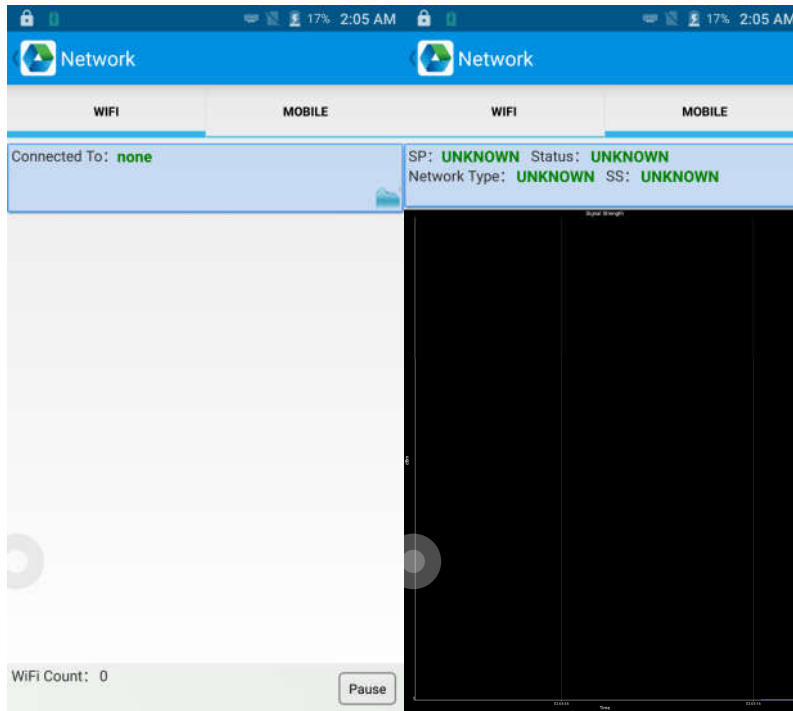
6.6 Keyboard

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



6.7 Network

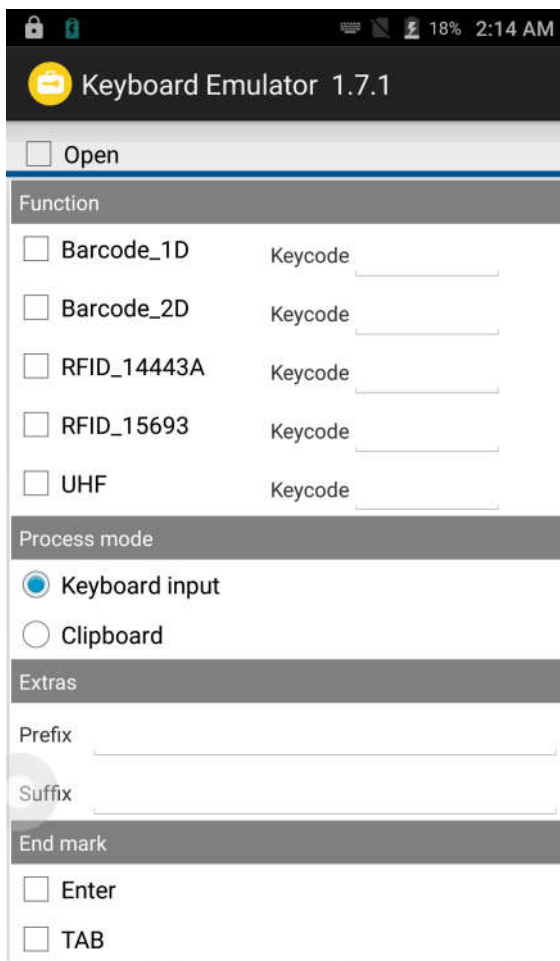
1. Click “Network” in App Center.
2. Test WIFI/Mobile signal by requirements.



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 'Keyboard Emulator 1.7.1' application interface. At the top, there is a status bar with a lock icon, signal strength, Wi-Fi, battery level at 18%, and the time 2:14 AM. Below the status bar is the app title 'Keyboard Emulator 1.7.1' with a yellow icon. The main interface is divided into several sections:

- Open:** A checkbox labeled 'Open' is currently unchecked.
- Function:** A section with a grey header containing five items, each with an unchecked checkbox and a 'Keycode' label followed by a text input field:
 - Barcode_1D
 - Barcode_2D
 - RFID_14443A
 - RFID_15693
 - UHF
- Process mode:** A section with a grey header containing two radio button options:
 - Keyboard input
 - Clipboard
- Extras:** A section with a grey header containing two text input fields:
 - Prefix
 - Suffix
- End mark:** A section with a grey header containing two unchecked checkbox options:
 - Enter
 - TAB

Chapter 7 Device characteristic

Physical characteristics

| | |
|-----------------------|---|
| Size | 164.2mm*78.8mm*17mm |
| Weight | <260g(battery included) |
| Display | 5.2 inch, IPS FHD 1920*1080P |
| Touch panel | 4 main keyboards, 1 power button, 2 scan buttons, 1 multi-function button |
| Battery | Li-ion, rechargeable, 5000mAh |
| Expansion | Supports up to 32 GB Micro SD card |
| Expansion Slot | 1 slot for SIM card, 1 slot for SIM or TF card |
| Audio | speaker, 2 microphones |
| Camera | 13MP autofocus camera with flashlight |

Performance

| | |
|--------------------------------|------------------------------------|
| CPU | Cortex-A53 1.3GHz Quadcore |
| OS | Andriod 6.0 |
| RAM | 2GB RAM |
| Communication Interface | USB2.0, Type-C, OTG |
| ROM | 16GB |
| Max.expansion | Supports up to 32 GB Micro SD card |

User environment

| | |
|---------------------------|---|
| Operating temp. | -10°C to 50°C |
| Storage Temp. | -20°C to 70°C |
| Humidity | 5%RH - 95%RH non condensing |
| Sealing | IP67, IEC sealing standard |
| Drop specification | Multiple 1.8m/5.9ft drops to the concrete |

Communication

| | |
|-------------|---|
| WAN | 2G: B2,B3,B5,B8 3G: WCDMA B1/B2/B5/B8 TD-SCDMA B34/39 4G: FDD-LTE B1/B2/B3/B4/B5/B7/B17/B20 TDD-LTE B38/B39/B40/B41 |
| WLAN | IEEE802.11a/b/g/n, embedded antenna, 5 Gigabit WIFI max. power 14.79dBm. |
| WPAN | Bluetooth 4.0 |

Data collection

| | |
|-------------------------|---|
| Barcode scanning | 2D CMOS scanning engine(Honeywell N6603/Zebra SE4710) |
| RFID | NFC 13.56Mhz |

Developing Environment

| | |
|-----------------|------------------------|
| SDK | software develop kit |
| Language | Java |
| Develop | Eclipse/Android Studio |