BITA-INTERNATIONAL CO., LTD

Mobile Data Terminal

MC66 User Manual

Content

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Chapter 1 Product intro

1.1 Intro

Bita-International MC66 is a newly-developed rugged handheld computer with large screen and strong extensibility. Running on Android™ 11 OS, it is equipped with Qualcomm Octa-core processor for high-speed processing. With 5.5-inch high-definition display, it is integrated with barcode scanning, NFC and other functions. The data collection device supports quick charge and UHF sled for good extensibility that can meet the needs in logistics, warehouse, manufacturing, retail, asset tracking, power patrol inspection, 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 PWR-MC66-9V2A-EU (UK/US/CN), output voltage/current is 9V 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 -20℃ to 50℃.

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

Note:
SAR Max. Value:.

Chapter 2 Installation instructions

2.1 Appearance

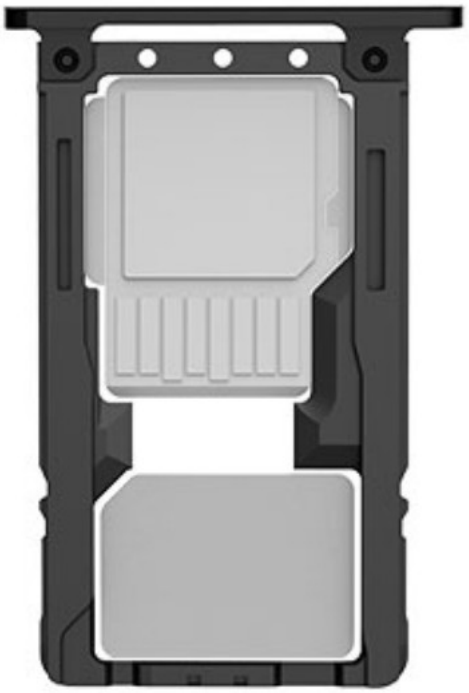
MC66 back and front appearances are showing as follows:

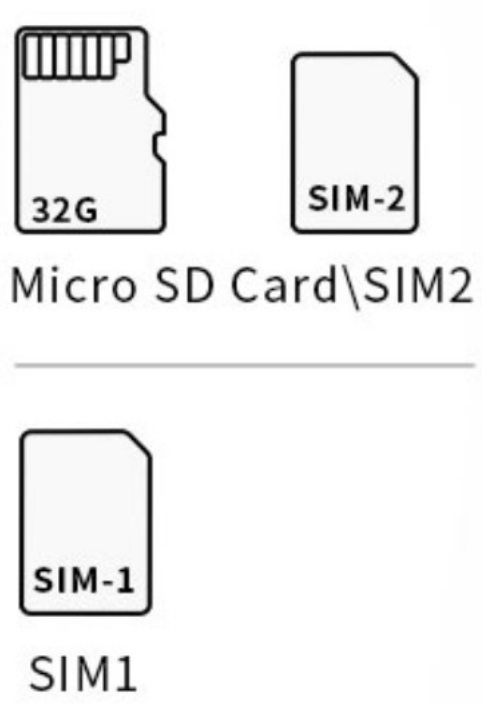
Buttons instruction

Button		Description
Side button	1. Power	Locate on right side, press to ON/OFF device.
	2. PTT key	Locate on right side, its function can be defined by software.
	3.SCAN	Scanning button located on both sides. There are two scanning buttons.
	4. Volume +/-	Volume up and down

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.

Note:

1. Main logic is pistol grip battery will work as power bank to give power to main device battery, when device battery power is under 50 percent, it start to charge the main device battery.It will keep charging until pistol grip battery is at percentage of 15 %.
2. Once installed the pistol grip to main device, must restart the device once so the pistol grip battery will be correctly detected .
3. When put the device with pistol grip together to charge, it will charge main device battery first, once main device battery is up to 95%, it will start to charge pistol grip battery.

2.4 Buttons and function area display

MC66 has 6 side buttons, 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

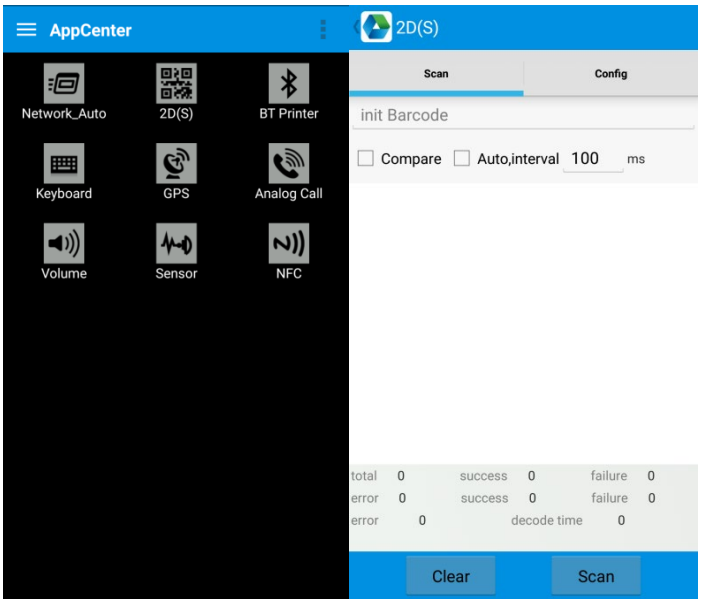
1. Click contacts to open contacts list.
2. Click icon  to add new contacts.
3. Click icon  to import/export contacts.

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

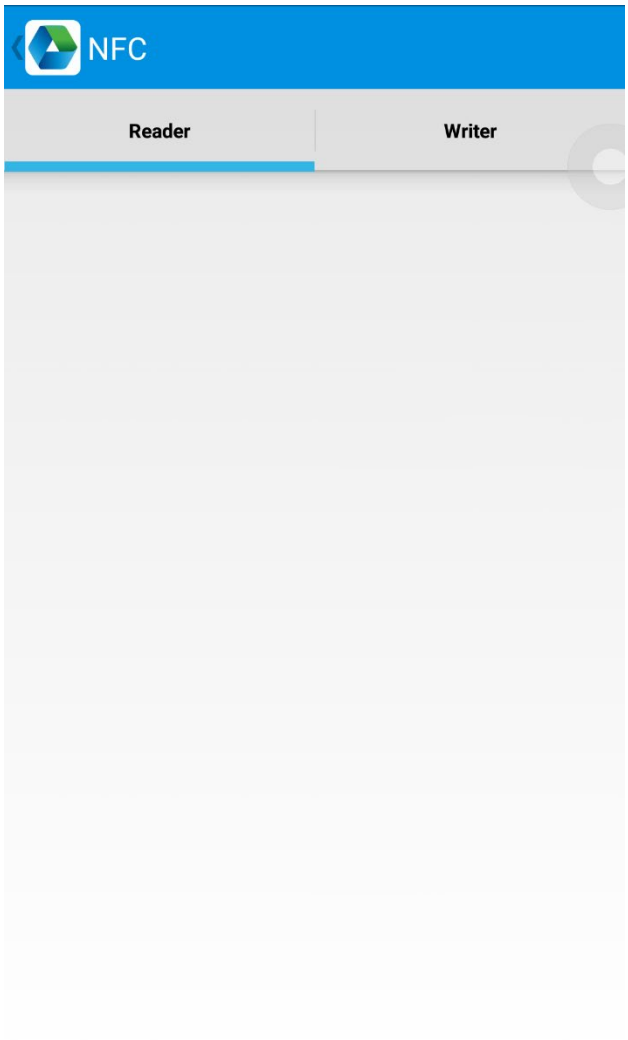
IEC 60825-1 (Ed.2.0).

21CFR 1040.10 and 1040.11 standard.

Chapter 5 RFID reader

5.1 NFC

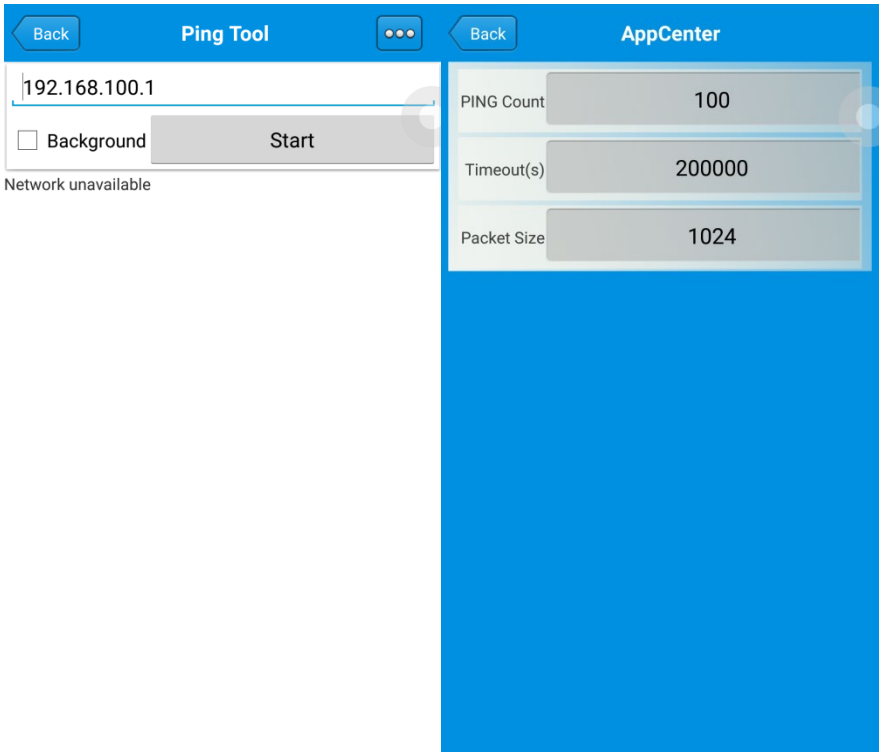
Click App Center, open “NFC” to read and write tag information.



Chapter 6 Other functions

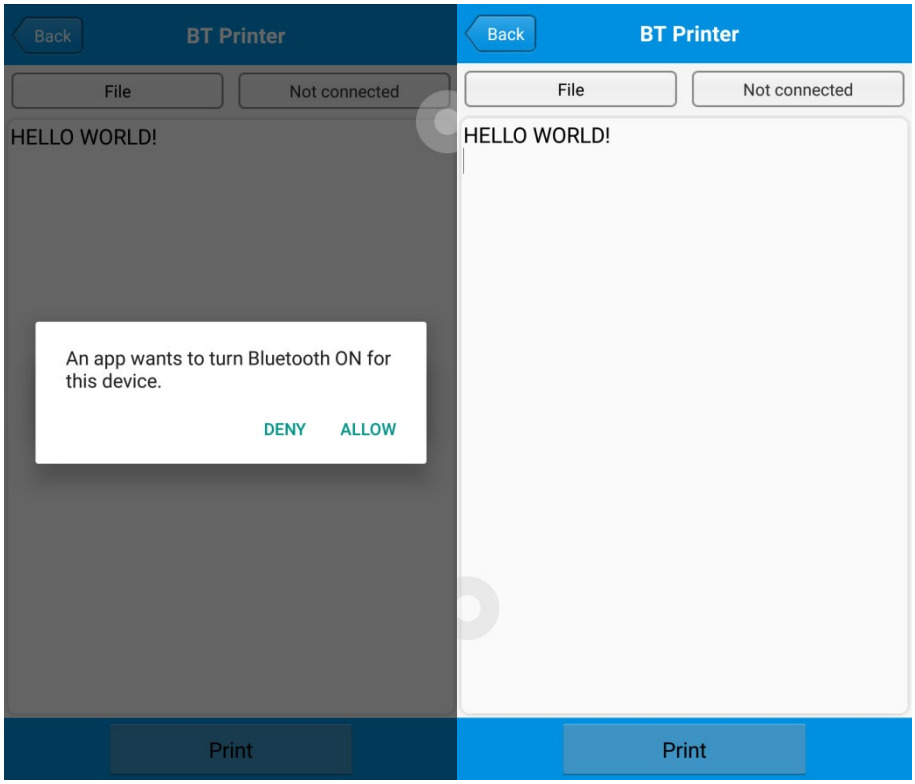
6.1 PING tool

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



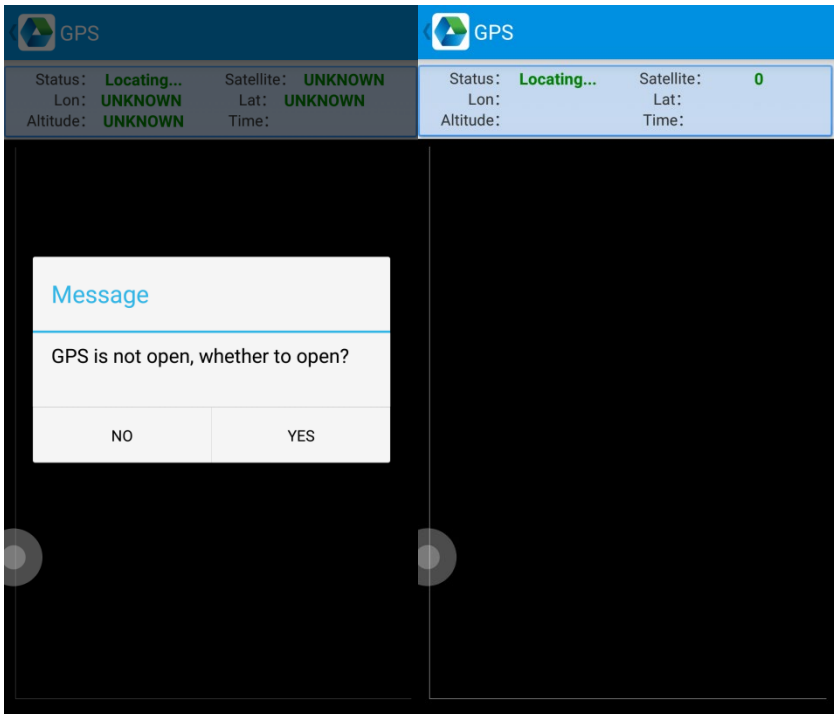
6.2 Bluetooth

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.



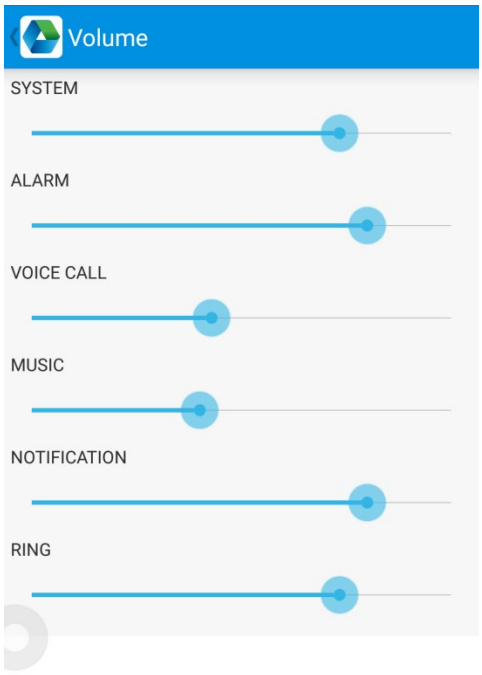
6.3 GPS

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



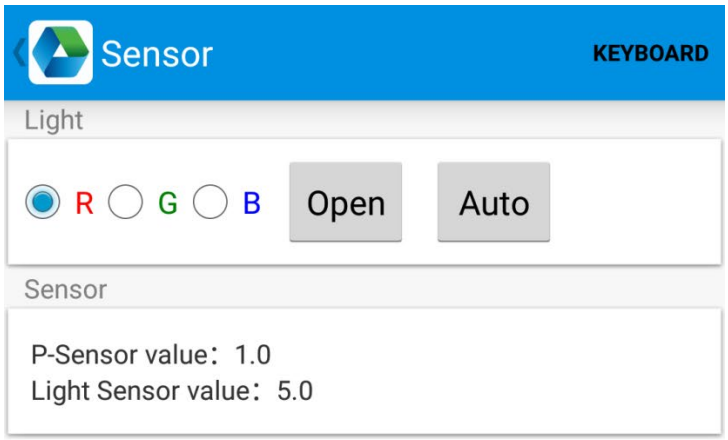
6.4 Volume setup

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



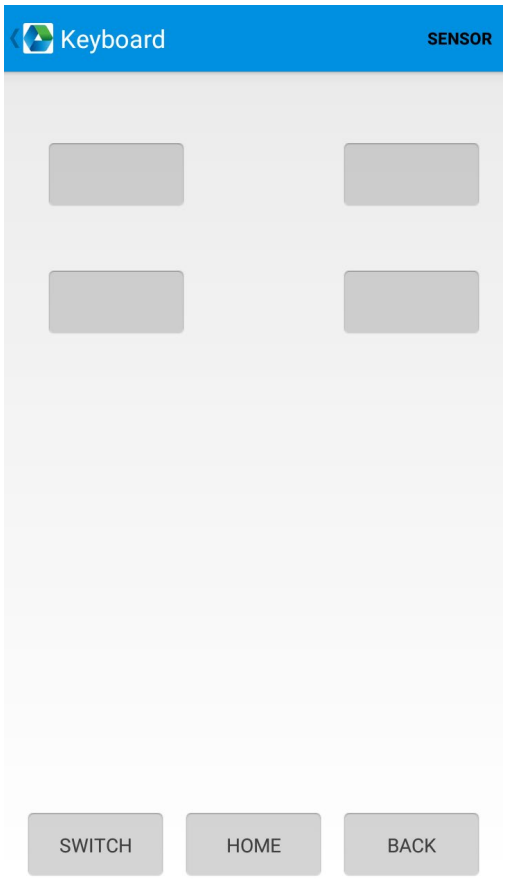
6.5 Sensor

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.



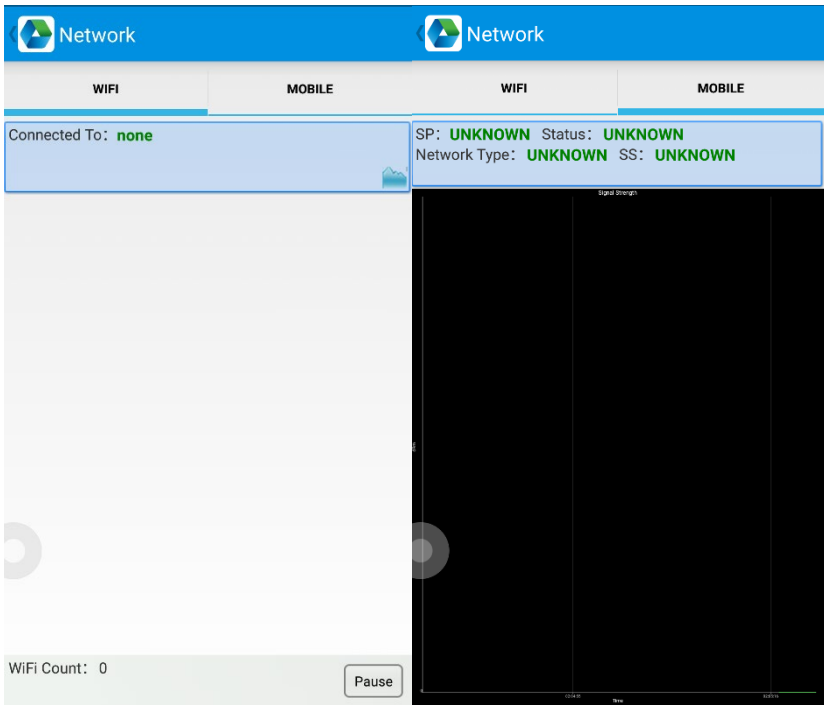
6.7 OTG Function

MC66 Cradle OTG Connection:

1. Install MC66 rubber boot.
2. Pay attention to installing direction of RB-MC66-RRHP Type C & Pogo Pin.
3. Install device onto cradle and select OTG mode on pop-up menu to switch on OTG.

6.8 Network

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

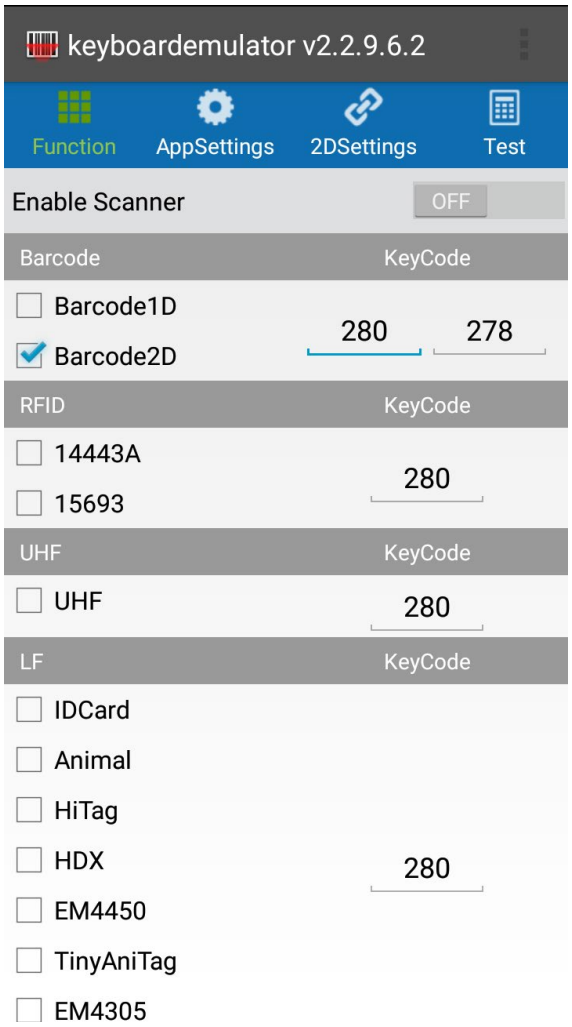


6.8 Keyboard emulator

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.



Chapter 7 Device characteristic

Physical characteristics

Size	160x76x15.5mm / 6.3*2.99*0.61in
Weight	＜287g/10.12oz(with battery)
Display	5.5-inch display, IPS LTPS 1440*720
Touch panel	Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported
Battery	4420mAh(type)/4300mAh(min) removable main battery, 5200 mAh optional pistol battery, support QC3.0 and RTC Standby: up to 490 hours (only main battery ; WiFi: up to 470h; 4G: up to 440h) Continuous use: over 12 hours (depending on user environment) Charging time: 2.5hours (charge device by standard adaptor and USB cable)
Expansion	Supports up to 128 GB Micro SD card
Expansion Slot	2 slot for SIM card, 1 slot for TF card
Audio	2 Microphones, 1 for noise reduction
Camera	13MP autofocus camera with flashlight

Performance

CPU	Qualcomm 2.0 GHz Octa-core
OS	Android 11
RAM	3GB
Communication Interface	USB3.1, Type-C, OTG
ROM	32GB
Max. expansion	Supports up to 128 GB Micro SD card

User environment

Operating temp.	-20℃ to 50℃
Storage Temp.	-40℃ to 70℃
Humidity	5%RH - 95%RH non condensing
Sealing	IP65, IEC sealing standard
Drop specification	Multiple 1.8m/5.91ft drops (at least 20 times) to the concrete across the operating temperature range Multiple 2.4m/7.87ft drops (at least 20 times) to the concrete after installed rubber bumper

Communication

WAN	EU/CH: 2G: 900/1800MHz 3G: CDMA EVDO: BC0 WCDMA: 900/2100MHz TD-SCDMA: A/F(B34/B39) 4G: B1, B3, B5, B7, B8, B20, B28A, B28B, B38, B39, B40, B41 US: 2G: 850/1900MHz 3G: 850/1900MHz, B4 CDMA: BC0 4G: B2/B4/B5/B7/B12/B13/B17/B38
Vo-LTE	Support Vo-LTE HD video voice call
WLAN	Support 802.11 a/b/g/n/ac/d/e/h/i/k/r/v,2.4G/5G dual-band, IPV4,IPV6, 5G PA;
Bluetooth	Bluetooth 5.1,BR+EDR+LE

Data collection

Barcode scanning	SE4710
RFID	NFC 13.56Mhz

Developing Environment

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