SHENZHEN CHAINWAY INFORMATION TECHNOLOGY CO.,LTD

Handheld RFID Reader

C5 User Manual

PSAM

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Statement

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Chapter 1 Product Intro

1.1 Intro

Chainway C5 is an upgraded all-in-one high-performance UHF RFID Reader. It has Integrated a self-developed Impinj E710/R2000 based UHF module which offers industry-leading UHF performance. C5 adopts an integrated design, provides more stable UHF performance, and delivers higher durability. The superior system configuration of the mobile computer features the Android 11 platform, Qualcomm octa-core processor, optional mass internal memory and a large capacity removable battery. C5 also supports 2D scanning, NFC, fingerprint recognition and other functions, which enables it to be widely used in scenarios like banking, public security, warehousing, retail, logistics and other industries.

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-C7X-5V2A-CN/EU/UK/US, 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℃ to 50℃.

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

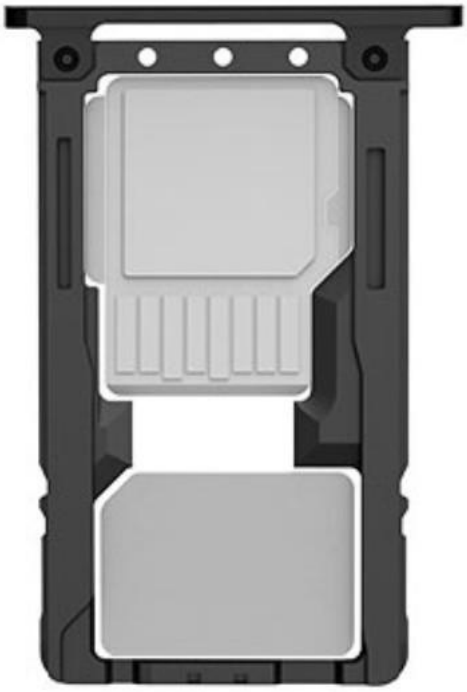
2.1 Appearance

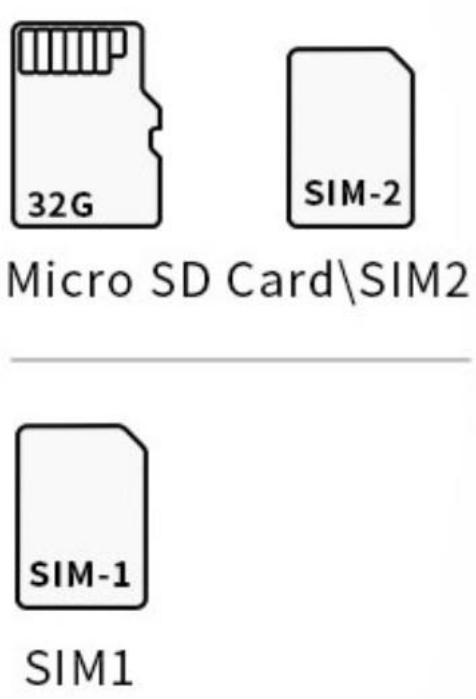
Buttons instruction

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.
	4. Volume +/-	Volume button located on right side.
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

C5 has 5 side buttons, 4 main buttons and trigger on pistol, UHF scanning area, 2D scanning module, HD camera and flashlight locate on the top.

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

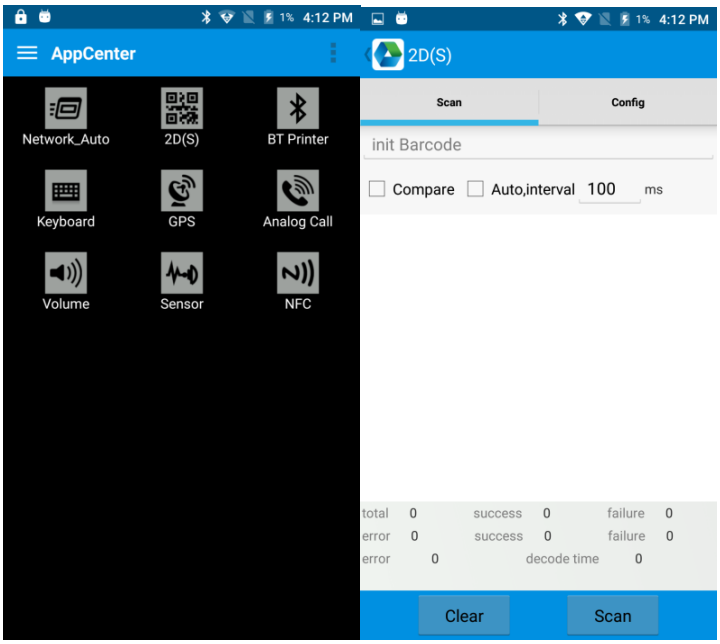
1. Click contacts to open contacts list.
2. Click icon to add new contacts.
3. Click icon to import/export contacts.

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.

1D barcode:

Correct

Incorrect

2D code:

Correct

Incorrect

Max. radiant power: 0.6mW

Wave length: 655nM

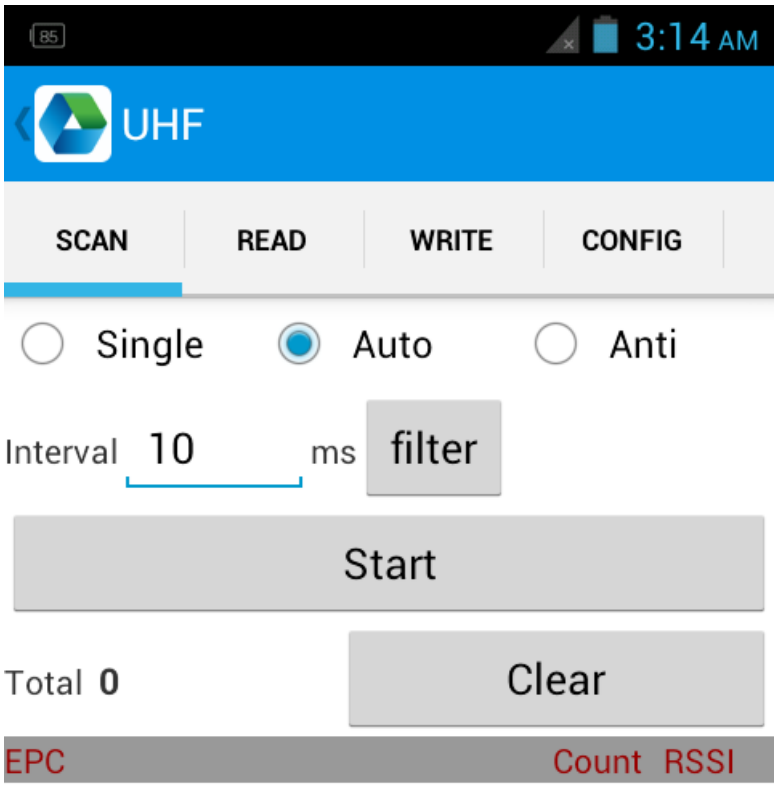
IEC 60825-1 (Ed.2.0).

21CFR 1040.10 and 1040.11 standard.

Chapter 5 RFID reader

5.1 UHF

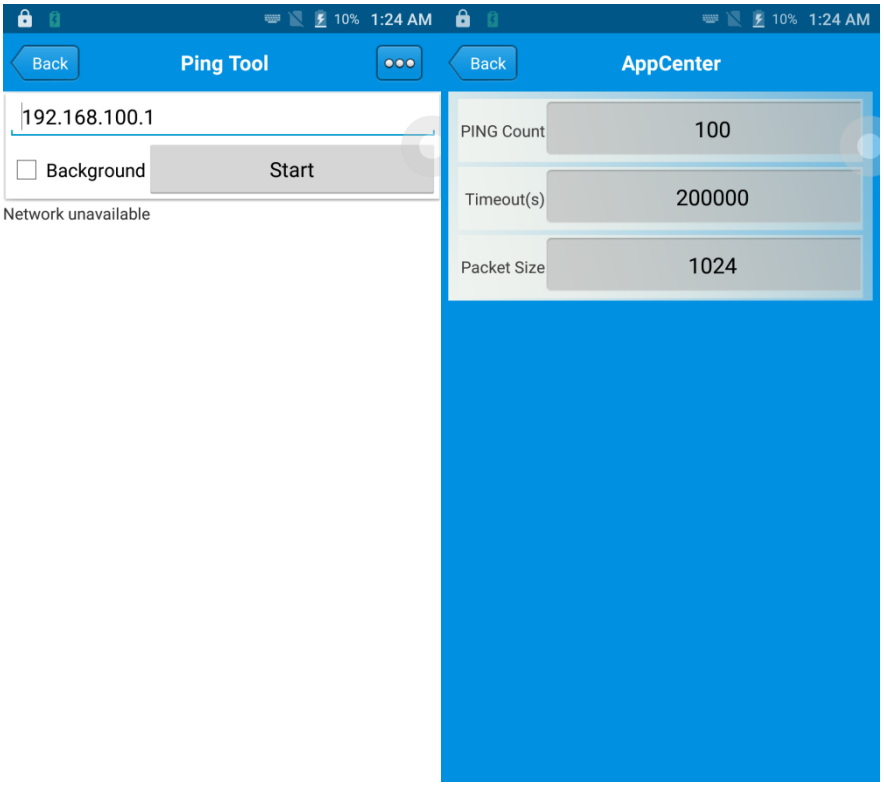
Click App Center, open “UHF” to read and write, kill and lock UHF tag.



Chapter 6 Other functions

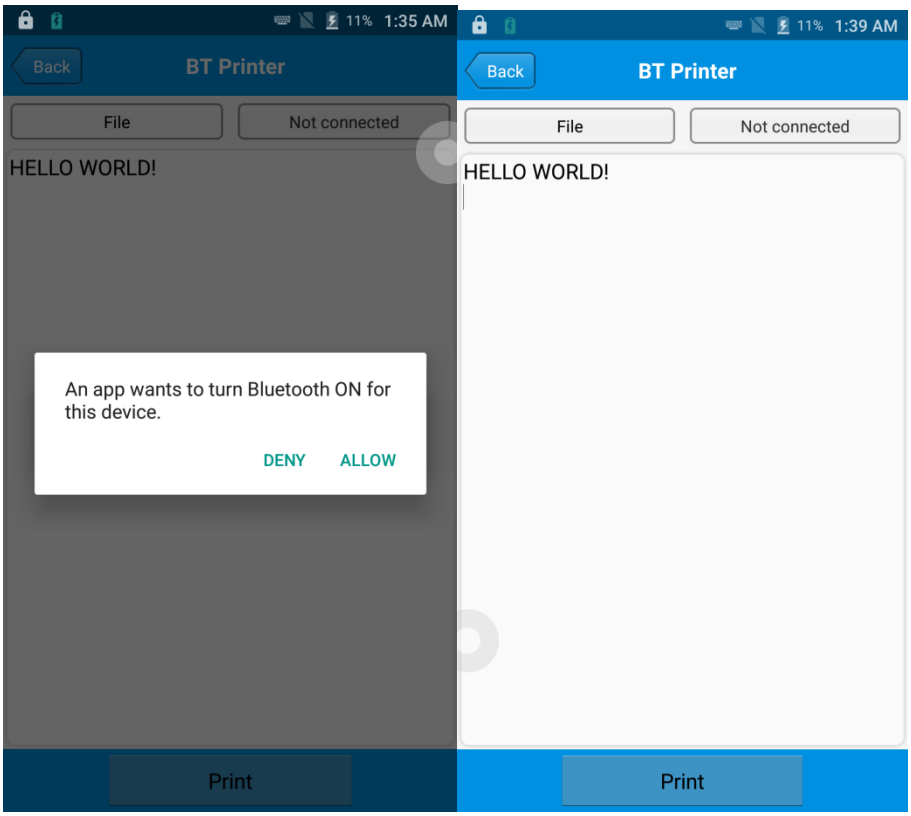
6.1 PING tool

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



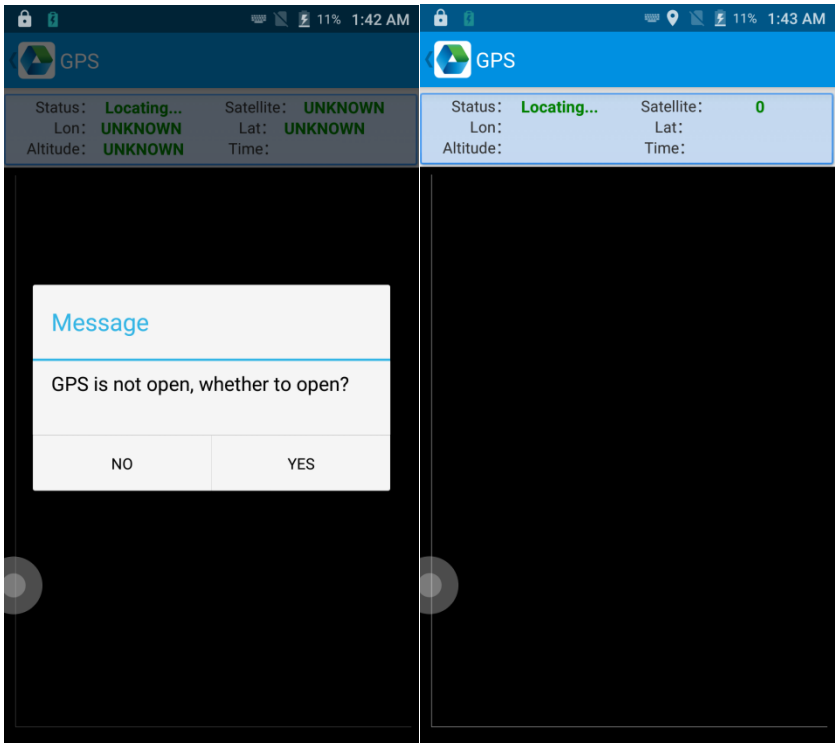
6.2 Bluetooth

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.



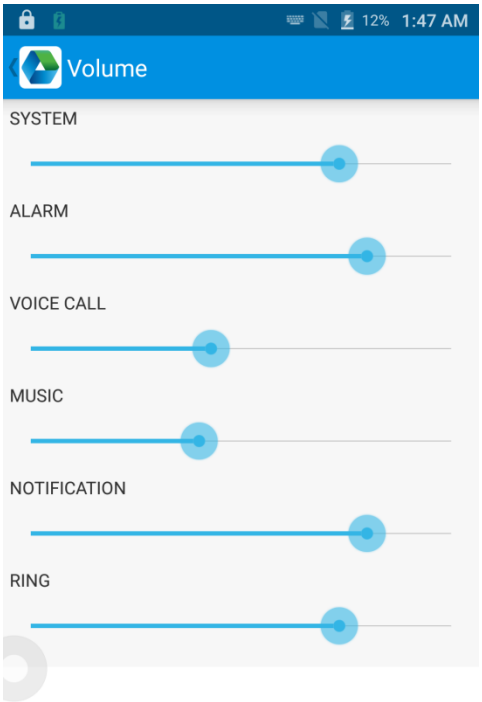
6.3 GPS

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



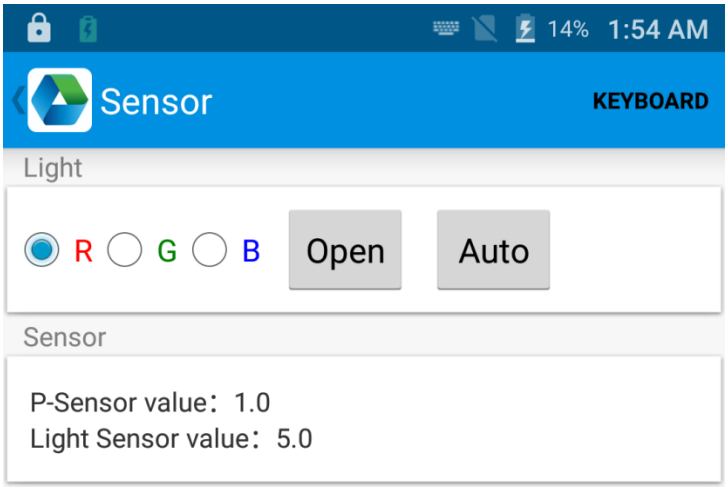
6.4 Volume setup

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



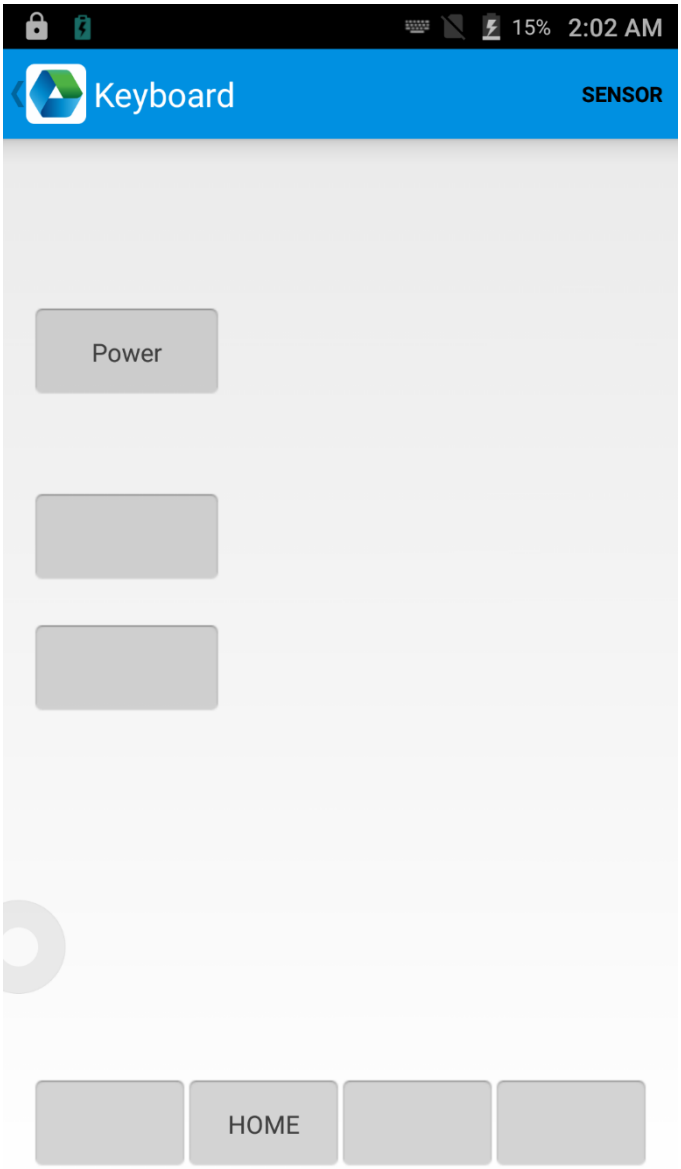
6.5 Sensor

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



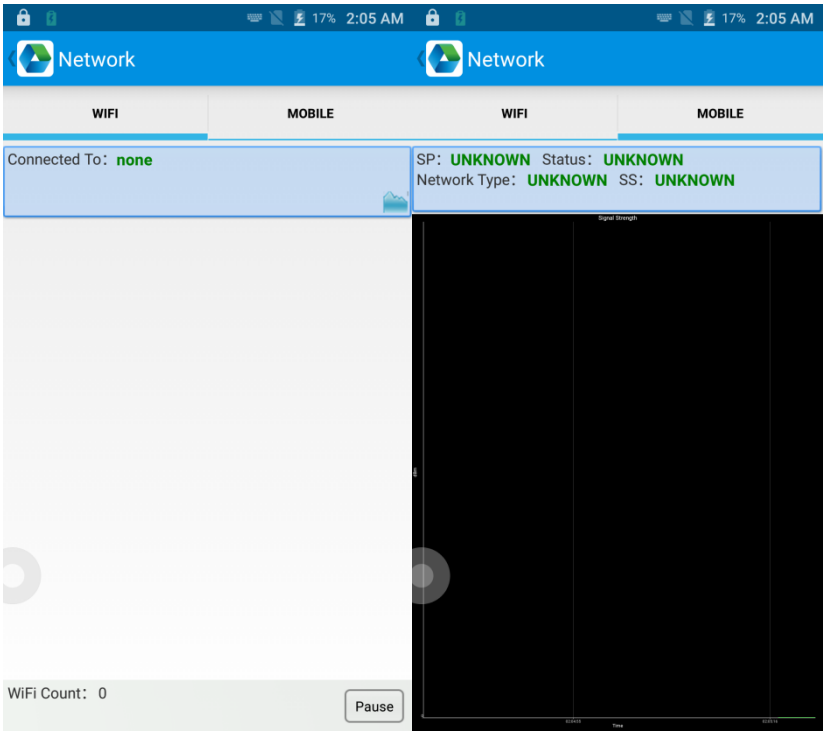
6.6 Keyboard

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.



Chapter 7 Device characteristic

Physical characteristics

Size	177.0 x 80.2 x 14.8mm / 6.97 x 3.15 x 0.58in
Weight	598g / 21.09oz. (device with battery)
Display	5-inch (Fingerprint), 1280 x 720 / 6-inch, 2400 x 1080
Touch panel	Multi-touch panel, gloves and wet hands supported
Battery	6700mAh / 134000mAh removable pistol battery Built in 100mAh backup battery, supporting battery hot swap
Card slot	2 slots for PSAM card; 1 slot for Nano SIM card, 1 slot for Nano SIM or TF card
Audio	2 microphones, 1 for noise cancellation; 1 speaker; 1 receiver
Camera	Front camera 5MP Rear camera Rear 13MP Autofocus with flash

Performance

CPU	Cortex-A53 Octa-core, 2.3GHz
OS	Android 11
RAM	3GB + 32GB / 4GB +64GB (Optional) / 6GB + 128GB (Optional)
Communication Interface	USB2.0,Type-C,OTG
ROM	32GB/64GB/128GB
Max.expansion	Supports up to 128 GB Micro SD card

User environment

Operating temp.	-20 °C to 50 °C / 4 °F to 122 °F
Storage Temp.	-40 °C to 70 °C / -40 °F to 158 °F
Humidity	5%RH - 95%RH non condensing
Sealing	IP65, IEC sealing standard
Drop specification	Multiple 1.5m / 5.9ft. drops (at least 28 times) to the concrete across the operating temperature range

Communication

WAN	2G: GSM (B2 / B3 / B5 / B8) 3G: WCDMA (B1 / B2 / B4 / B5 / B8) CDMA2000 ECDO: BC0 4G: B1 / B2 / B3 / B4 / B5 / B7 / B8 /
WLAN	802.11 a / b / g / n / ac, 2.4G / 5G dual-band
WPAN	Bluetooth 5.0

Data collection

Barcode scanning	Zebra: SE4710; Honeywell: N6603; CM60; CB300
RFID	EPCglobal Gen 2 (ISO18000-6C) ISO14443A / B, ISO15693, NFC-IP1, NFC-IP2 etc

Developing Environment

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

Appendix

Restrictions:

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

This device is restricted to indoor use where operated in the European Community using frequency in 5150MHz-5350MHz to reduce the potential for interference.

Simplified EU declaration of conformity

Hereby, ShenZhenChainway Information Technology Co., Ltd declares that the radio equipment type C5 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:www.chainway.net

Signature:

SAR Information

The SAR limit of Europe is 2.0 W/kg. Device types C5has also been tested against this SAR limit. The highest SAR value reported under this standard during product certification for use at the ear is 0.219W/kg and when properly worn on the body is 1.216 W/kg. This device was tested for typical body-worn operations with the back of the handset 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 handset. 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.