



Focus on RFID core technology

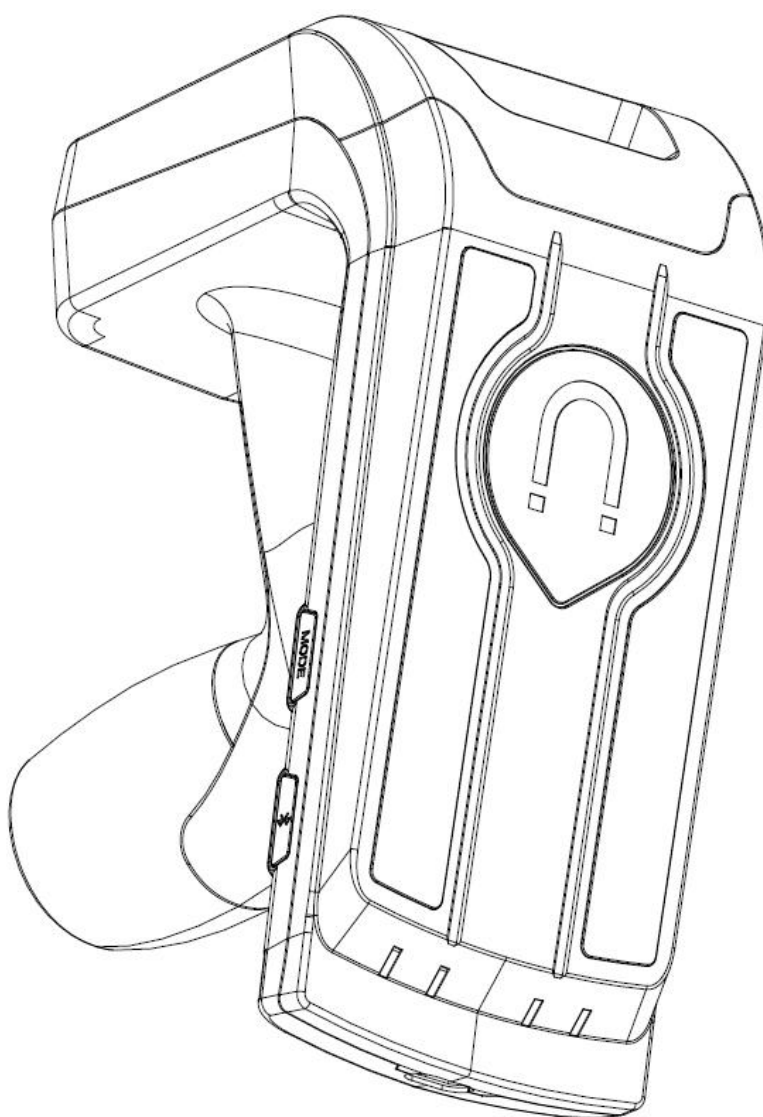
HL7202K8 Handheld **Terminal User manual**

Shenzhen Hopeland Technologies co. Ltd.



Welcome to be a customer of Hopeland.

Thank you for choosing the handheld
terminal HL7202K8



Use this user manual

Thank you for choosing Hopeland technology multifunctional handheld terminal. Based on the high technology and high standard of Hopeland technology, this equipment provides you with high quality experience. This user manual is convenient for you to understand the functional features and usage of this product.

Please read the instructions first

- Before use, please read the safety precautions and user manual carefully to ensure safety and normal use.
- The description in the user manual is based on default parameter Settings.
- The images and screen shots used in the manual may not look like the actual product.
- The manual may be slightly different from the product, and the latest version is available at www.hopelandrfid.com
- Available features and additional services may vary from product, software, or service provider.
- The format and information are based on Google's Android operating system.
- Applications and their functions may vary by country, region, or hardware specification.
- The sound source, wallpaper and images provided in the terminal are licensed for limited use between Hopeland technology and its owners. Extracting and using these materials for commercial or other purposes would violate copyright law. Hopeland shall not be liable for such copyright infringement by users.
- There may be charges for sending and receiving information, uploading and downloading, automatic synchronization or location-based services. To avoid extra costs, choose the right mode of work.
- Keep the user manual for future reference.

Please note the following tips before use:

Warning - a condition that may harm yourself or others.

Note - possible damage to this or other equipment.

Tips - comments, use tips, or other information.

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1 Specification

Product parameters

Functional Configurations		Major parameters
Basic functions	MCU	ATSAM4S4BA-MU
	Keypad	Trigger Key, Power key, Work mode switch key, reset key
	Indicator LED	Charging indicator, status indicator, Work mode indicator
		V2.1+EDR Connection range of 10m and above Support communication
	Audio	Support buzzer
Special functions	Barcode Engine	The professional scanning engine module supports one-dimensional barcode and two-dimensional code scanning 2D: PDF417, QR Code, Hanxin . DataMatrix(ECC200, ECC000, 050; 080, 100, 140) etc. 1D: Code 128, EAN-13, EAN-8, Code 39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ITF-6, ITF-14, ISBN, Code 93, UCC/EAN-128, GS1 Databar, Matrix 2 of 5, Code 11, Industrial 2 of 5, Standard 2 of 5, Plessey, MSI-Plessey etc.
		Air Protocols :ISO/IEC18000-6B ,6C/ EPC Global C1Gen2 Work Mode: Fixed/hop frequency optional Support RSSI Output Power: 0dBm-24dBm adjustable
Physical interface	USB Type C	Support device charging function
Software	SDK	Provide secondary development documentation for Android devices
Physical Characteristics	Power Consumption	Standby time is greater than 72 hours and continuous working time is greater than 8 hours
	Temp.	Operating Temp.: -20°C ~ +70°C Storage Temp.: -25°C ~ +75°C
	Humidity	5%-95% (non condensing)
	EMC	Comply with relevant national standards
	Dust & Water Proof	IP53
	Drop Spec.	1.5M Drop to concrete
Accessories	Battery	Non-replaceable and rechargeable battery, 5000mAh/3.7V Work continuously for more than 8 hours. Support USB charging. Meet GB/ T18287-2000 standard
	Power Adapter	General purpose power adapter 5V, standard USB interface Charging time is less than 4 hours
	communication cable	USB communication cable×1

2 Schematic diagram

2.1 Structure appearance

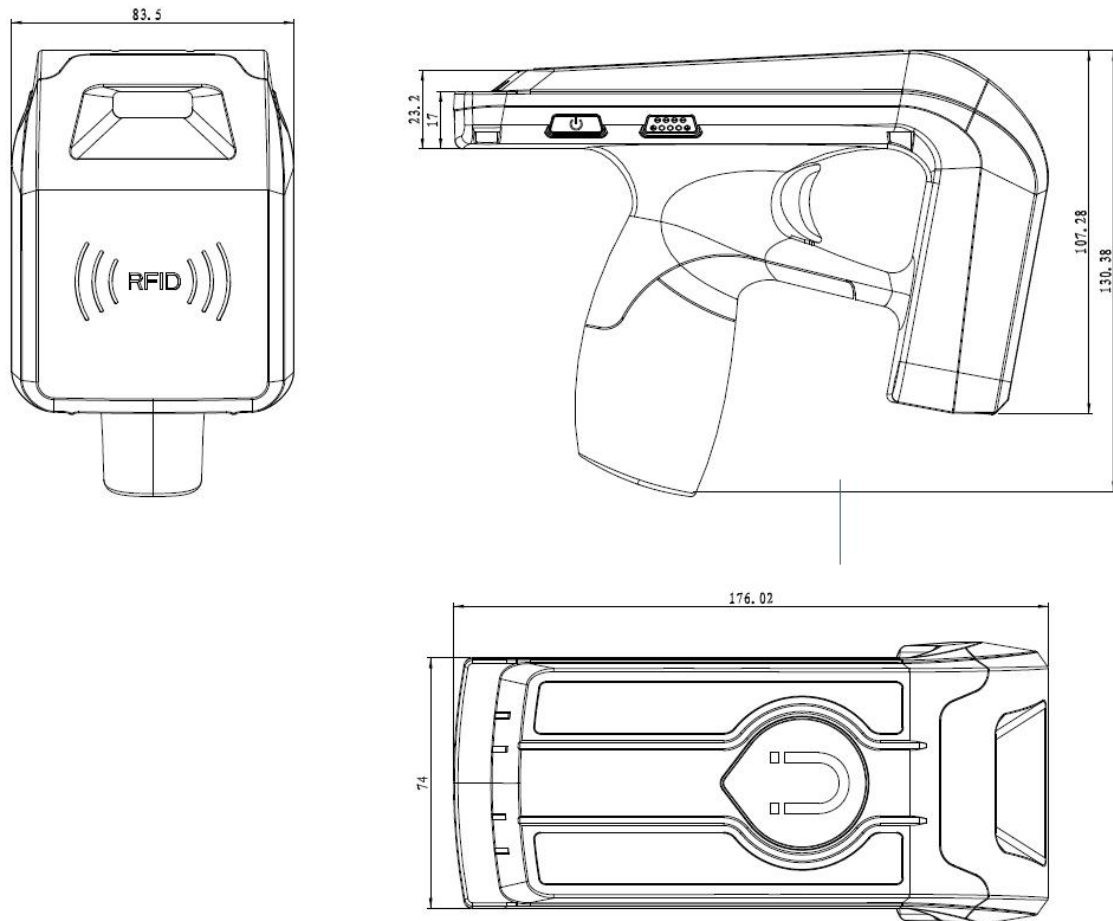


Figure 2-1 HL7202K8 Structure appearance

HL7202K8 Dimensions

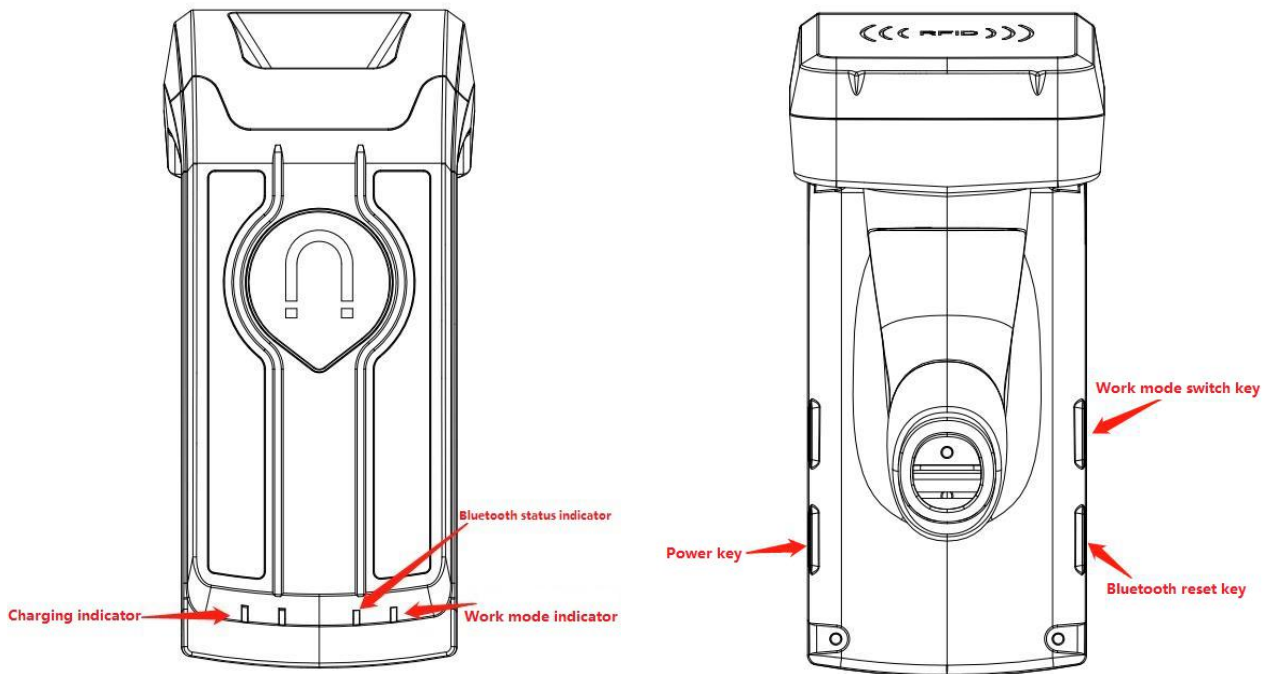
176mm×130.4mm×83.5mm (without accessories)

2.2 Weight

About 400g (include battery)

3 Instructions

Function diagram



Introductions

Charging indicator	Display red when charging, full display green
status indicator	Flashing slowly: pairing Constant: connected Flashing fast: battery low
Work Mode indicator	Off: UHF mode On: Scanning mode In different working modes, press the same trigger button will perform corresponding functions
Power button	Press and hold more than 2 seconds to turn on or turn off the device
Work mode switch key	Switch the working mode of the handheld (uhf mode and scanning mode), and the working mode indicator will indicate the current working mode
reset key	will automatically reset when pressed

This handheld device cannot be used alone, it must be used with android phone.

When using, connect the mobile phone to the handheld by , and control the handheld device through the app.

4 Demo Software instructions

4.1 Android installation package (apk)

At present, handheld demo software version is V1.5. Demo software runs on Android 5.0 system, can be installed using CL7202G7 or CL7202G9.

名称	修改日期	类型	大小
bluetoothpdademo_v1.5_20190403.apk	2019-4-3 17:22	APK 文件	2,845 KB

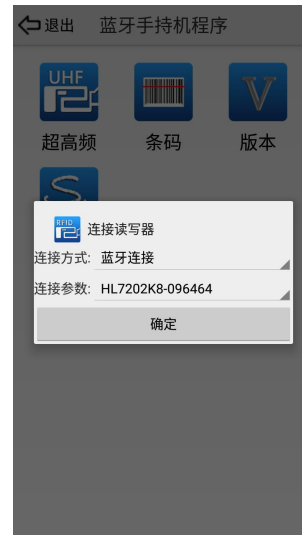
4.2 connection

Take HL7202K8 -096464 as an example:

- Open the software and check whether HL7202K8 -096464 exists in the parameter list of connection. If it does not exist, turn on the android phone's function, click the "search" button and the pairing interface will pop up. As shown in the figure below



- Click HL7202K8 -096464 to enter the pairing connection. Return after the link is successfully paired. "HL7202K8 -096464" can be found in the list of connection parameters. Select it and click "ok".



- Once the link is successfully connected, it will prompt "open connection successfully" and jump to UHF interface by default. At this point, you can click "version" to check the baseband version of UHF and further confirm that the connection is successful.

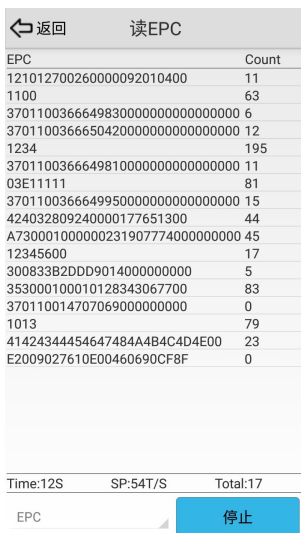


4.3 UHF

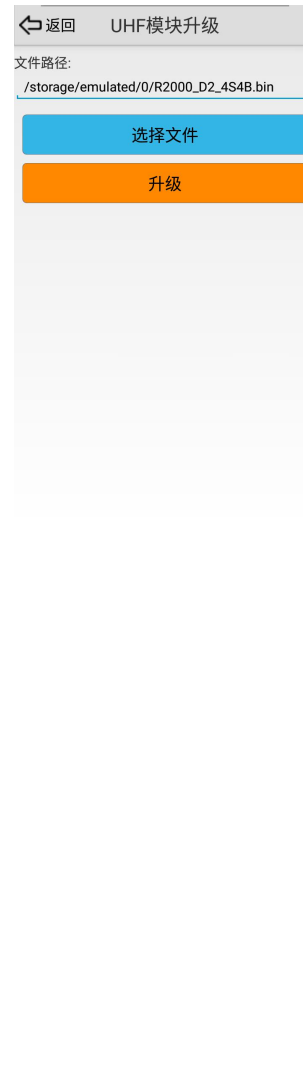
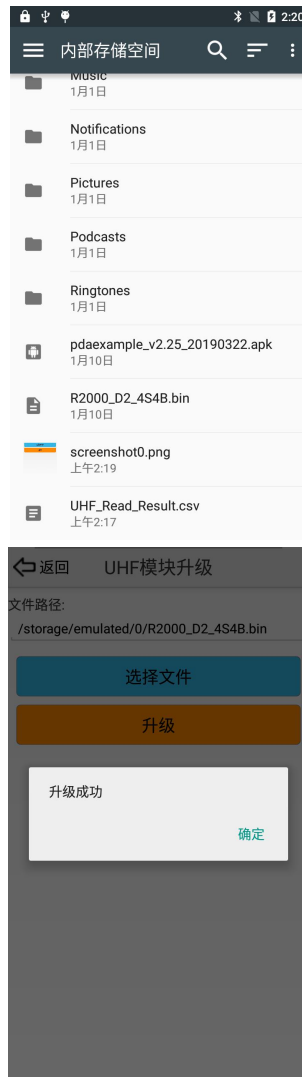
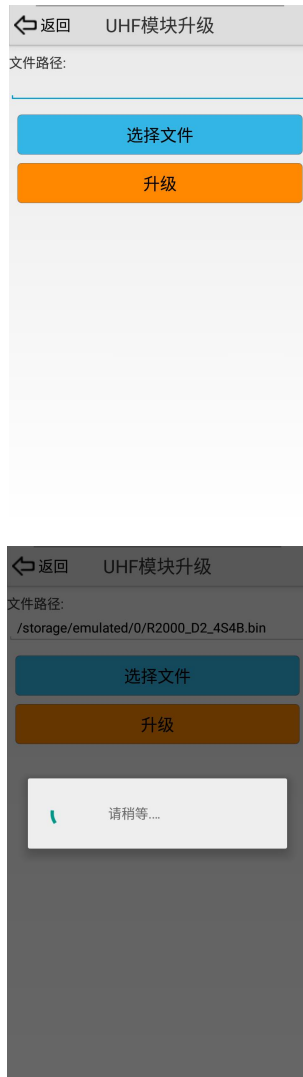
- Click the UHF icon to enter the UHF test interface



● Interfaces of Read tag, write tag, lock tag, configuration



● Baseband upgrade of UHF module



When upgrading, you need to hold down the power key

- Query UHF version



4.4 Scan

Click the "barcode" icon to enter the scanning test interface. One-dimensional code and two-dimensional code can be scanned respectively, as shown in the figure below:



4.5 Trigger function setting

The trigger button of handheld (K8) has the following functions: Press the trigger button to start UHF tag reading test, stop reading immediately after releasing the trigger button. Press and release the trigger button once to do barcode test. The UHF operating instructions triggered by the trigger button (that is, how to read and what areas of data to read) is set through the UHF configuration interface. To read tags or scan barcodes, switch through MODE key of handheld (K8), and use status indicator to distinguish and identify.

Data obtained by trigger button of handheld (K8) can only be displayed by reading tag interface or barcode interface of demo. Other interfaces do not display the obtained data.

The following is an example of setting trigger button to read user data:

- Open the uhf configuration interface, select the option of "custom read" in the drop-down box of trigger execution instruction, and enter the instruction of reading user data in the pop-up box, as shown in the figure below.



- After confirm, click the "Set" button, and it will prompt that the Setting is successful. At this point, the trigger execution instruction is set to read user data. As shown in the figure below:



- Open the interface of UHF tag reading, press the trigger button at this time, the handheld starts to read tags, and the interface of tag reading will display the tag data.

← 返回	读EPC
UserData	Count
000000000000000000000000	6
000000000000000000000000	11
111111111110000000000000	0
000000000000000000000000	128
000000000000000000000000	4
000000000000000000000000	28
000000000000000000000000	6
000000000000000000000000	1
000000000000000000000000	6
000000000000000000000000	58
000000000000000000000000	5
000000000000000000000000	35
A6602222F3F10000000000000	19
000000000000000000000000	1
000000000000000000000000	17
000000000000000000000000	2

Time:17S SP:45T/S Total:16

UserData 开始

← 返回	读EPC
EPC	Count
1234	49
12345678	8
424032809240000177651300	9
03E00059	1
1100	0
1234	81
353000100010128343067700	24
1013	14
370110036664995000000000000000	0
E2009027610E00460690CF8F	0
41424344454647484A4B4C4D4E00	24

Time:16S SP:14T/S Total:11

EPC 开始

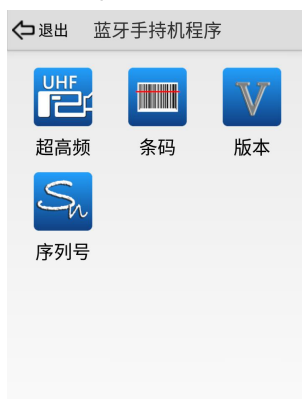
← 返回	读EPC
TID	Count
E20034120141F0000A20A5BA	29
E2003412013A17000269260B	20
E2003412012FF1000C142E80	1
E28011052000435380F8002D	322
E280110520005491722A0899	56
E2003412013AF0000A20CD63	55
E2801105200051556FD2002F	4
E2003412012BF00005A9CBDE	8
E280110520003089644C0157	113
E20034120133F000059A683C	59
E2801160200075952B0308F5	3
E2801105200050947010002F	11
E2003412013AF00005A9CF8E	26
E2801105200054D56FE7002F	18
E280110520005B156E51002F	0
E20034120139F00005A9CF8F	14
E20034120130F0000A1D5ECA	8
E20034120132F00005A9CF93	30

Time:60S SP:44T/S Total:18

TID 开始

4.6 Information Query

In order to query the current handheld serial number, software version and battery information, the Demo software provides a query interface, as shown in the figure below:



5 Packing accessories and transportation and storage

5.1 Package

To facilitate future storage and transportation, the packing boxes and packing materials should be properly stored after opening.

In the packing box, besides the handheld, it also includes the accessories for the use of the products. Please confirm that the products and accessories are complete according to the packing list of the products. If there is any nonconformity or damage, please contact the after-sales service immediately.

The specific annex list is shown in table 5-1:

Table 5-1 accessories list

No.	ITEM	QTY	UNIT	REMARK
1	Handheld terminal	1	pcs	Included
2	Charger	1	pcs	Included
3	USB cable	1	pcs	Included
4	Warranty card	1	pcs	Included
5	Certificate of approval	1	pcs	Included
6	Pin	1	pcs	Included

5.2 Storage environment

HL7202K8 handheld terminal should be stored in below conditions:

☆ Environment temperature: -20°C ~ +70°C

☆ Relative humidity: 5% RH ~ 95%RH

6 Common failure analysis and solution

Can't find another device

Make sure the wireless function is enabled.

Make sure that the device you want to connect to has wireless function enabled (if necessary).

Make sure the distance between the device and another device is within range.

Safety precautions

To protect you and others from harm or protect your terminal from damage, please read all the information below before using your terminal.

Warning

Avoid electric shock, fire and explosion

Do not use damaged power cord plugs or loose power outlets

Do not touch the power cord with wet hands or unplug the charger by pulling the cord

Do not bend or damage the power cord

Please use the special charger

Please avoid using the terminal in thunderstorm weather

- Do not throw the battery or terminal into the fire.
- Do not place the battery or terminal inside or attached to a heating device, such as a microwave oven, oven or radiator. Overheating can cause a battery to explode.
- Do not squeeze or puncture the battery. Do not subject the battery to external high pressure, otherwise it may lead to internal short circuit and overheating.

Protect the terminal, battery and charger from damage

- Avoid exposing terminals and batteries to extremely cold or extremely hot temperatures.
- Extreme temperatures can deform terminals, reduce charging capacity and shorten terminal and battery life.
- Prevent the battery from contacting metal objects, otherwise it may make the positive and negative connection of the battery, causing temporary or permanent

damage to the battery.

Note: Please comply with all safety warnings and regulations when using terminals in restricted areas

Close the terminal where it is not allowed

Comply with all restrictions on the use of terminals in a particular area.

Do not use terminals near other electronic devices

Most electronic devices use radio frequency signals, and your terminal may interfere with other electronic devices.

Do not use terminals near hospitals or medical devices that may be interfered with by radio frequency

If you personally use any medical equipment, please contact the equipment manufacturer to ensure that your terminal can be used safely in radio frequency.

Close the terminal in the event of a possible explosion

- Always operate according to regulations, instructions and signs in the case of possible explosion.
- Do not use terminals at gas stations (maintenance stations) or close to flammable, chemical agents or explosion areas.
- Do not store or carry flammable liquid, gas or explosive articles in a box with terminal, terminal parts or accessories

Properly keep and use the terminal

Keep the terminal dry

- Moisture and various liquids may damage terminal parts or electrical wiring.
- When the terminal is wet, remove the battery. Dry the terminal with a towel.

Ensure battery and chargers reach maximum service life

- The battery should not be charged continuously for more than a week.

Overcharging may shorten the battery life.

- The battery will not discharge gradually after long-term placement and must be recharged before use.
- Please disconnect the power when the charger is idle.

7 After-sale service

Letter to Customers

Since our aim is to continuously improve our products for better user experience, we may modify the product characteristics, composition and design of circuits without given notifications. Thus the real product may be not in accordance with this manual. Generally, we will provide timely amendments to this manual. If it' s not provided timely, please consult our service department.

Shenzhen Hopeland Technologies Co., Ltd.

Tell: +86-755 36901035

Website: <http://www.hopelandrfid.com>

Address: Clou Buliding, Baoshen Road, Hi-tech Park North, Nanshan District, 518057, Shenzhen, China

FCC warning:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

IC warning:

- English:

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

- French:

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with IC RF radiation exposure limits set forth for an uncontrolled environment.

« ce matériel est conforme aux limites d'exposition aux rayonnements rf de ic énoncés dans un autre environnement.