Atid
All that Identification

AT911N

Guide for Customer

ATID Co., Ltd

Disclaimer

ATID Co., Ltd.
#1205, Byuksan/GyungIn Digital Valley II, #481-10,
Gasan-Dong, Gumchon-Gu, Seoul, Korea
Tel: +82-2-544-1436
Fax: +82-2-2113-0040
www.atid1.com

Contents

Page Contents

Before using manual for AT911N

There are some differences between user guide and actual function of device.
User guide can be adjusted by ATID CO.LTD without consent of user discretionally.

User guide is written for users who want to use and maintain the AT911N. Please read and understand these instruction prior to operating this unit.

Safety information

Your safety is extremely important. Read and follow all warnings and cautions in this document before you handle and operate ATID equipment. If you do not follow the safety warnings and cautions, you might be seriously injured, and the equipment and data also might be damaged.

- WARNIING

  A warning requires you must pay attention to the operating procedure practice, condition, and statement strictly, or might be injured seriously.

- CAUTION

  A caution alerts you that you must be observe strictly when you operating procedure, practicing, configuring, for preventing from damage and destruction of equipment, and loss of data.

- NOTICE

  A notice provide you the information which you must needs while you using AT911N.

Caution when using AT911N

Please aware of the manual contents in advance before you handle and operate your AT911N and other ATID Products.

How to use the battery correctly

- In case that you dropped the main body or battery in water, please do not put into the stove or heater for drying. Just keep it in natural drying or contact purchase place.
- Please note that the battery terminal doesn't have to be contacted to metallic object.
- If you do not use the battery for a long time, please keep it at room temperature after charging.
- Operating time of battery can be shorter than usual in accordance with loss of battery and use time. In this case, please contact us.
- You have to use provided adaptor when charging the device.
- Turn off the device properly then detach or replace the battery.

Caution when using AT911N

- User careless or products repair would damage the stored data. Manufacturer is not responsible for this damage, so please do back-up the important data separately.
- If you have a problem on product, do not try to repair or disassemble it by yourself, please contact our customer service center.
- Do not use your product at the specific places such as hospital, plane and so on where electromagnetic wave or the risk may occur.
- Please note that using the device in environment of high temperature and humidity for long hours can make a malfunction of device.
- In case of that noise, smoke and odor occur at the device while using product, please disconnect the charger with device and off the power immediately, then please contact our customer service center.
- If you have any other questions on use of device, please contact our customer service center.

Product Composition

AT911N is based upon Android 4.2. As the state of the art product, it is equipped with barcode scanner, RFID Tag reader, MODEM, Camera and so on and it can be applied to Industry, Enterprise, Logistics and so on, can be used extensively in many fields due to this kind of various functions

Product composition

Open the packing box and confirm the items as below.

* Please contact our customer service in defect of product composition and need to be changed.

Name of each part

Function of each part

NAME	FUNCTION
1D/2D Scanner (option)	Please be careful not to get the damage or the foreign substances at the Window emitted the laser beam ◆Warning Do not look at the laser beam directly.
UHF Connecting port	It is connector to equip the UHF 900MHz tag reader module.
Internal NFC (option)	It is where Internal NFC is placed.
Reset button	It is used for hard reset.
Microphone	It is used for telephone conversation.
WLAN LED (option)	It displays whether the wireless WLAN power gets supply.
Battery latch	You can attach and detach by moving it from side to side.
battery	It attaches on body for receiving power.
Scan key	You can scan the barcode or RFID tag by this buttons.
Speaker	It is equipped for playing sound and various sound effects internally.
Sync cable connector	It makes device transmit and receive the data with computer in connection with USB sync cable.
DC Power Port	Please do connect it with provided adapter when charging the device.
Earphone jack	It is used for connecting the earphone with device.
Charger LED	It will be changed with red color in charging state / with green color in full.
Camera flash (option)	It functions in case of using camera.
Camera (option)	It makes image capture and save.
Keypad	It makes device implement the program and input the key value by using input key.
Touch screen	You can implement and terminate the program to touch the screen by using stylus pen.
Hand strap hole	Please attach hand strap and stylus pen with device for your convenience when using it for a long time.

Basic Function

PDA is composed of battery. The battery supplies the power to the system and RAM which can save and conserve the data.

Battery: 3.7V 2,200mAh Lithium-Ion

Attach the battery to the back battery compartment of the PDA.

Push the batter lever inside so that the battery is firmly attached to the PDA.
“Refer to 1.1 Battery attaching and detaching”

Connecting adaptor to the PDA adaptor connecting jack, and check if the “Power LED” is Red, and then charging the power completely until it turns into Green.

> ◆ Note:
> When the desktop screen shows after starting the system, press the <power> button for a couple of seconds can reduce the recharging time.

Attaching and Detaching the battery

▶ Battery detachment

These images as below, shows the back bottom of the PDA.
Slide the battery latch to the right (UNLOCK side), and then lift the battery out of the compartment along both sides of groove.

Battery locking lever

▶ Battery attachment

Put the top part of battery into the upward groove, and then press down the bottom of battery into the battery compartment, slide battery latch to the left (LOCK side) to attach battery firmly

Above gap for attachment/
top of battery

Charging battery

You have to charge the battery via dedicated adapter, which provided from the factory.
"Power LED" is Red while charging or is Green when charged completely. When fully charged, the LED light will be turned off.

▶ Connecting Adapter

1. Plug in the adapter into the 220V socket.
2. Connect the Mini USB jack to the PDA's "Sync cable connector"
3. When "Power LED" shows red light, it means that the device is being charged.

◆ Caution:
You must to charge the device using dedicated adapter that is provided from the manufacturer, or your device might get damaged.

Low power mode (Sleep mode)

When the system is started and shows the main desktop screen or other programs are running, you can enter into the low power mode (sleep mode) by using the power button. If you want to use the device again, press the power button again and turn on the system

▶ Setting low power mode (sleep mode) by Power ON/OFF button

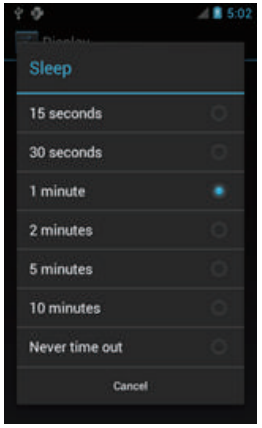
Power off (setting sleep mode):
If the power button is pressed when the device is on, the screen will be turned off and the device will enter the low power mode (sleep mode).

Power on (releasing sleep mode)
If the power button is pressed when the device is off, the screen will be turned on and the device will be turned on.

▶ Automatic Power OFF

If the user doesn't use the device for a set period of time, system enters into the low power mode (sleep mode) automatically. You can change the setting time in control panel and power management as shown below. Using proper time-out setting prevents the system is on a long time without the user and extends hours of battery use.

[Menu] -> [Application] -> [Settings] -> [Display] -> [Sleep mode]



▶ Turn off the device in case of discharging the battery

If the system cannot be used by electric discharge, it will be automatically entered into low-power mode (sleep mode). In this case, user have to charge the battery or connect the adaptor with the adaptor connecting jack of main body, then press the <Power> button to turn on the system since it won`t be turned on despite of pressing the <POWER> button.

▶ Batter replacement

If the batteries are damaged or out of its life, buy new batteries to use.

■ Warning!
Discard the dead batteries to the designated place

Hard reset

If the system is not responding or application program doesn't work, restart the system by using reset function.

System reset is used to reboot and initialize the hardware completely. The installed programs copied files, and registry values will be preserved even after the system reset

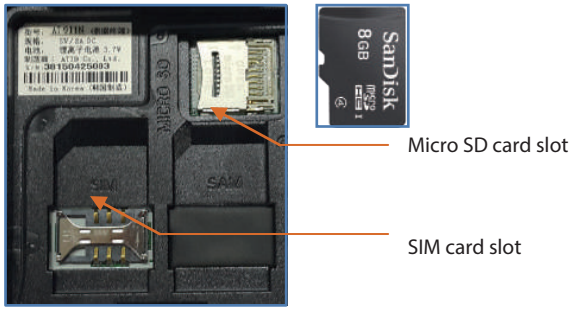
[Process of hard reset]

Push and release the reset button.

[Result of Hard Reset]

- The system will restart.
- The operating system will be loaded again when restarting.

The image below shows the back side of the PDA when the battery is removed.
There are 1 SIM card slot, 1 Micro SD memory card slot as shown below.



Attaching Micro SD card

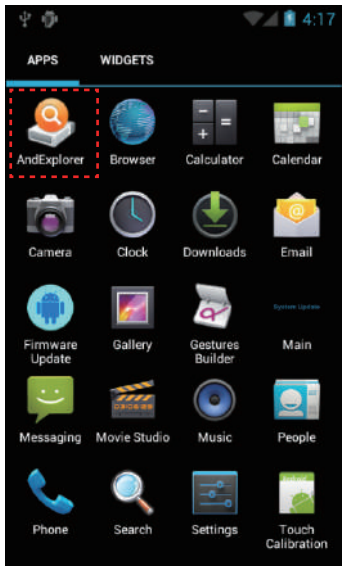
Slide the cover of Micro SD card slot to the right to release the lock.

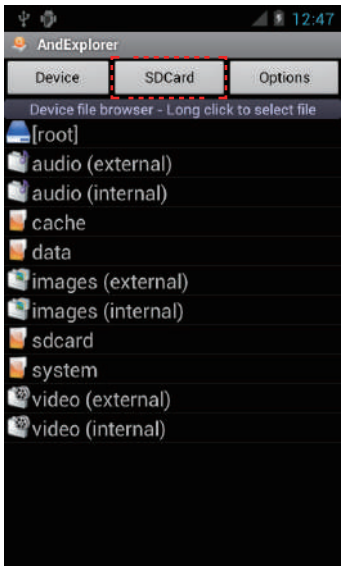
Lift up the top of the slot cover to open

Place the SD memory card into the slot and close the cover

Slide the cover to the left to lock the slot.

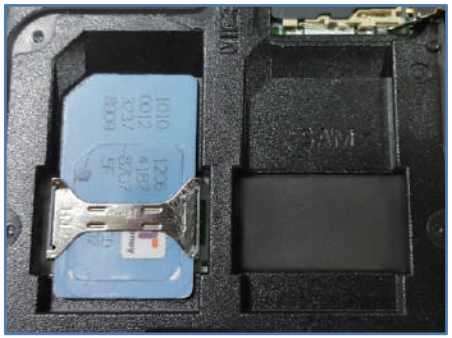
When the SD memory is selected from the File Manager after installing Micro SD memory card, it is shown as below.





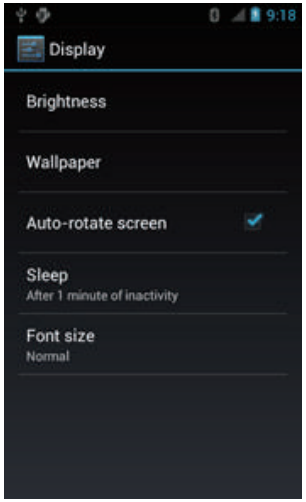
Attaching SIM card

Below is the screenshot after installing the SIM card.
Place and insert the SIM card so that it fits the slot shape.



Set screen brightness

Brightness of the screen affects the power consumption the most, so it is recommended to be set as required by the user.



[Setting the screen brightness]

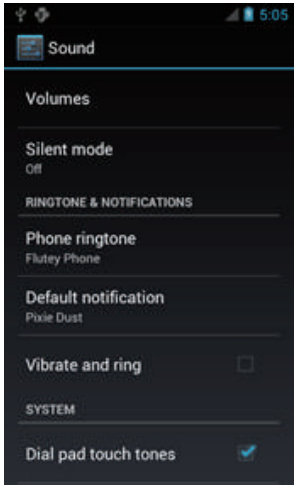
1. [Menu] -> [Settings] -> [Display] -> [Brightness]

Brightness: Adjust the screen brightness.
Wallpaper: Choose the wallpaper.
Auto-rotate screen: Set the Auto-rotate screen function.
Sleep mode: Adjust the time period to enter into the sleep mode
Font size: Adjust the font size of PDA.

Volume setting

The volume is set to 80% when it is dispatched. The user can set the different features of sound settings from [Menu] -> [Settings] -> [Sound].

Volumes and sound setting
[Menu] -> [Settings] -> [Sound]

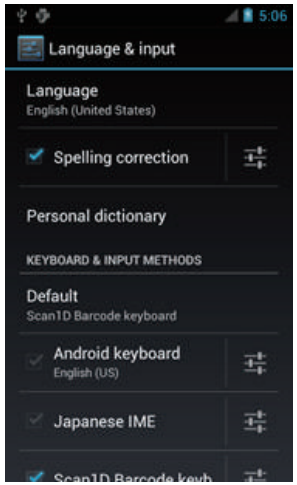


Keypad is an input method editor that inputs numbers or alphabetic characters easily.

Using keypad

To change the current input language, follow the steps below.

[Menu] -> [Settings] -> [Language & input]



Keypad button execution

Describe the Keypad Function.

Keypad	Function description
	Menu key
	Home button.
scan	Contains keyEvent values of KEYCODE_SOFT_RIGHT.
	It is used to move back to previous state.
	It is used for searching.

Optional module

This chapter describes various option modules for use with AT911N.Please refer to description of necessary option modules and use them.

Option module for AT911N

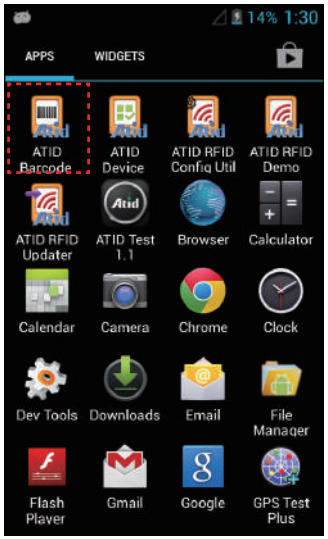
AT911N device provides the options as below according to the purpose of use. The Option Modules below are other specifications outside AT911N, so when buying the device, you should confirm it to buy.

Various optional modules for AT911N

1) Barcode reader
   -. 1D Laser Barcode Scanner
   -. 2D Imager Barcode Scanner
2) Wireless LAN – 802.11 a/b/g/n
3) Bluetooth
4) UHF 900MHz RFID – ISO18000-6C
5) GPS Module
6) Phone
7) Camera

The barcode scanner which can recognize 1D, 2D barcode can be installed on this device.

Using 1D or 2D barcode scanner



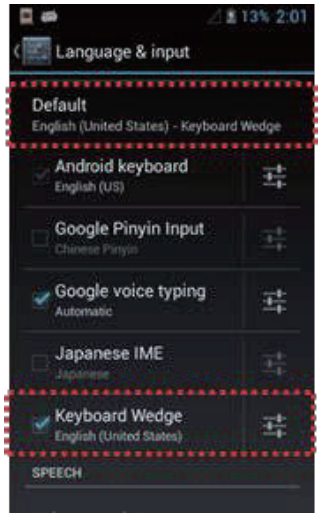
[Menu] -> [Application] -> [ATID Barcode]

ATID Barcode demo

Barcode emulator setting

Can input the read barcode values (Notes, Internet Explorer…) where the cursors are located.
Sets the barcode value input method, scan button, scan sound etc. using Barcode Emulator program.
When opening the Barcode Emulator, if other Barcode programs are being run, please close the program first to run the Barcode Emulator.

[Menu] -> [Application] -> [Settings] -> [Language & input]



1) Emulator execution

Cursor is on the screen and user can use this program when barcode soft keyboard is created.

Read barcode value by using SCAN Key and Side key.

Barcode scanning

1. Remove protection film on barcode scanner
2. Run the scanning application
3. Place beam in the middle of the barcode to read
   - Adjust distance fits to the barcode
   - Scanning stops automatically after 5 seconds from getting out of readable distance

[Correct barcode reading]

1. The small barcode should be closer to the device. This device is read at the distances of 40~300mm. If the reading not working well, please adjust angle or distance.
2. Laser beam appears as a dark red line when shined to barcode label.

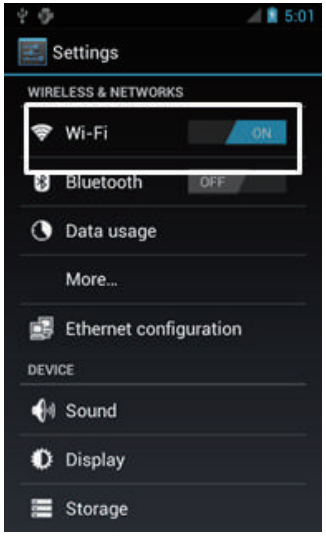
[Incorrect barcode reading]

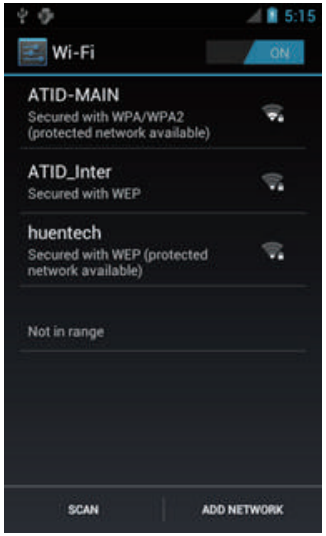
1. Laser beam should cross the barcode.
2. If only part of the barcode is shined by the laser beam, it won't be recognized.

This device can communicates wireless data by 802.11a/b/g/n radio, and describes access pointer and the contents related to wireless communication.
AT 911N device supports TCP/IP network protocol and directly use host computer and TCP/IP in TCP/IP network.
When shipping goods, wireless LAN is always set to off

WIFI connection and termination

[Menu] -> [Applications] -> [Settings] -> [Wi-Fi]



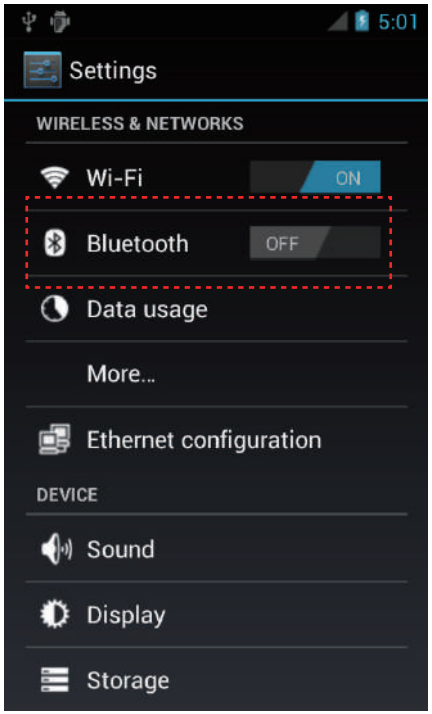


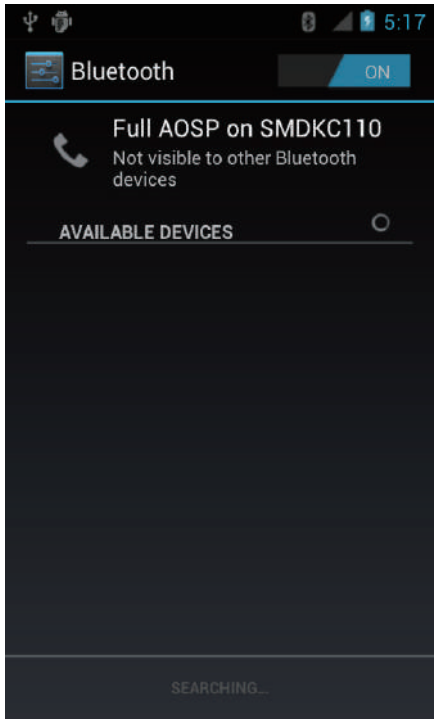
The below contents are related to “AP6330 COMBO” Module which is used in AT911N.

Bluetooth connection and termination

[Menu] -> [Applications] -> [Settings] -> [Bluetooth]

1. Start Bluetooth function

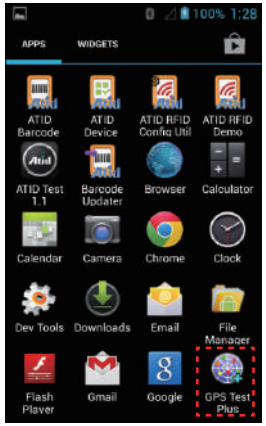




The device can be installed with GPS system as option, and GPS Module will be installed on top of AT911N into Built-in shape.

GPS demo program execution

[Menu] -> [Applications] -> [GPS Test]



GPS Test Start the program

GPS Test Screen.

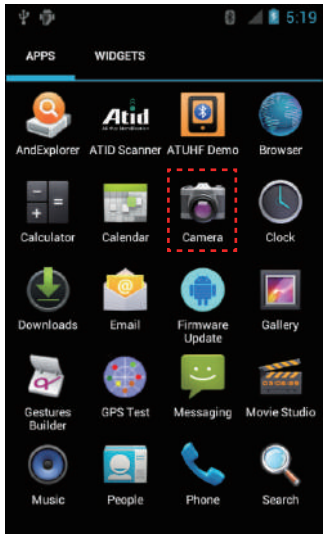
Confirm GPS reception Data:

1. Confirm whether GPS reception is normal in the open place.
2. Actual reception times of GPS Data may be different according to environment (about 3~5 minutes) If the signal is received previously, it can receive the GPS Data quickly.

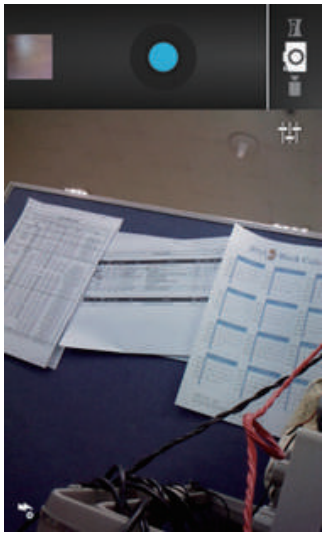
The products are installed with 5.0 mega pixel cameras and have the functions of screen brightness, resolution adjustment and screen captures

Use of camera

[Menu] -> [Applications] -> [Camera]



Start Camera program

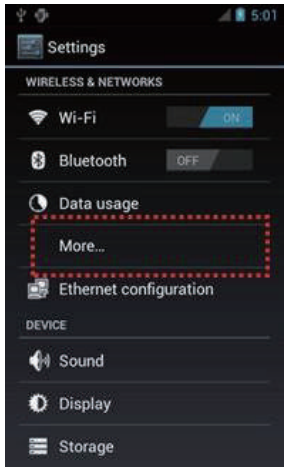


Camera screen

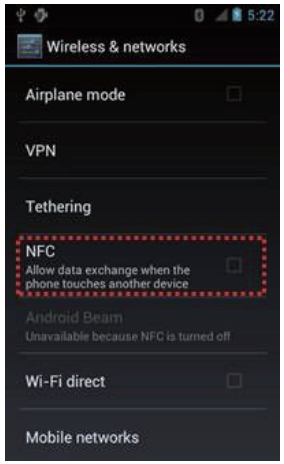
AT911N can internally install the NFC module as an option and it can read the tag in range of 3~8.5cm in accordance with ISO standard. In case of Mifare tag, it can read in range of 1~3.5cm. NFC tag can be also read.

NFC execution

[Menu] -> [Application] -> [Settings] -> [More…]



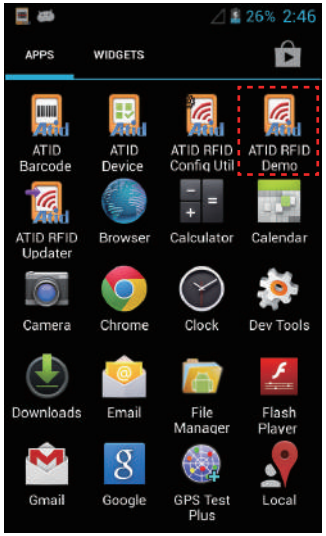
NFC ON/OFF setting



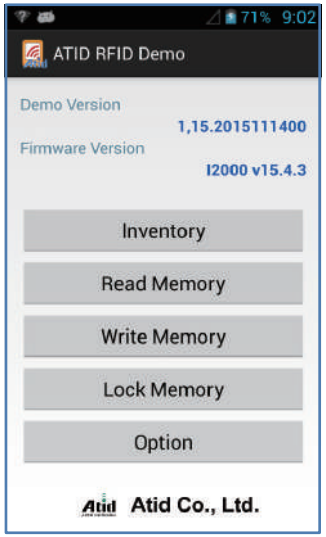
NFC Power can be set by checkbox as ON/OFF

UHF 900MHz RFID program

[Menu] -> [Applications] -> [Settings] -> [ATUHF Demo]



Start ATUHF Demo program



ATUHF Demo screen

Appendix

Product specification

PHYSICAL CHARACTERISTICS	
Dimensions (L x W x H)	145 x 75 x 27 (31.5) mm
Weight	270g (PDA only, without battery)
Operating Temp.	-10℃ ~ 60℃
Storage Temp.	-30℃ ~ 70℃
Charging Temp.	-0℃ ~ 45℃
Humidity	95% non-condensing
Drop Spec.	1.5M Drop to concrete
Dust & Water Proof	IP65
PERFORMANCE CHARACTERISTICS	
Processor	Dual-Core 1.0 GHz
Operating System	Android 4.2 (Jelly Bean)
Memory	1GB RAM / 8GB ROM
Display	4" WVGA with IPS TFT LCD, 480Wx800L with Backlight Capacitive Touch Screen
Audio	Phone Receiver, Speaker, Ear Jack, Microphone
Standard I/O Port	USB 2.0 Client
Expansion Slot	1Micro SD Slot (SDHC), 1SIM Slot
Notification	Vibrator and LED, Speaker
BATTERY SUPPLY	
Main Battery	Lithium-Ion 3.7V 2,200mAh (Rechargeable)
Power Adapter	Input AC100V ~ 240V / Output DC 5V 2A

NETWORK CHARACTERISTICS	
WLAN	IEEE 802.11 a/b/g/n Compliant
Bluetooth	Bluetooth Class II, 2.1 + EDR
Radio	MODEM 3G (GSM / GPRS / EDGE / WCDMA / HSPA+)
GPS	Internal Antenna (GPS + Glonass)
DATA CAPTURE & DATA PROCESSING DEVICE	
Barcode Engine	1D Laser or 2D Imager Barcode Scanner
Camera	CMOS 5 MEGA Pixel Auto Focus with Flash
Sensor	3D Digital Linear Acceleration Sensor and 3D Digital Magnetic Sensor
UHF 900MHZ RFID READER/WRITER	
Frequency	CE 865MHz ~ 868MHz FCC 902MHz ~ 928MHz
Reading range	0M ~ 5M (According to Tag & Environment)
Writing range	0M ~ 0.5M (According to Tag & Environment)
RF output	1W (MAX)
Protocol	GEN2, ISO/IEC 18000-6C/6B (Option)
Special function	Anti-Collision
HF 13.56MHZ RFID READER/WRITER	
Applied RFID Tag	NFC, ISO15693, MIFARE, ISO14443 A/B (Option)
Reading range	According to Tag : 0Cm ~ 5Cm (Internal)
ACCESSORIES (Option)	
Gun Handle Grip (Pistol Grip)	Body, UHF / HF Available
Gun Handle Battery	Lithium-Ion 3.7V 5,200mAh (Rechargeable) Option