

RP1600X USER MANUAL



Copyrights

The products described in this document may include copyrighted computer programs. Laws in countries preserve for certain exclusive rights for copyrighted computer programs.

Accordingly, any copyrighted computer programs contained in the products described in this document may not be copied or reproduced in any manner without the express written permission.

© 2023 ID Secure LLC All Rights Reserved

No part of this document may be reproduced, transmitted, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, without the prior written permission.

Furthermore, the purchase of our products shall not be deemed to grant either directly or by implication, estoppel or otherwise, any license under the copyrights, patents or patent applications, except for the normal non-exclusive, royalty-free license to use that arises by operation of law in the sale of a product.

Disclaimer

Please note that certain features, facilities, and capabilities described in this document may not be applicable to or licensed for use on a particular system, or may be dependent upon the characteristics of a particular mobile subscriber unit or configuration of certain parameters.

Please refer to your contact for further information.

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.

Table of Contents

Copyright	2
Table of Contents	3
Overview	4
Getting Started	8
Basic Function	18
Application	25
Using the Camera	27
Using the NFC	28
Using the Iris Reader	29
Wireless	30
Settings	49

Overview - Specification

General Characteristics	CPU / RAM / ROM	Hexa core CPU (Cortex A72 Dual-core 1.8GHz, Cortex A53 Quad core 1.4Ghz)
	RAM / ROM	4GB RAM / 32GB ROM
	OS	Android 11
	Dimensions	139mm/5.47inch(W) x 230mm/2.87inch(H) x 28(22)mm, 1.10/(0.86)inch : (D)(Minimum Thickness)
	Weight	320g/11.3oz with 4,000mA battery
	Buttons	5 front buttons / 5 side buttons
	Battery / Backup battery	Standard : 1860mAh Li-Ion / Extended : 4000mAh Li-Ion / NFC, IC Card Battery : 2860mAh Li-Ion Backup battery : 200mAh Li-Polymer
	Audio / LED / Sensor	Audio : Speaker, Receiver, Mic / LED : 1 charging status Sensor : Acceleration, Compass, Proximity, Ambient Light Sensor
	Display / Touch	4.3 Inch, WVGA(480x800) / Capacitive, multi touch, Gorilla glass 3
	Expansion Slot / SAM	Micro SDXC / 2 SAM Slot
	Communication	USB Host/Client : USB2.0 High Speed, External Serial RS232C, RJ45 Port (Use 1Slot/4Slot Cradle)
	Power	DC Jack 5V / 3.5A Adaptor

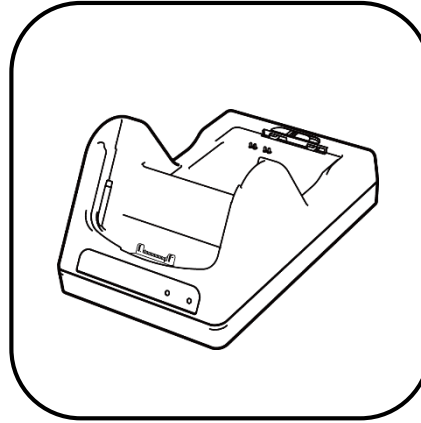
Overview - Specification

Integrated Radio	Wireless LAN	IEEE 802.11 a/b/g/n/ac (2.4, 5GHz)
	Bluetooth	Bluetooth 4.2 BLE
	GPS	AGPS
DATA CAPTURE	Camera	Rear Camera : 13MP Auto Focus / 1 LED Flash
	RFID	NXP PN548 / HF 13.56Mhz / 14443A/B, 15693
	Contact Smart Card	Contact type Smart Card Reader : ISO7816 compliant
	Dual Iris Scanner	Camera : 5MP B&W CMOS sensor Operating Range : 320±40mm (11"~14") Resolution : Above 160 pixel/cm Iris Capture Volume : 130mm x 45mm x 80mm Illumination : IR LED Image : 2592 x 920 x 30 Frame
User Environment	Operating Temp	-20°C ~ 60°C (-4°F ~ 140°F)
	Storage Temp	-30°C ~ 70°C (-22°F ~ 158°F)
	Humidity	Non-condensing, 93%
	Drop	1.5m (5ft.)
Supported Software	Development Tools	Android Studio, Eclipse
	Development SDK	With Java SDK : Fingerprint, Smart card, Iris, Camera

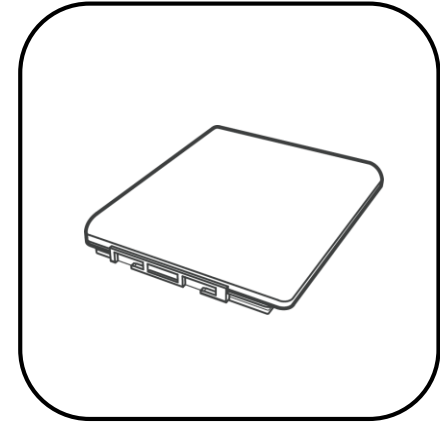
Overview - Package



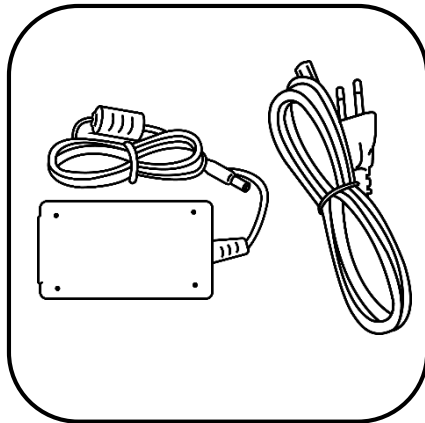
RP1600X



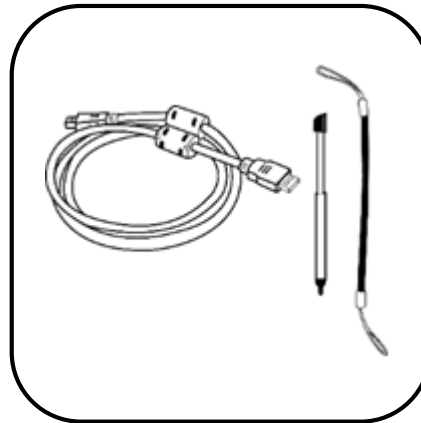
Desktop Cradle



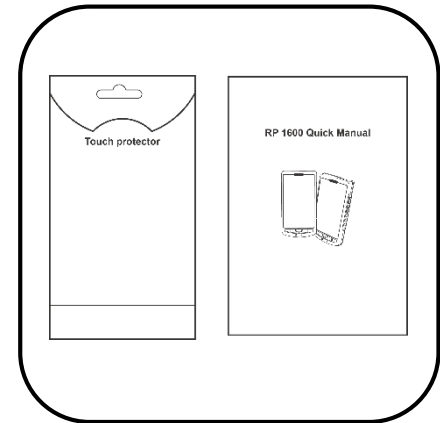
Battery



Adapter / AC Cord



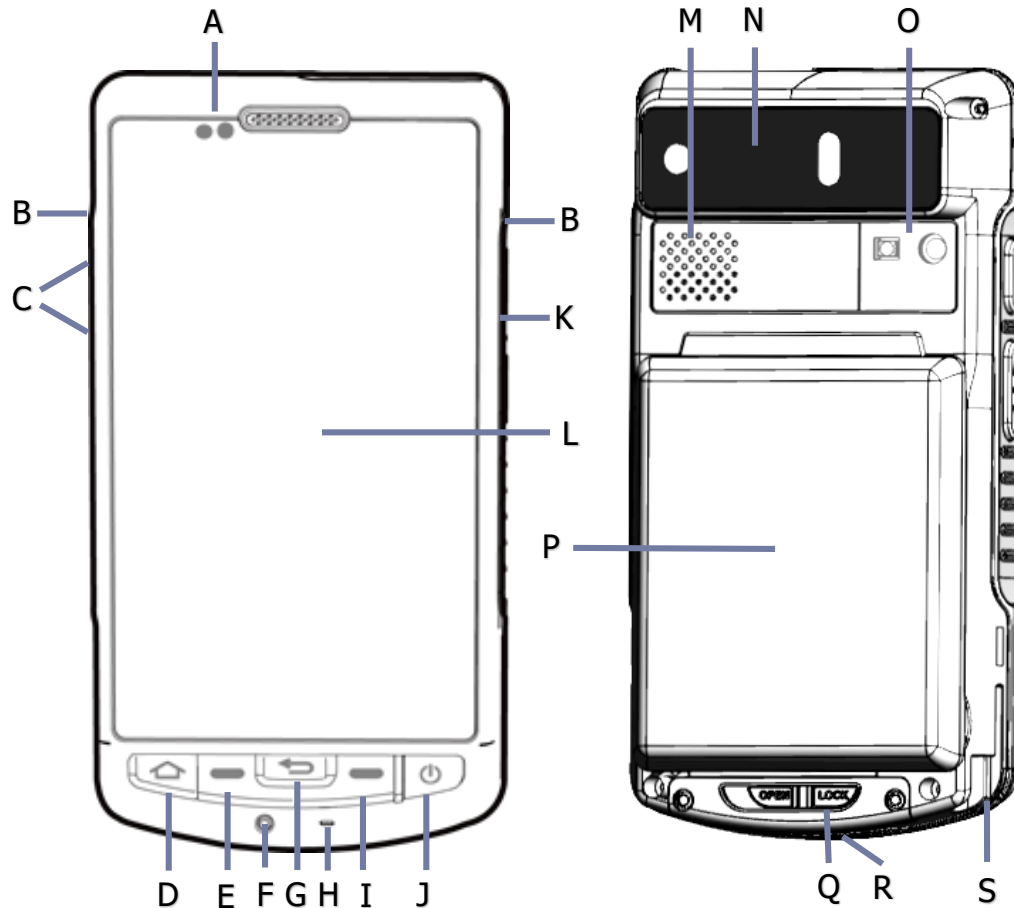
**USB cable / Stylus pen
/ Pen string**



**Screen Protector /
Quick Manual**

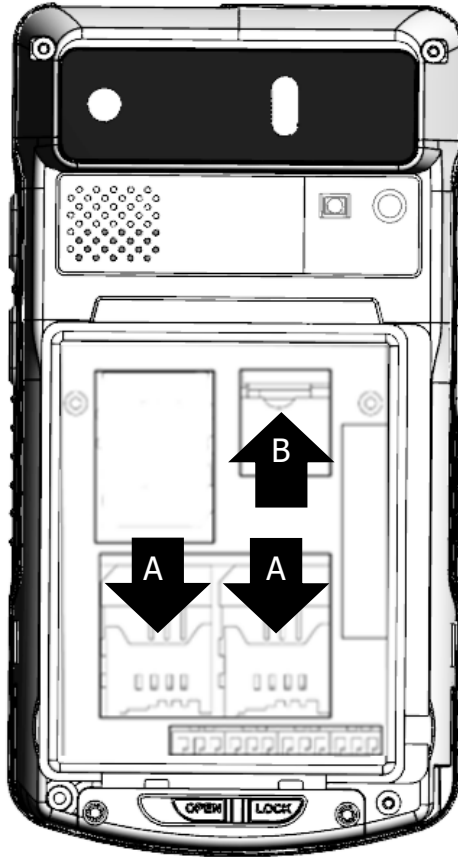
NOTE. Items in the box may be changed according to the purchase order.

Overview - Device Features



- A. Proximity / Light Sensor
- B. Left / Right function Buttons
- C. Volume Up / Down Buttons
- D. Home Button
- E. Function Button
- F. Reset Button
- G. Back Button
- H. MIC
- I. Menu Button
- J. Power Button
- K. Camera Button
- L. LCD / Touch
- M. Speaker
- N. Iris Reader
- O. Camera / Flash
- P. Battery
- Q. Battery Locker
- R. EID10 Alpha / Cradle IO Connector
- S. Stylus Pen Slot

Getting Started - Installing the Cards



- ▶ There are three slots to insert SAM, micro SD in the back of your device.

- ① SAM card is required for security transactions that are made through your device.
- ② It validates the device and the credit cards. It also includes the company information.
- ③ Micro SDXC card is required for external storage.

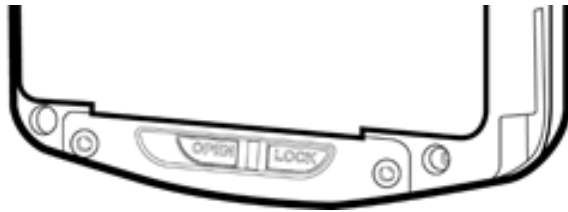
▶ Installing the Cards

- ① SAM Card (2 Slot) : Slide the SAM Card toward the top of the device like direction of an arrow A.
- ② Micro SD Card : Slide the Micro SD Card toward the top of the device like direction of an arrow B.

▶ Removing the Cards

- ① SAM Card : To remove the cards, pull and remove the card completely.
- ② Micro SD Card : To remove the cards, push the inserted card once. The card is released with a click sound. Pull and remove the card completely.

Getting Started - Installing Battery



Open

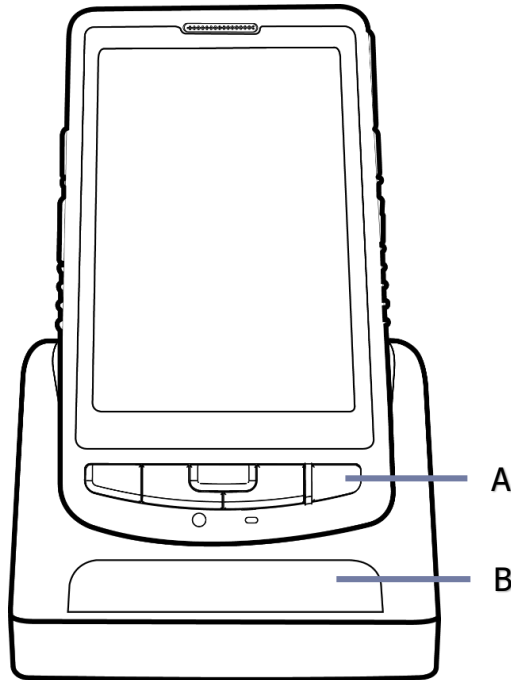


Lock

- ▶ RP1600X Series uses a Lithium-ion rechargeable battery
Standard 1860mAh, Middle 2860mAh, Extended 4000mAh
Install the provided battery before starting to charge the device.
- ▶ Installing the Battery
 - ① Insert the battery, top first, into the battery compartment in the back of the device.
 - ② Press the battery down into the battery compartment .
 - ③ Lock the Battery Release Latch.
 - ❖ When removing the battery cover, be careful not to damage your fingernail.
- ▶ Removing the Battery
 - ① Open the Battery Release Latch.
 - ② Pull the battery up into the battery compartment .

Getting Started - Charging & Cradle Interface

- ▶ Before using the RP1600X device for the first time, charge the main battery until the amber. Charging/Battery Status LED remains lit.
To charge the device, use a cable or a cradle with the appropriate power supply.
- ▶ To charge with the cradle
 - ① Place the device on the cradle as illustrated.
Connect the power adapter with the cradle and plug it into a power outlet.
 - ② Connect the charging accessory to the appropriate power source.
 - ③ Insert the device into a cradle or attach to a cable.
 - ④ The device begins charging.
 - ⑤ The Charging/Battery Status LED red while charging, then turns LED green when fully charged.
- ❖ You can also take out the battery from the device and charge it separately on a cradle.



A. Device charging status LED

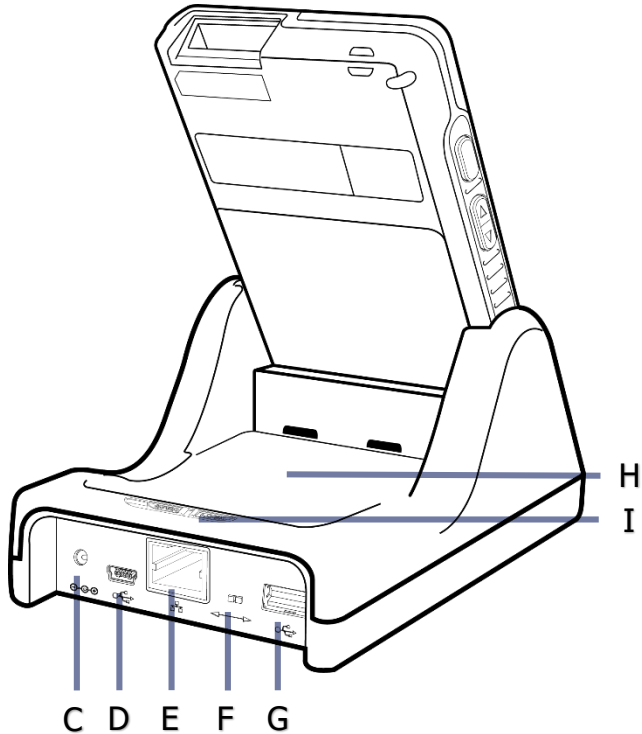
- OFF : Not charging
- Red LED : Charging
- Green LED : Fully charged

B. Spare battery charging status LED

- OFF : Not Charging
- Red LED : Charging
- Green LED : Fully Charged

❖ If the LED is off when the device or the spare battery was mounted. Make sure that RP1600X is inserted correctly in the cradle or RP1600X is connected to a power source.

Getting Started - Charging & Cradle Interface



- C. DC Jack
- D. USB Client Port
- E. Ethernet Port (optional)
- F. Select Ethernet/USB Host Switch
- G. USB Host Port
- H. Spare Battery Charging Slot
- I. Battery Locker

Caution.

Do not use any other charger except one (5.0V / 3.5A) provide.

Make sure to handle it gentle; damage with excessive force may cause no warranty.

Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

When attached battery is completely discharged, plug charger to main body, then reset the device to check if screen is back on.

Getting Started - Power Interface

▶ Power on the Device

After inserting the battery or when turning the device on for the first time, the splash screen displays for about a minute as the device boots, then the main screen appears.

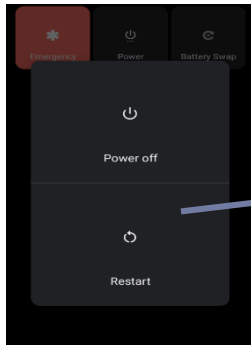
❖ Press and hold the power button approximately 3 seconds to turn the device on while the device is charging on a cradle.

▶ Resetting the Device

- ① You rarely need to reset the computer. If the computer or an application lock up, you may need to reset the device.
- ② The device uses the configuration currently saved in flash memory during the boot process. There are three ways to reset the device
- ③ If the device is not functioning properly, perform a reset first. If the device still does not respond, perform a hard reset.

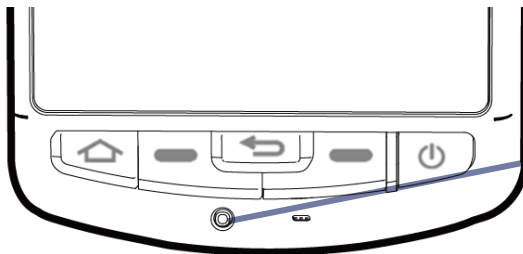
▶ Soft Reset

- ① Press and hold the power button to perform a Soft Reset.



Restart

- ② Press the reset button to perform a Soft Reset.



Using the stylus pen, press the reset button.

Getting Started - Power Interface

▶ Hard Reset

Press and hold the power button for approximately 7 seconds to perform a Hard Reset.

❖ Perform a Hard Reset if a Soft Reset is not working

▶ Factory Reset

Follow the below steps to perform a Factory Reset.

Path : Settings > System > Advanced > Reset options > Erase all data (factory reset) > Erase all data

▶ Power off the Device

① Press the Power button until the menu appears.

② Touch Power off

▶ How to change a battery for hotswap

Battery hot swap is available selecting Battery Swap menu under the Power Menu.

① When you select the Battery Swap menu, Display will turn off then keypad LED will turn on within 10 seconds.

② After Keypad LED turns on, change a battery and then push the power button. > Done

Caution.

The Factory reset process erases the device memory, including all applications and data files in the object store.

Getting Started - Manage Battery

▶ Battery Usage

Prior to checking the battery charge level, remove the RP1600X from any AC power source. (cradle or multi gender)

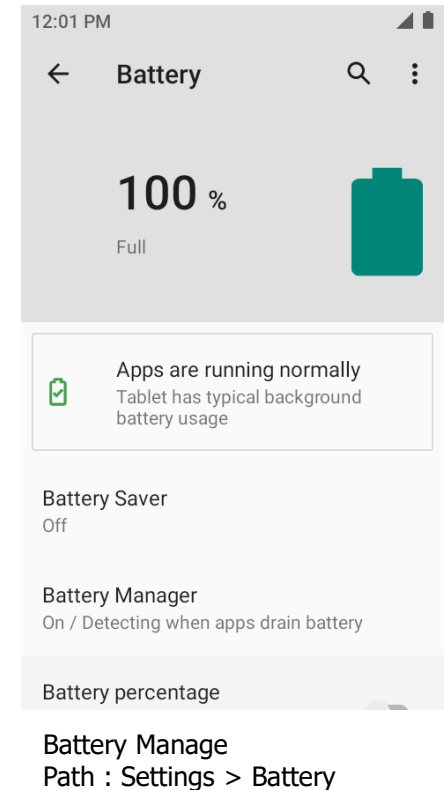
The Battery screen lists which applications consume the most battery power. Also use it to turn off applications that were downloaded if they are consuming too much power.

Path : Settings > Battery

- ① The Battery screen lists the applications using the battery. The discharge graph at the top of the screen shows the rate of the battery discharge since last charged (short periods of time when connected to a charger are shown as thin green lines at the bottom of the chart), and how long it has been running on battery power.
- ② Touch an application in the Battery screen to display details about its power consumption. Different applications display different information. Some applications include buttons that open screens with settings to adjust power use.

▶ Low Battery Notification

- ① When the battery charge level drops below 10% and 5%, the device displays a Low Battery Notification.
- ② When the battery charge level drops below 2%, the device displays a Low Battery Notification and turns off automatically.



Getting Started - Settings the Data & Time / Language

▶ Automatic Settings

① Data & Time

The date and time is automatically synchronized using a NITZ server when the RP1600X is connected to a network. The user is only required to set the time zone or set the date and time when if the wireless LAN does not support Network Time Protocol (NTP).

② Language / Input

English is the default setting, and you can set language and input from the Settings menu.

▶ Manual Settings

① Data & Time

- ▶ Settings > System > Date & time > "Use network-provided time / Use network-provided time zone" to disable automatic date and time synchronization.
- ▶ Set date > Move the sliders up and down to select the month, date and year.
- ▶ Set Time > Move the sliders up and down to select the hour, minutes and part of the day.
- ▶ Select time zone > Select the current time zone from the list.

② Language / Input

- ▶ Menu > Language & input > Select the Language form the list
- ▶ SIP is changed to the basic form according to the language setting.

Getting Started - Display

► Brightness

- ① Settings > Display > Brightness level
- ② In the Brightness dialog box, touch Auto to set the RP1600X to automatically adjust the brightness using the built-in light sensor. Deselect Auto to set the brightness manually. Use the slider to set a brightness level.

► Screen Rotation

By default, screen rotation is disabled. To enable screen rotation :

- ① Settings > Display > Advanced > Auto-rotation screen
- ② Uncheck Auto-rotate screen to set the RP1600X to automatically switch orientation when the RP1600X is rotated.

❖ The Home screen does not rotate

► Screen Timeout(To set the screen sleep time)

- ① Settings > Display > Screen timeout
- ② Select one of the sleep values
15 seconds, 30 seconds, 1 minute, 2 minutes (Default), 5 minutes, 10 minutes, 30 minutes, Never sleep

► Font Size

- ① Settings > Display > Advanced > Font size
- ② Select one of the font size values. - Small, Default

Getting Started - Sound

- ▶ Use the Sounds settings to configure media and alarm volumes.

Settings > Sounds

- ▶ Volumes

Use to change the volume of Media, Ringtone & notifications, Alarms volume.

- ▶ Call Ringtone & Vibrate

- ① Phone ringtone

Touch to select a ringtone to sound when an incoming call is received.

- ② Vibrate when calls

Check to make the device vibrate when a call is received

- ▶ System

- ① Default notification sound

Touch to select a sound to play for all system notifications.

- ② Dial pad tones

Check to play a sound when a phone key is touched

- ③ Touch sounds

Check to play a sound when making screen selections

- ④ Screen lock sound

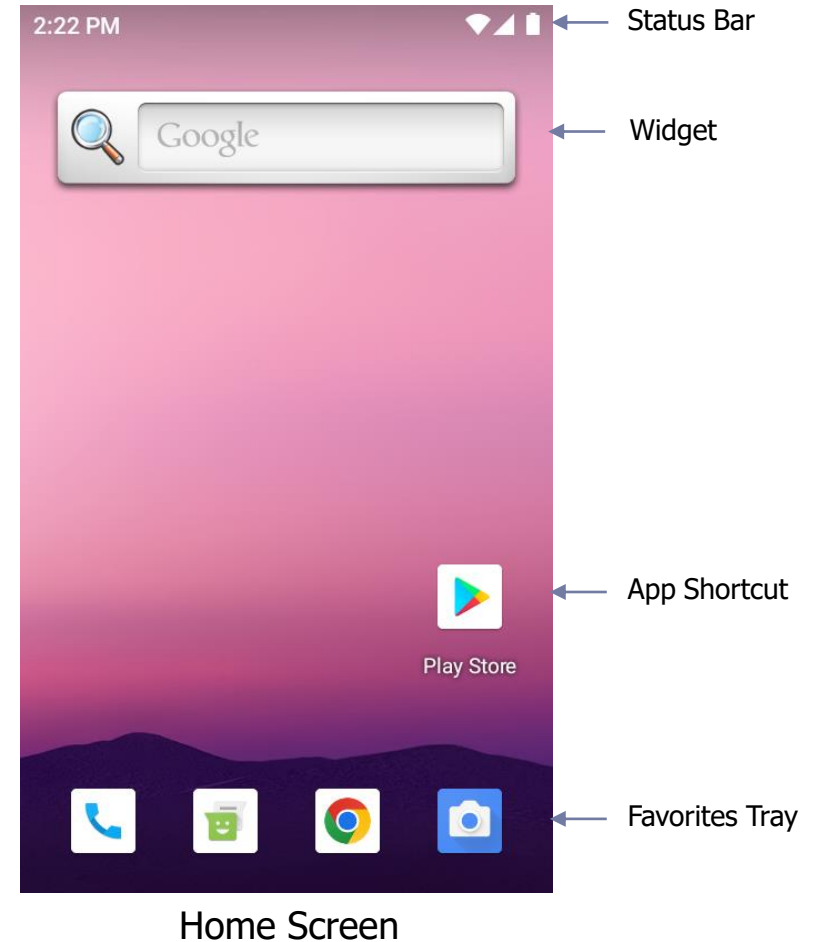
Check to play a sound when locking and unlocking the screen

- ⑤ Touch vibration

Check to have the device vibrate when touching soft key and on certain screen interactions

Basic Function - Home Screen

- ▶ You can personalize the panels with your choice of shortcuts, apps, folders and widgets.
The Favorites tray, located at the bottom of the screen, is visible from any of the home screen panels. You can modify the apps in the Favorites tray to include the apps you use most.
- ▶ You can see all the apps available on your device by sliding the screen from bottom to top.
- ▶ Notifications and status indicators appear at the top of the screen.
Notifications appear on the left, status indicators for various system function on the right with the current time
- ▶ You can press the Home button on the front of the device to return to the Home screen from any open app.



Basic Function – Notifications / Status Bar

▶ Status bar

The Status bar displays the time, notification icons (left side), and status icons (right side).

If there are more notifications than can fit in the Status bar, a dot displays indicating that more notifications exist.

Swipe down from the Status bar to open the Notification panel and view all notifications and status.



▶ Managing Notification

Notification icons report the arrival of new messages, calendar events, alarms, and ongoing events.

When a notification occurs, an icon appears in the Status bar with a brief description.

To view a list of all notifications, open the Notification panel by dragging the Status bar down from the top of the screen.

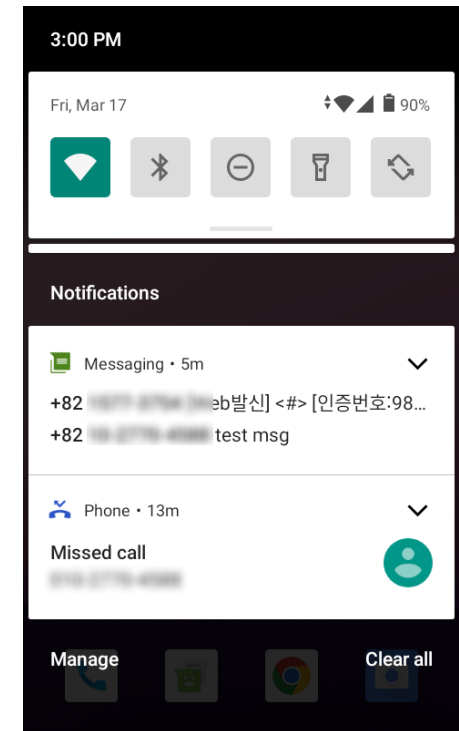
To respond to a notification, open the Notification panel and then touch a notification. The Notification panel closes and the corresponding app opens.

To manage recent or frequently used notifications, open the Notification panel and then touch Manage notifications.

Touch the toggle switch next to an app to turn off all notifications, or touch an app for more notification options.

To clear all notifications, open the Notification panel and then touch CLEAR ALL. All event-based notifications are removed. Ongoing notifications remain in the list.

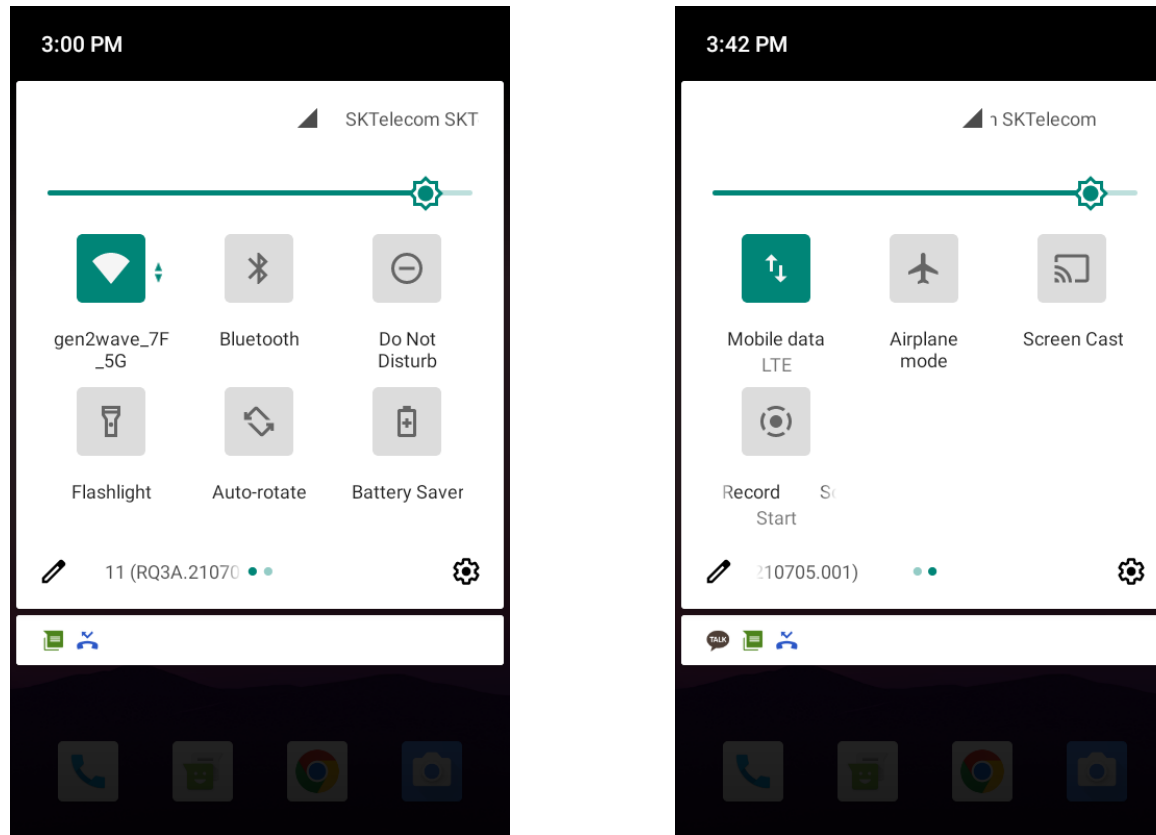
To close the Notification panel, swipe the Notification panel up.



Notification Panel

Basic Function – Quick Access Panel





- ▶ Use the Quick Access panel to access frequently used settings.
 - ① If the device is locked, swipe down once.
 - ② If the device is unlocked, swipe down once with two fingers, or twice with one finger.
 - ③ If the Notification panel is open, swipe down from the Quick Settings bar.



Quick Access Panel

Basic Function – Functions Button

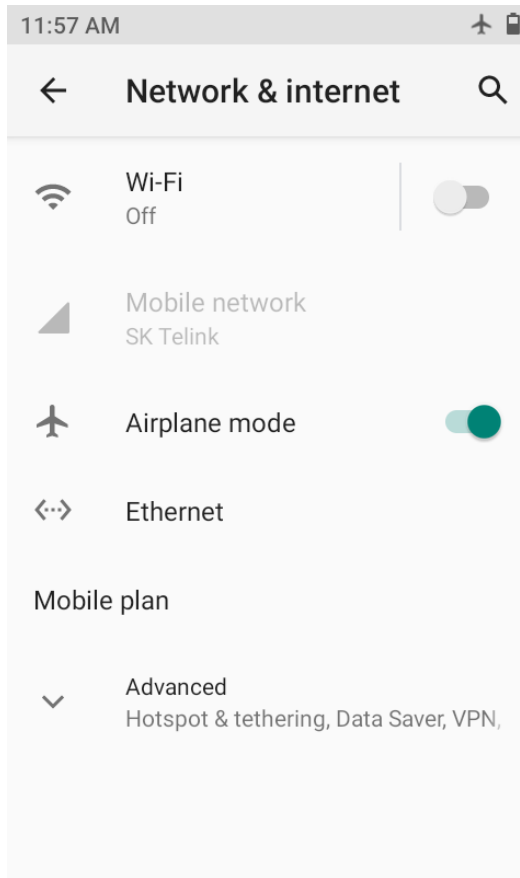
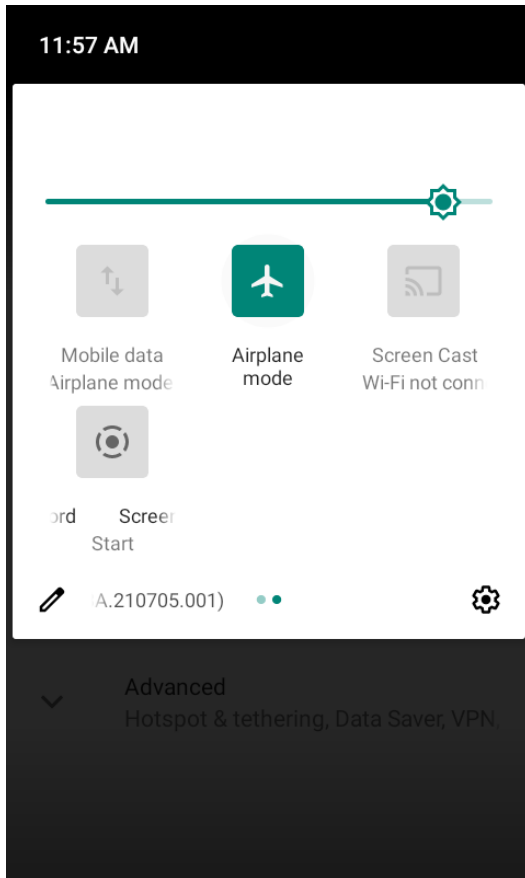
The device has function button

Button		Function
	Home	Return to the Home screen
	Green	A user defined button.
	Back	Back to the previous screen.
	Red	Opens additional menu options.
	Power	Power Menu / Sleep on, Wake up
	Right & Left Function	A user defined button.
	Volume	Raises or lowers the volume of the active speaker.
	Camera	Capture Image

Basic Function – Turning Airplane Mode ON/OFF

Turn Airplane Mode on to disable all the device radios that transmit data.

- ▶ You can enable Airplane mode in the Quick access panel or Settings.
- ▶ When Airplane Mode is turned on, shows on the status bar.



Basic Function – USB Communication

Connect the device to a host computer to transfer files between the device and the host computer.

When connecting the device to a host computer, follow the host computer's instructions for connecting and disconnecting USB devices, to avoid damaging or corrupting files.

❖ The device supports USB 2.0(Hi-Speed) communication.

▶ Transferring Files

Use Transfer files to copy files between the device and the host computer.

- ① Connect the device to a host computer using a USB accessory.
- ② On the device, pull down the Notification panel and touch Charging this device via USB.
- ③ Touch File Transfer.
- ④ On the host computer, open Files app.
- ⑤ Locate the device as a device.
- ⑥ Open the SD card or the Internal storage folder.
- ⑦ Copy files to and from the device or delete files as required

▶ Disconnecting from the Host Computer

Carefully follow the host computer's instructions disconnect USB devices correctly to avoid losing information.

On the host computer, unmount the device.

Basic Function – Using the Touchscreen

RP1600X can support both type touch panel, resistive and capacitive.

▶ Tab

- ① Select items on the screen.
- ② Type letters and symbols using the on-screen keyboard.
- ③ Press on-screen buttons.

▶ Tap and Hold

- ① An item on the Home screen to move it to a new location or to the trash.
- ② An item in Apps to create a shortcut on the Home screen.
- ③ The Home screen to open a menu for customizing the Home screen.
- ④ An empty area on the Home screen until the menu appears.

▶ Drag

- ① Tap and hold an item for a moment and then move finger on the screen until reaching the new position.

▶ Swipe : Move finger up and down or left and right on the screen to

- ① Unlock the screen.
- ② View additional Home screens.
- ③ View additional application icons in the Launcher window.
- ④ View more information on an applications screen.

▶ Double-tap




- ① Tap twice on a web page, map, or other screen to zoom in and out.

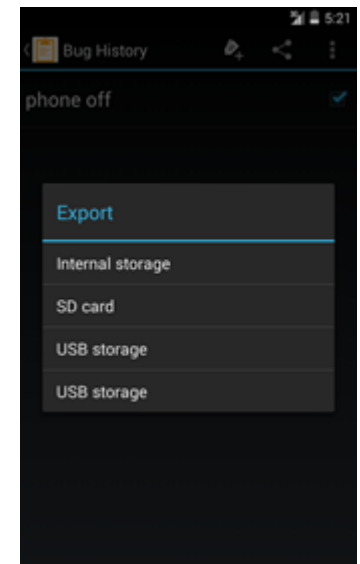
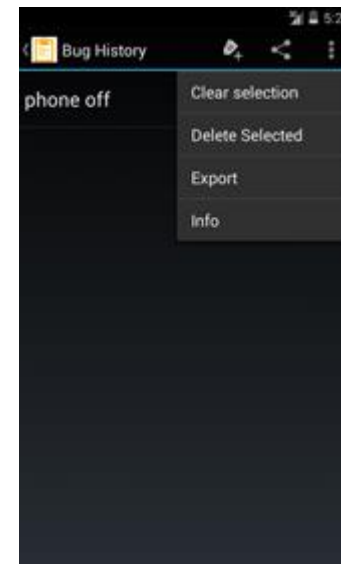
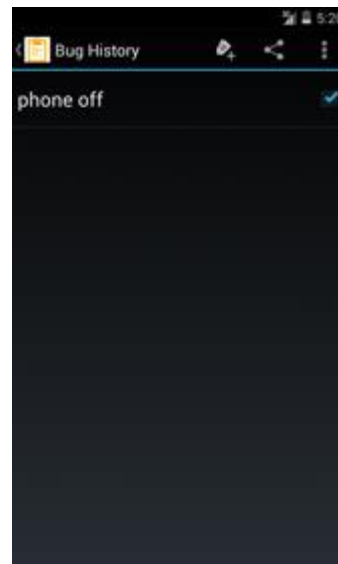
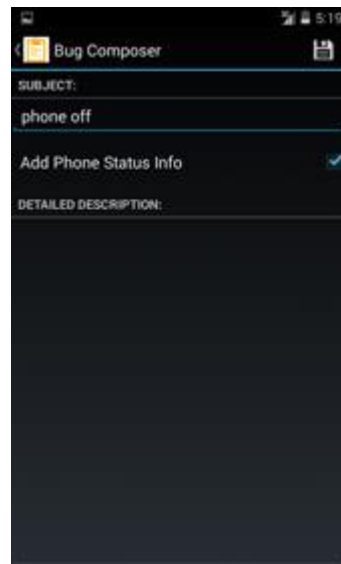
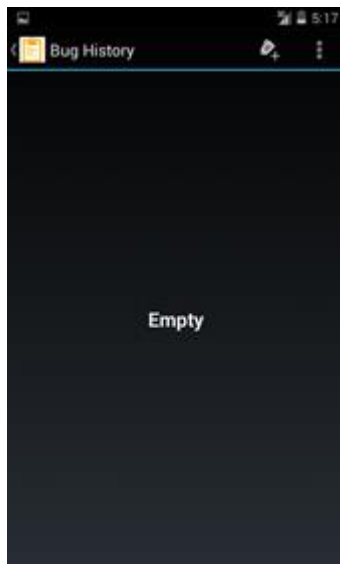
▶ Pinch

- ① In some applications, zoom in and out by placing two fingers on the screen and pinching them together (to zoom out) or spreading them apart (to zoom in).

Application – Bug History

► Use Bug History to capture log files for diagnostics.

- ① Path : APPLICATION > Bug History
- ② Touch 
- ③ Input SUBJECT(bug name)
- ④ Touch 
- ⑤ Check SUBJECT
- ⑥ Touch 
- ⑦ Touch Export
- ⑧ Select export storage



Application – G2W Test

► It is available for users to test main functions of the device.

- ① Path : APPLICATION > G2W TEST
- ② Test : Select each test item to check each function is working properly or not.

The image displays two side-by-side screenshots of a mobile application interface for testing device functions. Both screens have a blue header bar with a back arrow and a title.

Test1 Screen:

- Header: < Test1
- Items (each with a checkbox): LCD, Flash, Key, Vibration, Speaker, Receiver, Battery, Touch, Backlight, Record, Accelerator, Compass.
- Bottom button: Next

Test2 Screen:

- Header: < Test2
- Items (each with a checkbox): Proximity, Illumination, Sleep, Bluetooth, WLAN, Scanner, Camera, GPS, IC Card, RFID, NFC, SAM.
- Bottom buttons: Clear (red), Finish

- ③ Information : View basic information about the device.

Using the Camera

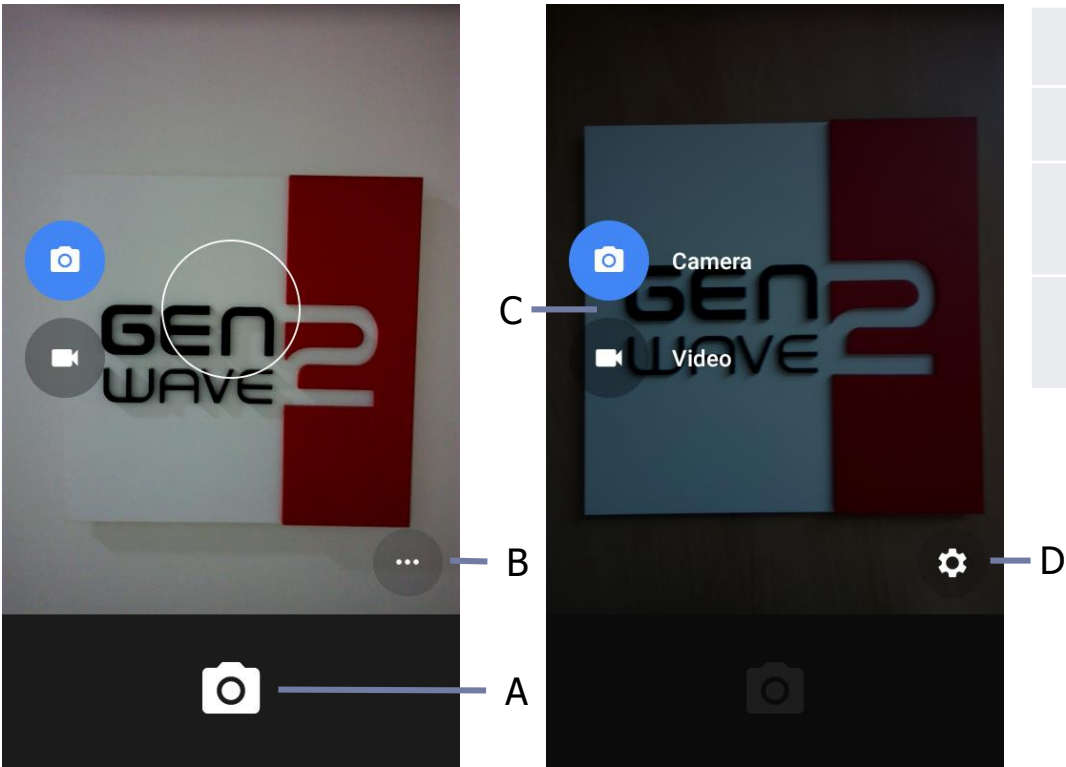
► Overview

Device are equipped with 13.0 Megapixel auto focus cameras to provide easy integration of color picture and video capture into business application. The camera lens and camera flash are located on the back panel of the device.

Pictures and videos captured using the Camera app are stored on the internal memory in the DCIM folder under Camera(Internal storage/DCIM/Camera). You can copy your pictures and videos to a computer or view, edit, and share your pictures and videos using the Gallery app.

► Opening the Camera app and adjusting the settings

To open the Camera app, touch camera on the Home screen.



A	Capture	Take photo, video
B	Option	Timer, Flash, Grid
C	Mode	Activate the menu by sliding the screen from left to right in the camera app Photo, video mode switching
D	Settings	Resolution & quality, Capture Sound, Save location, Advanced, Restore Default Settings

Using the NFC

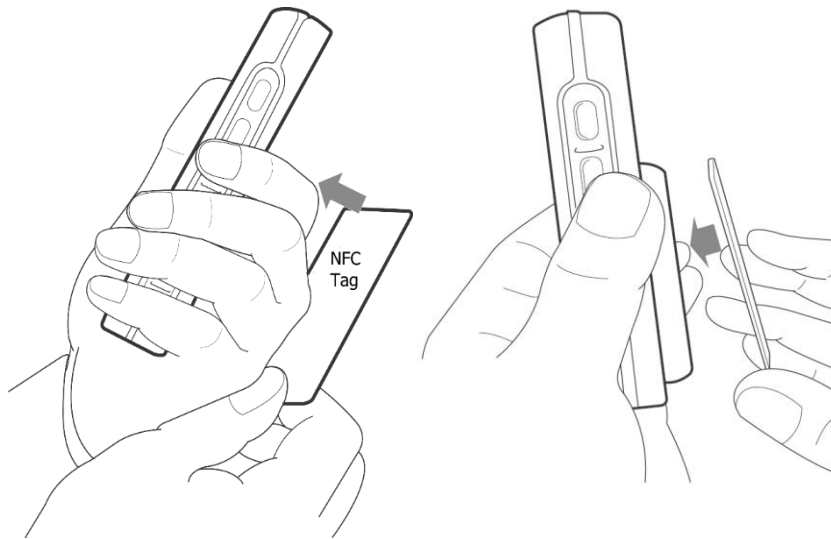
NFC/HF RFID is a short-range wireless connectivity technology standard that enables secure transaction between a reader and a contactless smartcard.

The technology is based on ISO/IEC 14443 type A and B and ISO/IEC 15693 standards, using the HF 13.56MHz unlicensed band.

▶ Reading NFC Card

Enable NFC Path > Settings > Connected devices > Connection preferences > NFC

- ① Launch an NFC enabled application.
- ② Move RP1600X close up the NFC card until the device detects the card.
- ③ Hold the card steadily until the transaction is complete (usually indicated by the application).



Since NFC antenna is integrated in the rear side of the battery, read the contactless card as shown.

NFC reading distance depends on the Card type.

Using the Iris Reader

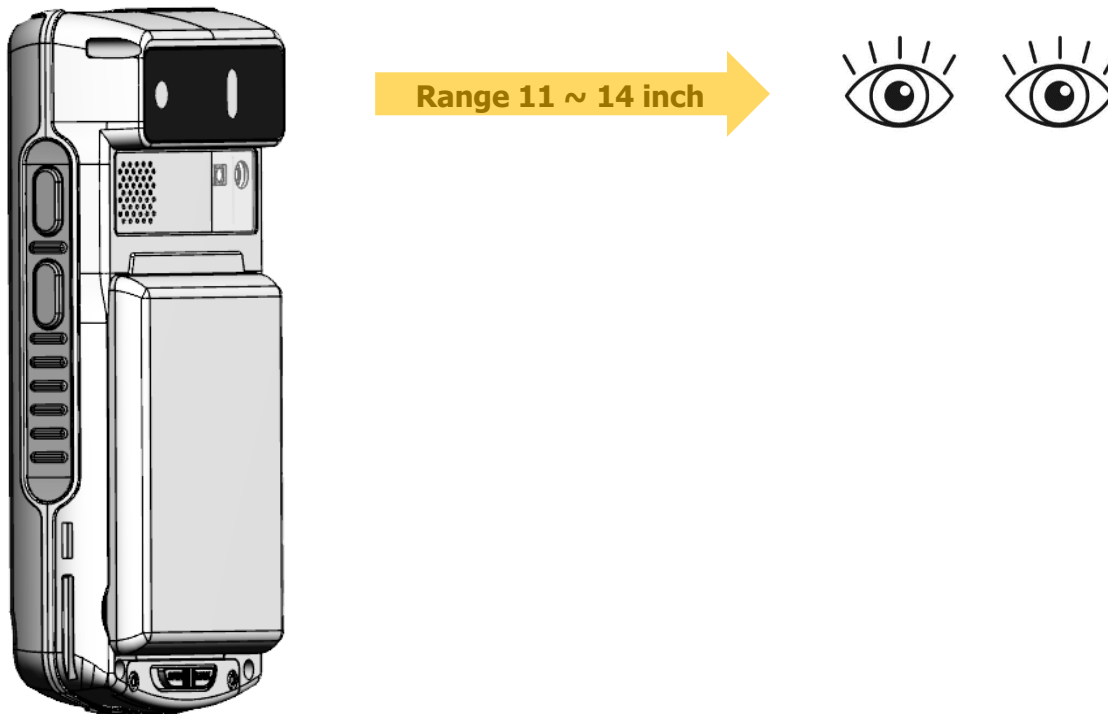
The RP1600X performs high-speed dual iris capture and outputs ISO standards compliant images.

Both eyes are simultaneously captured.

Provides an easy user interface, which makes the process easier for the user and operator.

Also equipped with an orientation sensor and left and right iris capture management controls which can be selected prior to or during the process

- ▶ After running the iris app, keep the device and both eyes apart about 11 to 14 inches and wait until both irises are recognized.



Wireless – Wireless Local Area Network

Wireless local area networks (WLANs) allow the device to communicate wirelessly inside a building.

Before using the device on a WLAN, the facility must be set up with the required hardware to run the WLAN.

The infrastructure and the device must both be properly configured to enable this communication.

► Connecting to a Wi-Fi Network

- ① Go to Settings.
- ② Touch Network & internet.
- ③ Touch Wi-Fi to open the Wi-Fi screen. The device searches for WLANs in the area and lists them.
- ④ Scroll through the list and select the desired WLAN network.
- ⑤ For open networks, touch profile once or press and hold and then select Connect or for secure networks enter the required password or other credentials then touch Connect. See the system administrator for more information.
- ⑥ In the Wi-Fi setting field, Connected appears indicating that the device is connected to the WLAN.

► Removing a Wi-Fi Network

- ① Go to Settings.
- ② Touch Network & Internet > Wi-Fi.
- ③ Scroll down to the bottom of the list and touch Saved networks.
- ④ Touch the name of the network.
- ⑤ Touch FORGET.

Wireless – Wireless Local Area Network

► WLAN Configuration

This section provides information on configuring Wi-Fi settings.

❖ Configuring a Secure Wi-Fi Network

- ① Go to Settings
- ② Touch Network & Internet > Wi-Fi.
- ③ Slide the switch to the ON position.
- ④ The device searches for WLANs in the area and lists them on the screen.
- ⑤ Scroll through the list and select the desired WLAN network.
- ⑥ Touch the desired network. If network security is Open, the device automatically connects to the network. For all other network security, a dialog box appears.
- ⑦ If network security is WPA/WPA2-Personal, or WEP, enter the required password and then touch Connect.
- ⑧ If network security is WPA/WPA2-Personal, WPA3-Personal, or WEP, enter the required password and then touch Connect.
- ⑨ If network security is WPA/WPA2/WPA3 Enterprise
 - Touch the EAP method drop-down list and select one of the following: PEAP, TLS, TTLS, PWD, SIM, AKA, LEAP
 - Fill in the appropriate information. Options vary depending on the EAP method chosen.
 - ❑ When selecting CA certificate, Certification Authority (CA) certificates are installed using the Security settings.
 - ❑ When using the EAP methods PEAP, TLS, or TTLS, specify a domain.
 - ❑ Touch Advanced options to display additional network options.

Wireless – Wireless Local Area Network

► WLAN Configuration

❖ Manually Adding a Wi-Fi Network

Manually add a Wi-Fi network if the network does not broadcast its name (SSID) or to add a Wi-Fi network when out of range.

- ① Go to Settings.
- ② Touch Network & Internet > Wi-Fi.
- ③ Slide the Wi-Fi switch to the On position.
- ④ Scroll to the bottom of the list and select Add network.
- ⑤ In the Network name text box, enter the name of the Wi-Fi network.
- ⑥ In the Security drop-down list, set the type of security to: None, Enhanced Open, WEP, WPA/WPA2-Personal, WPA3-Personal, WPA/WPA2/WPA3-Enterprise
- ⑦ If the network security is None or Enhanced Open, touch Save.
- ⑧ If the network security is None, touch Save.
- ⑨ If the network security is WEP, WPA3-Personal, or WPA/WPA2-Personal, enter the required password and then touch Save.
- ⑩ If the network security is WEP or WPA/WPA2-Personal, enter the required password and then touch Save.
- ⑪ If network security is WPA/WPA2/WPA3 Enterprise:
 - Touch the EAP method drop-down list and select one of the following: PEAP, TLS, TTLS, PWD, SIM, AKA, AKA', LEAP
 - Fill in the appropriate information. Options vary depending on the EAP method chosen.
 - ❑ When selecting CA certificate, Certification Authority (CA) certificates are installed using the Security settings.
 - ❑ When using the EAP methods PEAP, TLS, or TTLS, specify a domain.
 - ❑ Touch Advanced options to display additional network options.

Wireless – Wireless Local Area Network

► WLAN Configuration

❖ Configuring for a Proxy Server

A proxy server is a server that acts as an intermediary for requests from clients seeking resources from other servers.

A client connects to the proxy server and requests some service, such as a file, connection, web page, or other resource, available from a different server. The proxy server evaluates the request according to its filtering rules.

It is important for enterprise customers to be able to set up secure computing environments within their companies, making proxy configuration essential.

Proxy configuration acts as a security barrier ensuring that the proxy server monitors all traffic between the Internet and the intranet.

This is normally an integral part of security enforcement in corporate firewalls within intranets.

- ① Go to Settings.
- ② Touch Network & Internet > Wi-Fi .
- ③ Slide the Wi-Fi switch to the On position.
- ④ In the network dialog box, select and touch a network.
- ⑤ If configuring the connected network, touch to edit the network details and then touch the down arrow to hide the keyboard.
- ⑥ Touch Advanced options.
- ⑦ Touch Proxy and select Manual.
- ⑧ In the Proxy hostname text box, enter the address of the proxy server.
- ⑨ In the Proxy port text box, enter the port number for the proxy server.
- ⑩ In the Bypass proxy for text box, enter addresses for web sites that are not required to go through the proxy server. Use a comma “,” between addresses. Do not use spaces or carriage returns between addresses.
- ⑪ If configuring the connected network, touch Save otherwise, touch Connect.
- ⑫ Touch Connect.

Wireless – Wireless Local Area Network

► WLAN Configuration

❖ Configuring the Device to Use as Static IP Address

By default, the device is configured to use Dynamic Host Configuration Protocol (DHCP) to assign an Internet protocol (IP) address when connecting to a wireless network.

- ① Go to Settings.
- ② Touch Network & Internet > Wi-Fi.
- ③ Slide the Wi-Fi switch to the On position.
- ④ In the network dialog box, select and touch a network.
- ⑤ If configuring the connected network, touch to edit the network details and then touch the down arrow to hide the keyboard.
- ⑥ Touch Advanced options.
- ⑦ Touch IP settings and select Static.
- ⑧ In the IP address text box, enter an IP address for the device.
- ⑨ If required, in the Gateway text box, enter a gateway address for the device.
- ⑩ If required, in the Network prefix length text box, enter the prefix length.
- ⑪ If required, in the DNS 1 text box, enter a Domain Name System (DNS) address.
- ⑫ If required, in the DNS 2 text box, enter a DNS address.
- ⑬ If configuring the connected network, touch Save otherwise, touch Connect.

Wireless – Wireless Local Area Network

► WLAN Configuration

❖ Wi-Fi Preferences

Use the Wi-Fi preferences to configure advanced Wi-Fi settings. From the Wi-Fi screen scroll down to the bottom of the screen and touch Wi-Fi preferences.

- ① Turn on Wi-Fi automatically - When enabled, Wi-Fi automatically turns back on when near high-quality saved networks.
- ② Open network notification - When enabled, notifies the user when an open network is available.
- ③ Additional settings - Touch to view additional Wi-Fi settings.
- ④ Advanced - Touch to expand options.
- ⑤ Additional settings - See Additional Settings.
- ⑥ Install Certificates – Touch to install certificates.
- ⑦ Wi-Fi Direct - Displays a list of devices available for a direct Wi-Fi connection.

❖ Wi-Fi Direct

Wi-Fi Direct devices can connect to each other without having to go through an access point.

Wi-Fi Direct devices establish their own ad-hoc network when required, letting you see which devices are available and choose which one you want to connect to.

- ① Go to Settings.
- ② Touch Wi-Fi > Wi-Fi preferences > Advanced > Wi-Fi Direct. The device begins searching for another Wi-Fi Direct device.
- ③ Under Peer devices, touch the other device name.
- ④ On the other device, select Accept.
- ⑤ Connected appears on the device. On both devices, in their respective Wi-Fi Direct screens, the other device name appears in the list.

Wireless – Bluetooth

Bluetooth-equipped devices can communicate without wires, using frequency-hopping spread spectrum (FHSS) radio frequency (RF) to transmit and receive data in the 2.4 GHz Industry Scientific and Medical (ISM) band (802.15.1). Bluetooth wireless technology is specifically designed for short-range (10 meters (32.8 feet)) communication and low power consumption.

Devices with Bluetooth capabilities can exchange information (e.g., files, appointments, and tasks) with other Bluetooth enabled devices such as printers, access points, and other mobile devices.

▶ Bluetooth Profiles

The device supports the following Bluetooth services

- ① Service Discovery Protocol (SDP) : Handles the search for known and specific services as well as general services.
- ② Serial Port Profile (SPP) : Allows use of RFCOMM protocol to emulate serial cable connection between two Bluetooth peer devices. For example, connecting the device to a printer.
- ③ Object Push Profile (OPP) : Allows the device to push and pull objects to and from a push server.
- ④ Advanced Audio Distribution Profile (A2DP) : Allows the device to stream stereo-quality audio to a wireless headset or wireless stereo speakers.
- ⑤ Audio/Video Remote Control Profile (AVRCP) : Allows the device to control A/V equipment to which a user has access. It may be used in concert with A2DP.
- ⑥ Personal Area Network (PAN) : Allows the use of Bluetooth Network Encapsulation Protocol to provide L3 networking capabilities over a Bluetooth link. Only PANU role is supported.
- ⑦ Human Interface Device Profile (HID) : Allows Bluetooth keyboards, pointing devices, gaming devices and remote monitoring devices to connect to the device.
- ⑧ Headset Profile (HSP) : Allows a hands-free device, such as a Bluetooth headset, to place and receive calls on the device.
- ⑨ Hands-Free Profile (HFP) : Allows car hands-free kits to communicate with the device in the car.
- ⑩ Dial-up Networking (DUN) : Allows the device to access the Internet and other dial-up services using a Bluetooth enabled mobile phone.
- ⑪ Out of Band (OOB) : Allows exchange of information used in the pairing process. Pairing is completed using the Bluetooth radio, but requires information from the OOB mechanism. Using OOB with NFC enables pairing when devices simply get close, rather than requiring a lengthy discovery process.

Wireless – Bluetooth

▶ Bluetooth Radio Power

Turn off the Bluetooth radio to save power or if entering an area with radio restrictions.

When the radio is off, other Bluetooth devices cannot see or connect to the device.

Turn on the Bluetooth radio to exchange information with other Bluetooth devices (within range).

Communicate only with Bluetooth radios in close proximity.

▶ Turning the Bluetooth radio On or Off

① Path : Settings > Connected devices > Connection preferences > Bluetooth

② Touch the Bluetooth OFF/ON toggle box off to turn the radio on.

③ Once the Bluetooth radio is activated, the device automatically starts searching for discoverable devices.

▶ Pairing and trusted devices

The device supports pairing with other devices using Bluetooth technology.

Pairing happens during general connection setup. Paired devices are "trusted" device.

This means that there is unrestricted access to all services (including services that require authorization and authentication).

Wireless – Bluetooth

▶ Connecting to other Bluetooth devices

The device can receive information from discovered devices without pairing. However, once paired, the device and a paired device exchange information automatically when the Bluetooth radio is on.

- ① Ensure that Bluetooth is enabled on both devices.
- ② Ensure that the Bluetooth device to discover is in discoverable mode.
- ③ Ensure that the two devices are within 10 meters (32.8 feet) of one another.
- ④ Swipe down from the Status bar to open the Quick Access panel.
- ⑤ Touch and hold Bluetooth.
- ⑥ Touch Pair new device. The device begins searching for discoverable Bluetooth devices in the area and displays them under Available devices.
- ⑦ Scroll through the list and select a device. The Bluetooth pairing request dialog box appears.
- ⑧ Touch Pair on both devices.
- ⑨ The Bluetooth device is added to the Paired devices list and a trusted (“paired”) connection is established.

▶ Changing the Bluetooth name

By default, the device has a generic Bluetooth name that is visible to other devices when connected.

- ① Go to Settings.
- ② Touch Connected devices > Connection preferences > Bluetooth.
- ③ If Bluetooth is not on, move the switch to turn Bluetooth on.
- ④ Touch Device name.
- ⑤ Enter a name and touch RENAME.

Wireless – Bluetooth

▶ Connecting to a Bluetooth device

Once paired, connect to a Bluetooth device.

- ① Go to Settings.
- ② Touch Connected devices > Connection preferences > Bluetooth.
- ③ In the list, touch the unconnected Bluetooth device. When connected, Connected appears below the device name.

▶ Selecting Profiles on the Bluetooth device

Some Bluetooth devices have multiple profiles.

- ① Go to Settings.
- ② Touch Connected devices > Connection preferences > Bluetooth .
- ③ In the Paired Devices list, touch next to the device name.
- ④ Turn on or off a profile to allow the device to use that profile.

▶ Unpairing a Bluetooth device

Unpairing a Bluetooth device erases all pairing information.

- ① Go to Settings.
- ② Touch Connected devices > Connection preferences > Bluetooth.
- ③ In the Paired Devices list, touch next to the device name.
- ④ Touch FORGET.

Settings – Ethernet

By default, the RP1600X is configured to obtain IP addresses automatically via DHCP server.

This means that in most cases you would simply plug-and-play the device.

- ▶ Connecting the device to the ethernet accessories

- ① Plug the ethernet accessories(ethernet cradle, 4 slot ethernet cradle, ethernet multigender) into the RJ45 connector on the back of the ethernet accessories.
- ② Plug the ethernet cable into the network.
- ③ When an Ethernet connection is established the status icon at the top of the screen

- ▶ Ethernet menu options

- ① Static IP

- ▶ Connect Ethernet.
- ▶ Path : Settings > Network & internet > Ethernet > Static IP
- ▶ Select Static IP under Connection Type, and then input the IP address and any additional information based on you network configuration.

Settings – Security

Use this Security settings to set a lock screen and change settings to secure your device.

Path : Settings > Security

▶ Screen lock

- ① None : The screen is unlocked at all times. When you press the Power button, the Home screen appears.
- ② Swipe : Drag the lock icon and release to unlock.
- ③ Pattern : Draw a pattern to unlock.
- ④ PIN : Enter a PIN to unlock.
- ⑤ Password : Enter a password to unlock.

▶ Configuring Credential Storage Settings

Configure credential storage from the device settings.

- ① Go to Settings.
- ② Touch Security > Encryption & credentials .
- ③ Select an option.
 - ▶ Touch Trusted credentials to display the trusted system and user credentials.
 - ▶ Touch User credentials to display user credentials.
 - ▶ Touch Install a certificate to install a secure certificate from the microSD card or internal storage.
 - ▶ Touch Clear credentials to delete all secure certificates and related credentials.

FCC compliance information

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.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

- This appliance and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.
- A minimum separation distance of 20 cm must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 RF, utilisateurs peut obtenir l'information anadienne sur l'exposition et la conformité de RF.

Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.