# RP1600

## Rugged and Professional Android Smartphone

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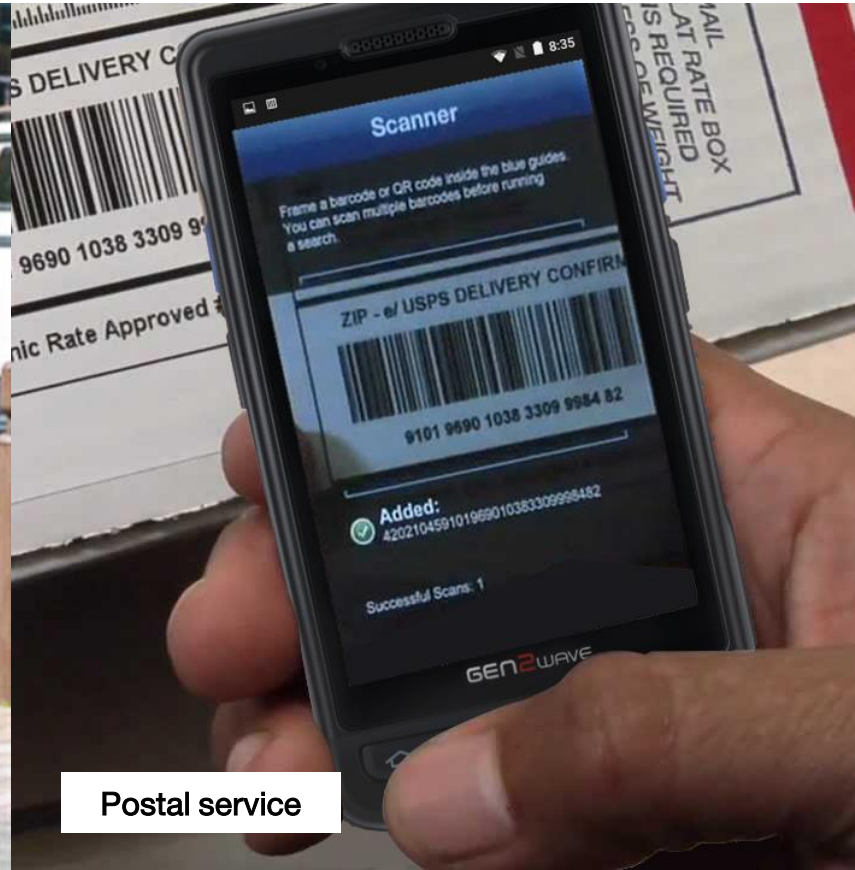
# The Rugged Smartphone armed with Octa-Core processor and Sizable RAM

**The RP1600 is powerful  smartphone with octa-core processor and 3GB RAM as well as various data capture options : Barcode, OCR, MSR, Contact & Contactless Smartcard and Fingerprint . The durability of the RP1600 ensures the performance is maintained all day, even in tough weather environment.  Work more effectively to serve your customer or citizen in various application field by using RP1600.  Work-ready and pocket-sized, RP1600 will bring ultimate mobility with true functionality.  This feature-rich RP1600 runs in Android 6.0 Marshmallow.  4.3inch display with compact, pocketable design enables users to carry it conveniently anywhere.  The RP1600 is valuable tool for field service operation, utility meter reading, law enforcement, sale force automation, postal service, retail shop operation, and healthcare.**

Parking enforcement




Postal service

# Octa-Core Platform Performance

**Latest Android platform with**

- **1.8GHZ 8-core Processor 1.8GHz (SAMSUNG Exynos)**
- **Android 6.0 Marshmallow**
- **3GB RAM, 16GB ROM**

  **which enables stable and speedy processing**

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# Comparison of Memory Size

| Model | Gen2Wave | Honeywell | Honeywell | Zebra | Zebra | Pidion |
|---|---|---|---|---|---|---|
| | RP1600 | CT50 | Dolphin 75e | TC75 | TC55 | BM180 |
| | | | | | | |
| RAM | 3GB | 2GB | 2GB | 1GB | 1GB | 1GB |
| ROM | 16GB | 16GB | 16GB | 8GB | 8GB | 8GB |

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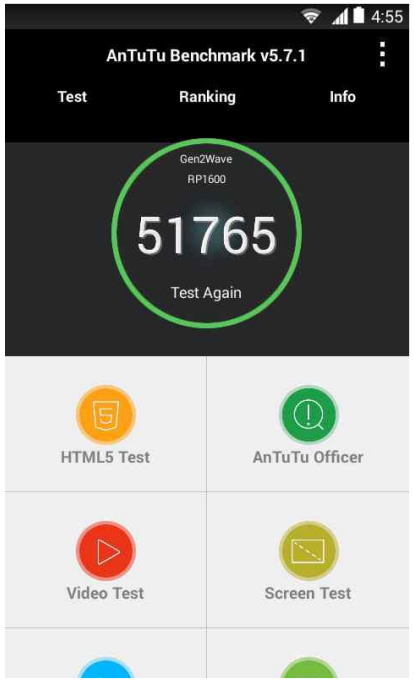
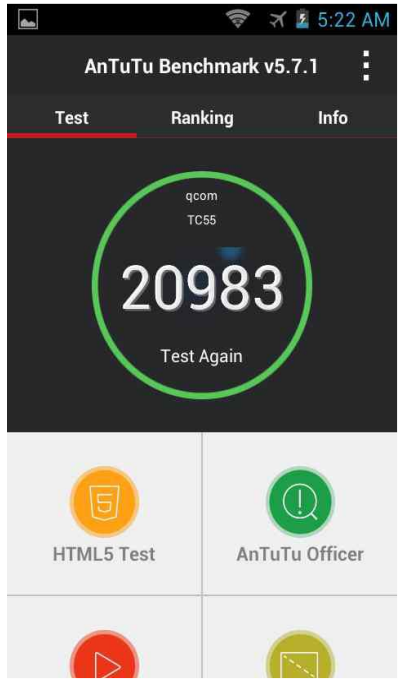
# Antutu Benchmarking Result

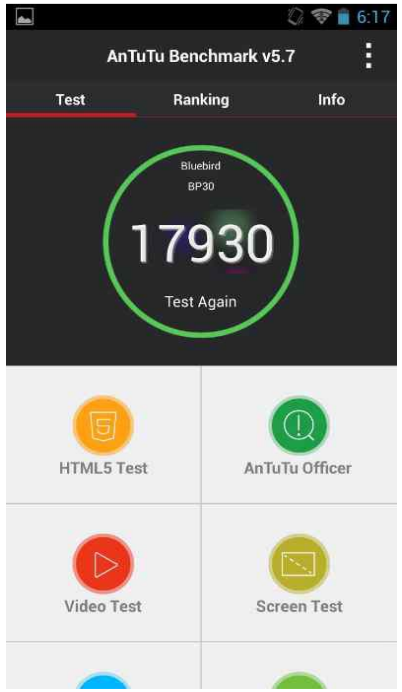
RP1600
Gen2Wave

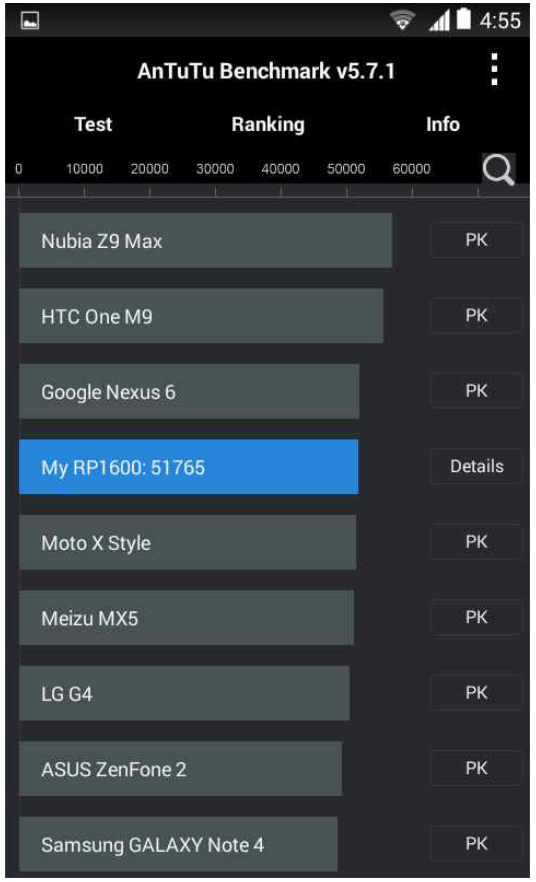
TC55
Zebra

BM180 / BP30
Pidion

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# 13.0 Mega Pixel High Resolution  Camera

# Accurate and Reliable Automatic Data Capture

NFC Reader

Built-in 1D/2D
Barcode Scanner

13MP Camera

Contact
Smartcard Reader

NFC Reader

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# Accurate & Reliable Barcode Scanning

**Lightening-fast, most advanced scan engine with longer range data capture capability.**

**Remarkable working range and wide field of view for distinguishing scanning flexibility.**

**1D Laser: Zebra SE965**

**2D Imager: Zebra SE4750**

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# Scanner Performance

| | 1D Scanner | | | 2D Imager | | |
|---|---|---|---|---|---|---|
| Model | Zebra SE965 | | | Zebra SE4750(SR Focus) | | |
| Decoding | Hardware decoder | | | Software decoder | | |
| Interface | Uart / Lager | | | MIPI / Image Resolution (1280 horizontal x 960 vertical pixels) | | |
| Typical Performance Narrow Width (1D Barcode) | Symbology | Near Distance | Far Distance | Symbology | Near Distance | Far Distance |
| | 5 mil (Code 128) | 3.05 cm (1.2 in) | 19.56 cm (7.7 in) | 3 mil (Code 39) | 7.1 cm (2.8 in) | 15.8 cm (6.2 in) |
| | 10 mil (Code 128) | 3.05 cm (1.2 in) | 48.26 cm (19 in) | 5mil (Code 128) | 5.8 cm (2.3 in) | 22.1 cm (8.7 in) |
| | 100 mil (Code 39) | 60.96cm (2 ft) | 518.16 cm (17 ft) | 20 mil (Code 39) | 4.1 cm (1.6 in) | 92/2 cm (36.3 in) |
| Typical Performance Narrow Width (2D Barcode) | | | | 5 mil (PDF 417) | 7.6 cm (3.0 in) | 20.6 cm (8.1 in) |
| | | | | 6.67 mil (PDF 417) | 5.6 cm (2.2 in) | 26.9 cm (10.6 in) |
| | | | | 10 mil (DataMatix) | 6.1 cm (2.4 in) | 26.0 cm (10.6 in) |

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# Pocketable and Rugged, IP 64 Waterproof, 1.5M Drop

**Dust, spilled coffee or raindrops are no match for RP1600. Born with toughness against dust and water, RP1600 is certified with IP64 sealing, 1.5 meter multitude drop resistant, and operating temperature of -20℃ to 60℃.**

**Both capacitive and resistive touch is available. The RP1600 is adequate to use in any challenging environments.**

IP64 sealing

Anti Shock Resistant
By 1.5m drop on Concrete

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Gorilla Glass 3 and Capacitive Touch Screen
The touch screen of RP1600 is equipped with 3rd generation Gorilla Glass
which provides utmost resistance against shock and scratch
With high sensitivity of the capacitive touch screen,
RP1600 allows to be operated with gloved hand, Stylus and bare hands.

# Reliable High Speed and Multimode Connectivity

**The RP1600 offers latest and advanced technology of connectivity options :**

| | |
|---|---|
| **4G LTE** | **Gemalto PLS8-E : LTE , HSPA+, EDGE, GPRS**<br>**LTE : 800, 900, 1800, 2600Mhz**<br>**HSPA+ : 900, 1800, 2100Mhz**<br>**GSM/GPRS/EDGE : 900, 1800Mhz** |
| **WLAN** | **IEEE 802.11 a/b/g/n/ac** |
| **Bluetooth** | **V4.2 BLE + HS (BT Headset support)** |
| **AGPS** | **A-GPS (Ublox-7 Series)** |

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# Technical Specification

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| Performance Characteristics | | |
|---|---|---|
| CPU | 1.8 GHz Octa-core processor (SAMSUNG Exynos) | |
| OS | Android 6.0 Marshmallow | |
| Memory | RAM 3GB, ROM 16GB | |
| **Physical Characteristics** | | |
| Dimensions | 147mm(H) X 78mm(W) X 21mm(D) | |
| Weight | 420 gram with standard battery<br>470 gram with extended battery (4000mAH) | |
| Display | 4.3 inch WVGA (Sunlight readable)/480 X800<br>(Capacitive touch, Resistive touch optional) | |
| Input | 5 Front Key / 5 Side key | |
| Battery | Standard battery | 2860mAh Li-ion<br>Contact Smart Card Reader (optional) |
| | Extended battery | 4000mAh Li-ion |
| | Built-in Backup Battery | 200mAh Li-Polymer<br>Hot-Swap available |
| Communication Interface | Host : USB2.0 High Speed<br>Client : USB 2.0 High Speed<br>External Serial RS232C<br>RJ45 Port (1Slot/4Slot Ethernet Cradle)<br>* Only USB Client operates when installing EID 10 PLUS | |
| Notification | Vibration and Charging LED, noise when certain icon is tapped on screen | |
| Audio | Speaker / Receiver / MIC | |
| Expansion Slot | Micro SD card(up to 32GB) | |

| User Environment | | |
|---|---|---|
| Operation Temp. | -20 ℃ ~ +60 ℃ (-4˚F~140˚F) | |
| Storage Temp. | -30 ℃ ~ +70 ℃ (-22˚F ~158˚ F) | |
| Humidity | Non-condensing, 93% | |
| Sealing | IP64 | |
| Drop Spec. | 1.5M drop to concrete | |
| **Wireless Communication** | | |
| Wireless(WWAN) | Gemalto PLS8-E : LTE, HSPA+, EDGE, GPRS<br>LTE : 800, 900, 1800, 2600Mhz<br>HSPA+ : 900, 1800, 2100Mhz<br>GSM/GPRS/EDGE : 900, 1800Mhz | |
| Wireless LAN | IEEE 802.11 a/b/g/n/ac | |
| Bluetooth | Bluetooth V4.2 BLE + HS (BT Headset support) | |
| GPS | A-GPS (Ublox-7 Series) | |
| **Data Capture** | | |
| Barcode Scanner | 1D Laser | 2D Imager |
| | Zebra SE965 | Zebra SE4750 |
| Camera | 13.0MP Auto Focus, Flash | |
| **Accessory** | | |
| Standard Accessories | All in the Giftbox<br>(Desktop Cradle, PSU, USB Cable, Stylus, Screen Protector) | |

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# Accessories

| | | | |
|---|---|---|---|
| Desktop cradle with<br>USB Type A and B<br>(Single Slot Cradle)<br>**SDTC-RP1000-UX** | | Direct auto charger Kit<br>**CLJC-02** | |
| Desktop cradle with<br>USB Type A and B, and Ethernet<br>(Single Slot Cradle)<br>**SDTC-RP1000-UE** | | Multi- gender Snap On<br>for Ethernet (RJ-45),<br>Auto-charge, Direct<br>cable charge, USB Client,<br>Ear-phone connector<br>**MTG-RP1000-UE** | |
| Ethernet 4 slot cradle with PSU<br>(4 slot Cradle)<br>**4DTC-RP1000-UE** | | Direct Adaptor Cable<br>For Serial Connection/<br>USB Host/Headset<br>**CAT-RP1000-CSM** | |
| Vehicle Cradle Charging &<br>RS232 connection with<br>suction fixation kit<br>**VC-RP1000-CS** | | Scanning Handle<br>**SH-RP1000** | |

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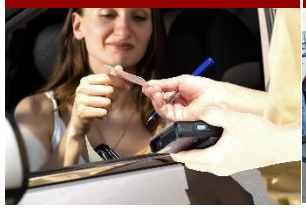
# Mobile Biometric & ID reader  EID10 Plus

## EID10Plus combined with RP1600 enables all kinds of ID verification

**: OCR(MRZ), MRS, Fingerprint Reader, Contact-type smartcard, NFC, Barcode Reader.**

**EID10 Plus  will be a great tool for law enforcement, benefit delivery, and any kind of Mobile ID verification .**

| Law Enforcement | Airports | ID in Healthcare | Benefit Delivery |
|---|---|---|---|
|  | | | |

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# Key Supporting Tools

1. G2W Auto Setup
2. G2W KIOSK
3. OTA
4. Device Self Test
5. Extended Wifi Setting
6. Barcode Scanner Emulator

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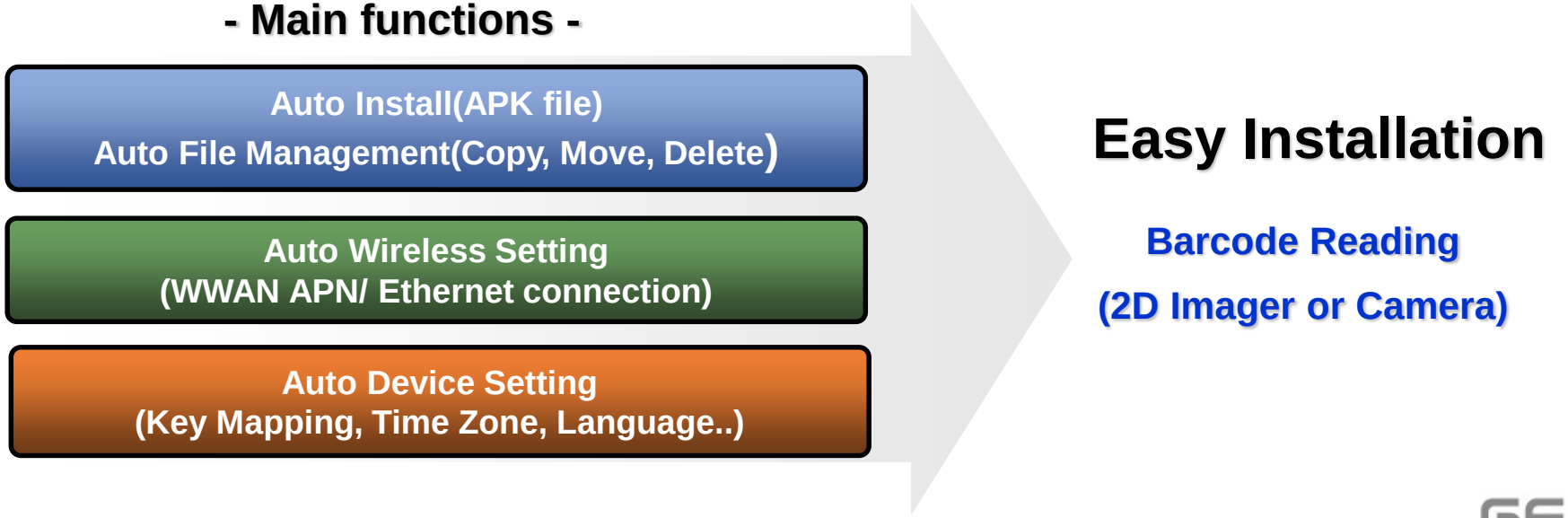
# 1. G2W Auto Setup

**Powerful tool to automatically install applications and configure identical settings to multiple devices in an efficient way**

**Make your device setting with G2W Auto Setup and apply it by easy & convenient way**

- **PC-based editing program provided**
- **Simple QR code scanning to install custom device settings**
- **Customer APPLICATION to multiple devices**

**- Main functions -**

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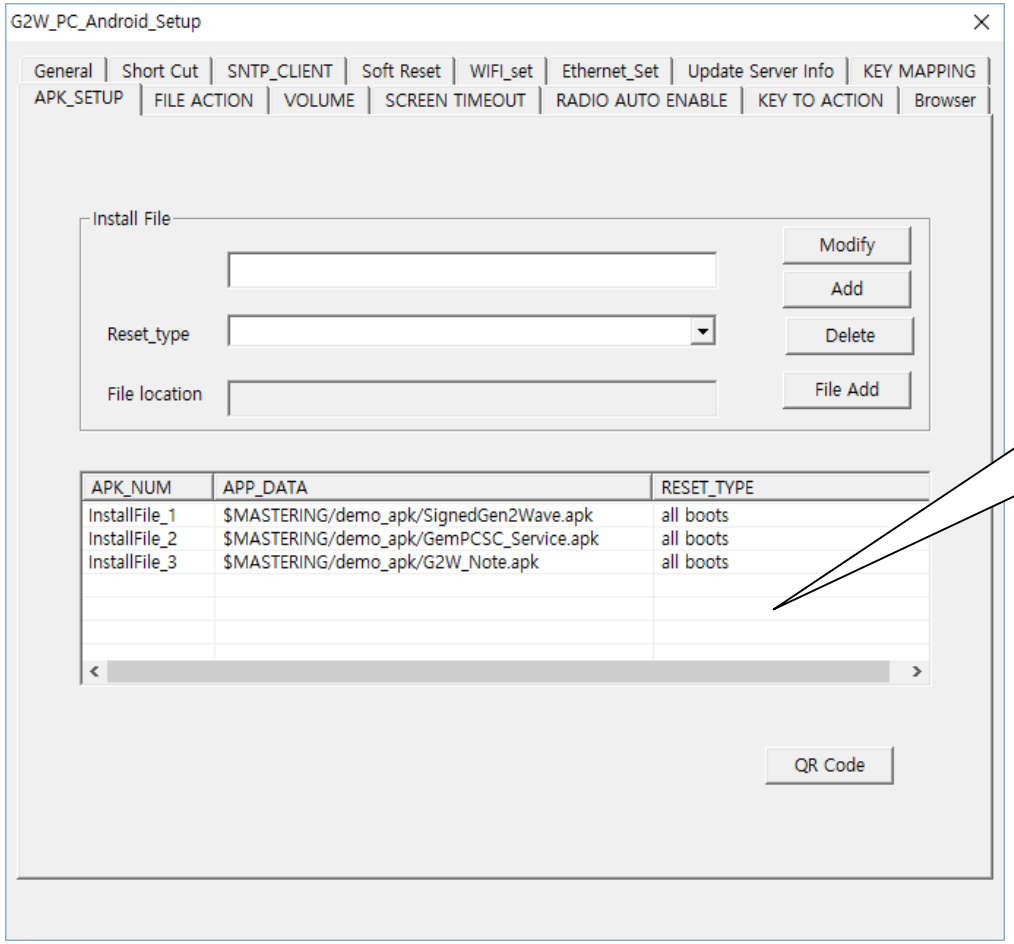
# 1. G2W Auto Setup
## PC-based Easy & Convenient Setting Editor




o make your own custom settings
o register all applications and drivers you need to install

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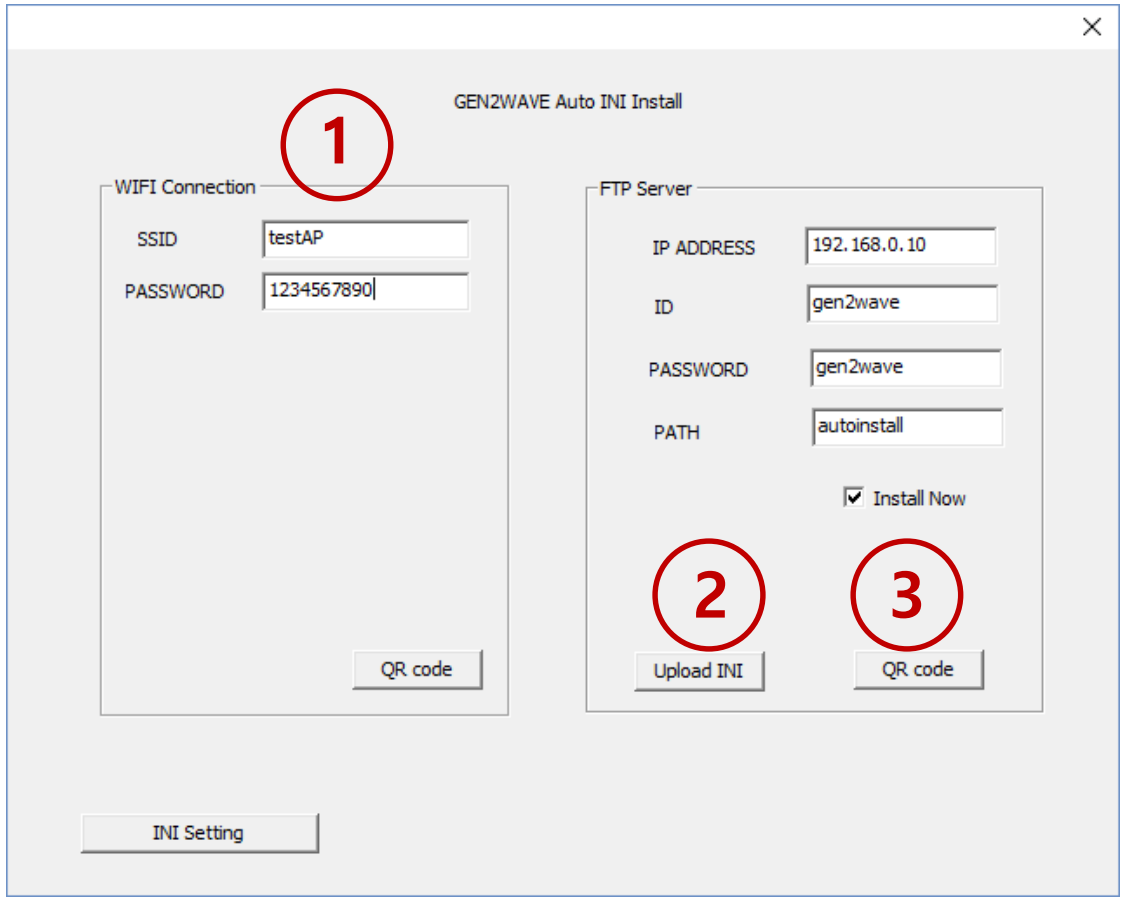
# 1. G2W Auto Setup
## Automatic network establishment & Applying Custom Settings




I. Set network connection info for devices
II. Upload Auto Setup/Customer APK
- FTP Server
III. Create QR code

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# 1. G2W Auto Setup

I. Scan QR code
II. Automatic connection to FTP server
III. Automatic download for Auto Setup & APK
IV. Automatic installation

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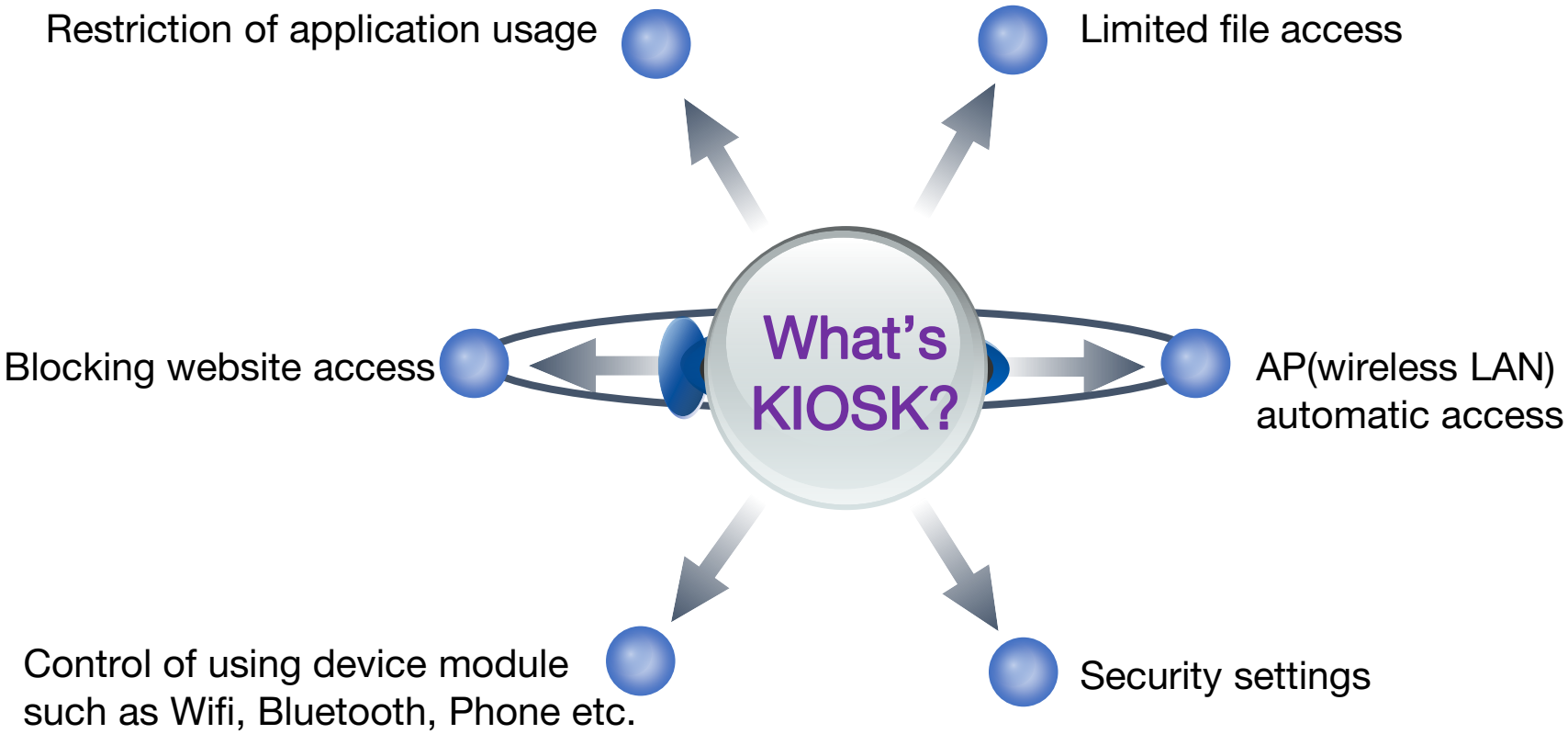
# 2. G2W Kiosk

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# 2. G2W Kiosk

User can access designated applications only

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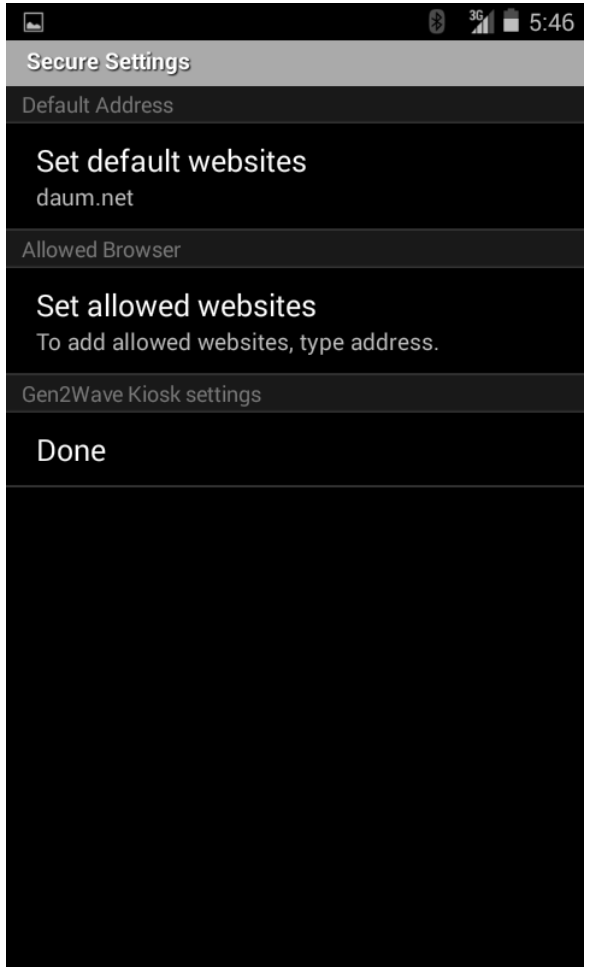
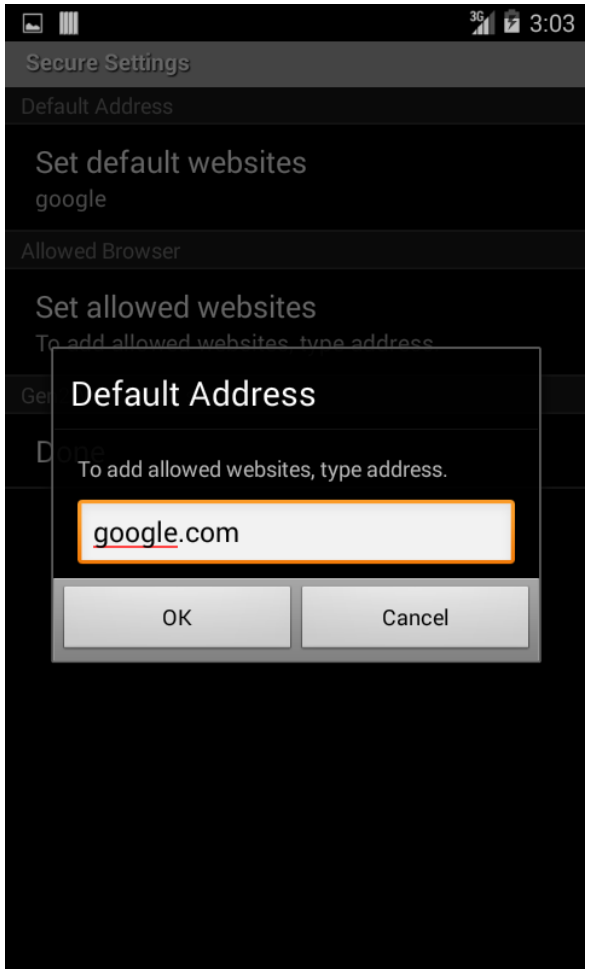
# 2. G2W Kiosk

## Only Registered Website accessible

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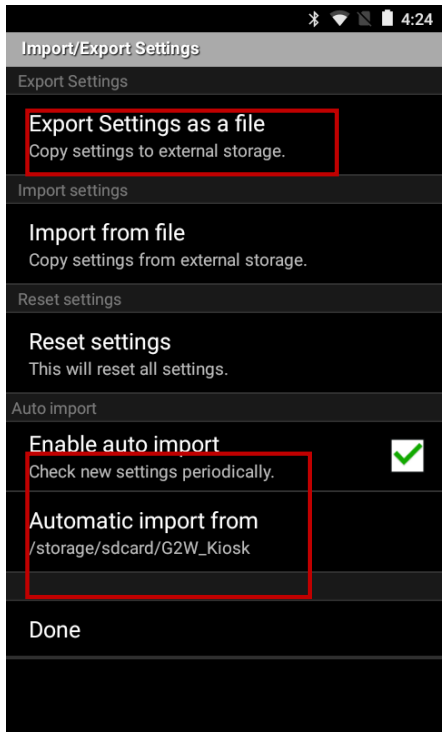
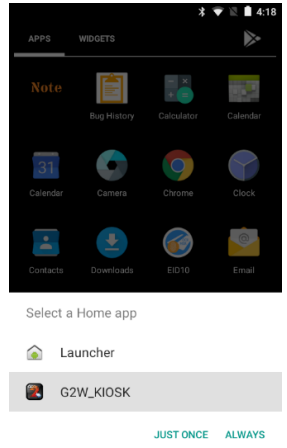
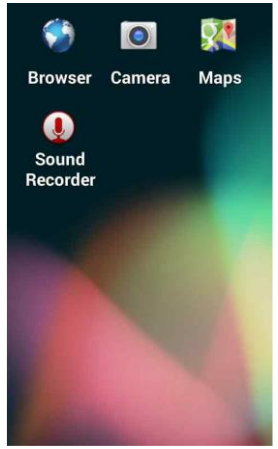
# 2. G2W Kiosk
## Easy Apply

I. Make your own Kiosk setting in your device
II. Export the setting file to PC Upload it to FTP server
III. QR code scanning in “G2W Auto Setup”
IV. Setting applied automatically.



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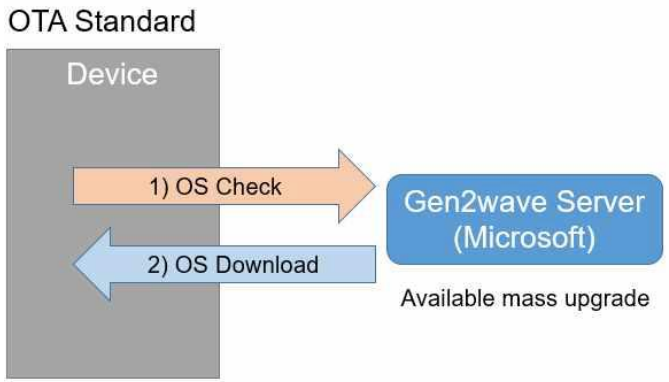
# 3. OTA

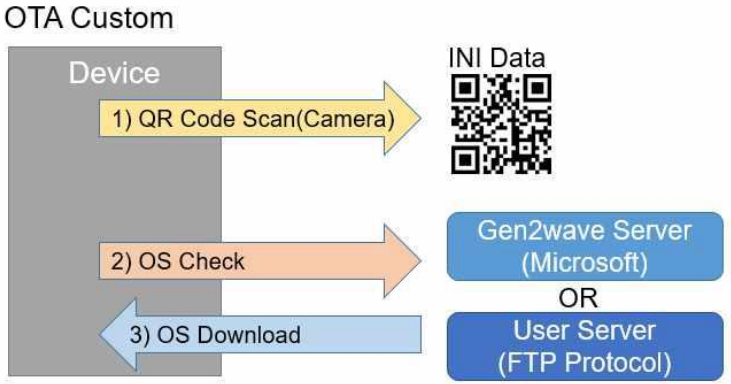
## OTA Upgrade

### Stable & Secure Server system

supported by “Microsoft Azure Cloud” enabling mass update simultaneously
speedy download using the server located in Europe
Operation of customer’s own FTP server system supported




**AdmAuto Setupstrator use Only**




1) INI Data(QR Code)
- IP address, Port, OS Path, ID, PW

2) Server Data
- OS Image(user path)
- XML File(OS version, apply type, OS name…)

[Remark]
No need to scan QR code in case that OTA network setting is made in Auto Setup.

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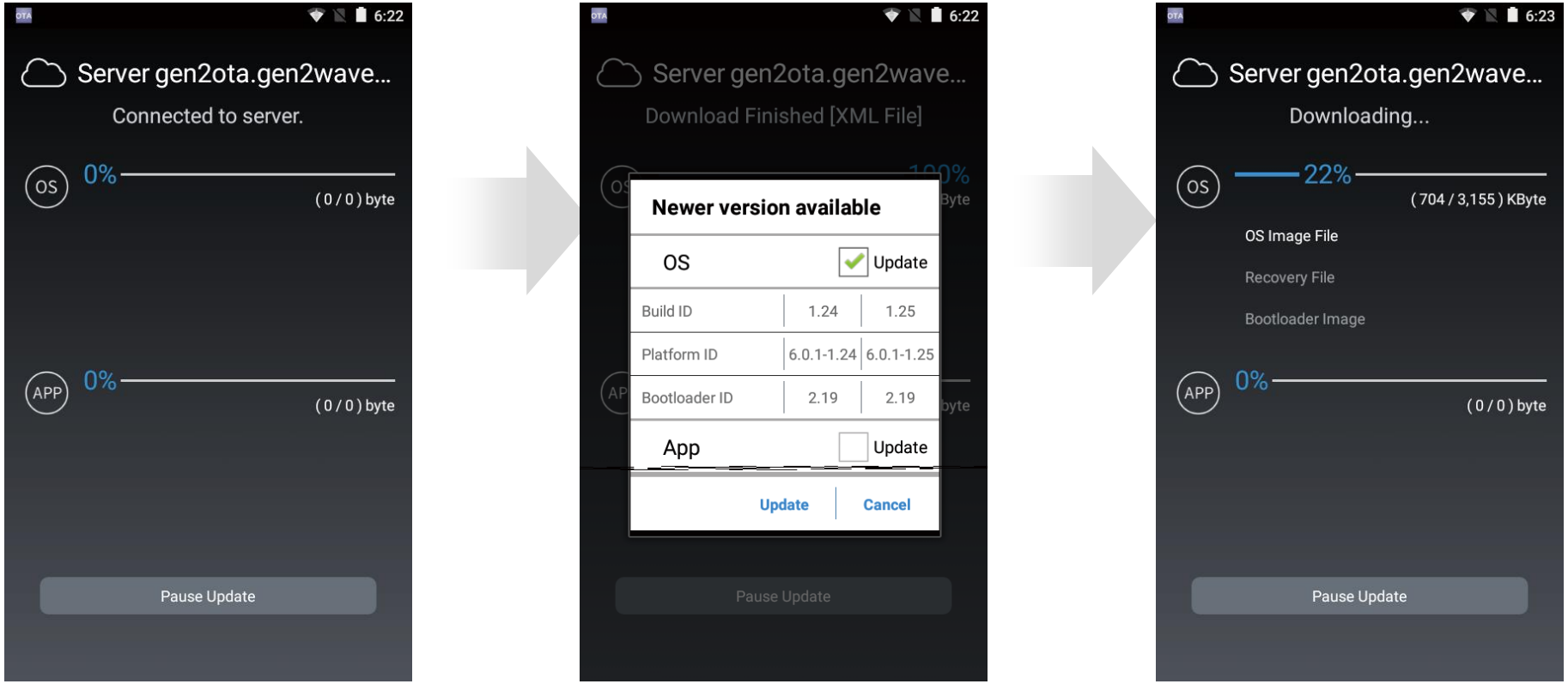
# 3. OTA

## OTA Windows for Individual Users

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# 4. Device Self Test

When devices are malfunctioning,
users can easily diagnose their devices by themselves using the self-test program

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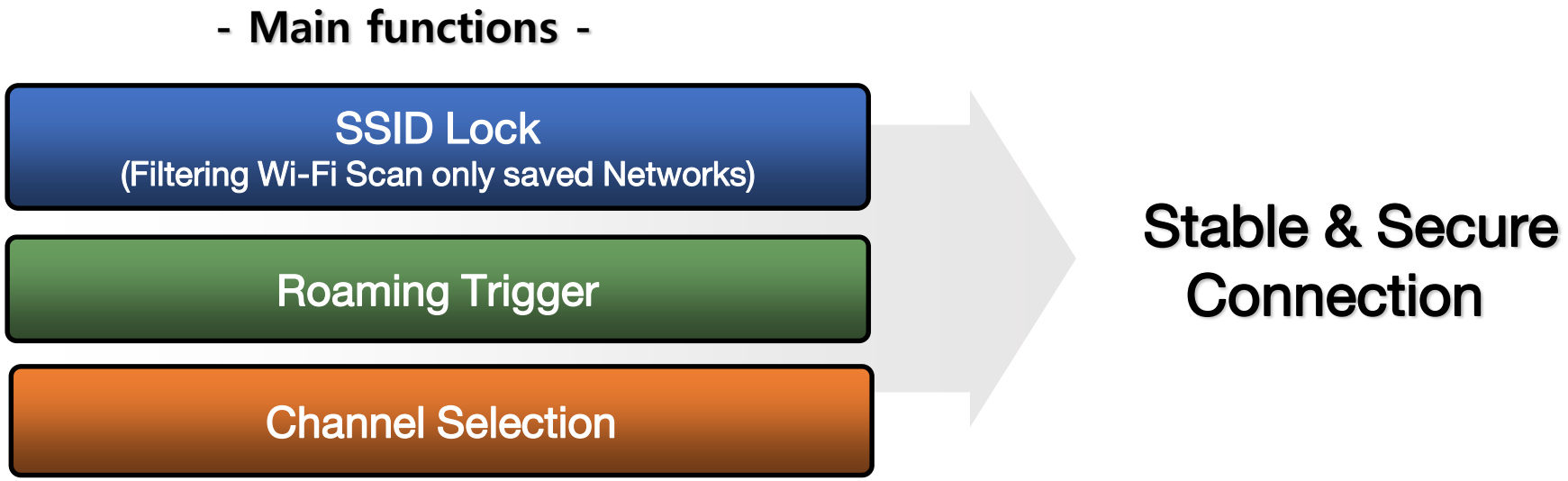
# 5. Extended WI-FI Settings

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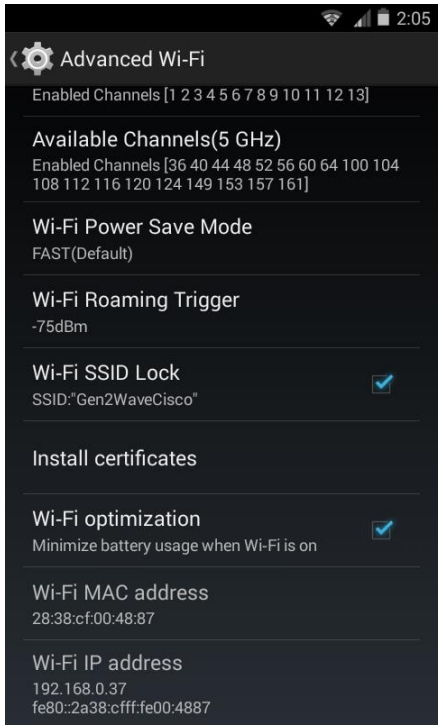
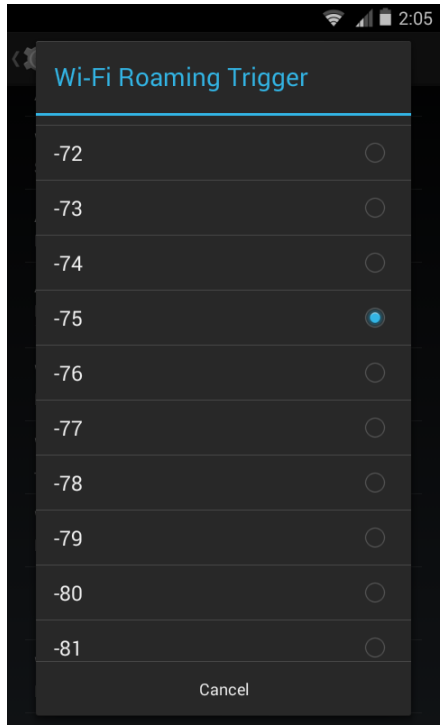
# 5. Extended WI-FI Settings

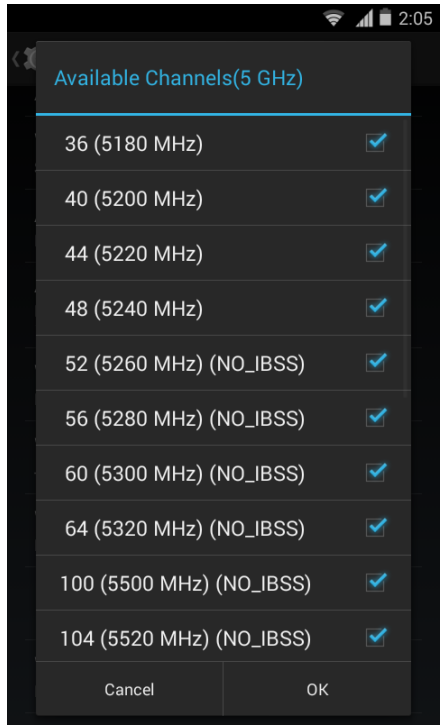
## SSID Lock




## Roaming Trigger




## Channel Select

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# 6. Barcode Scanner Emulator

Extended Functions for easy & efficient scanner use

- Main functions -

Various Functions
(Clipboard/Direct, Prefix/Suffix,
Vibration, Multi Reading, Easy Symbology Setting)

Easy / Convenient

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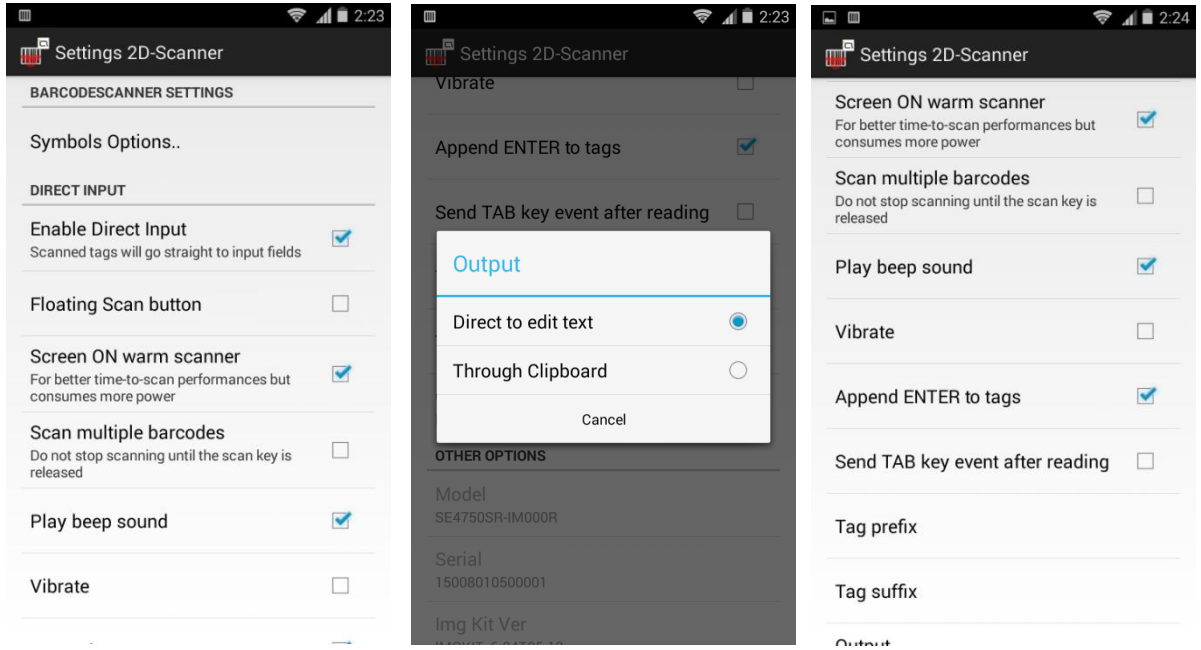
# 6. Barcode Scanner Emulator

## Convenient Functions

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# Key Differentiator of RP1600

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# Key Differentiator of RP1600

- **Powerful Processor & Sizable RAM**
- **Professional Supporting Tools**
- **Full-range of Accessories**

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# Application

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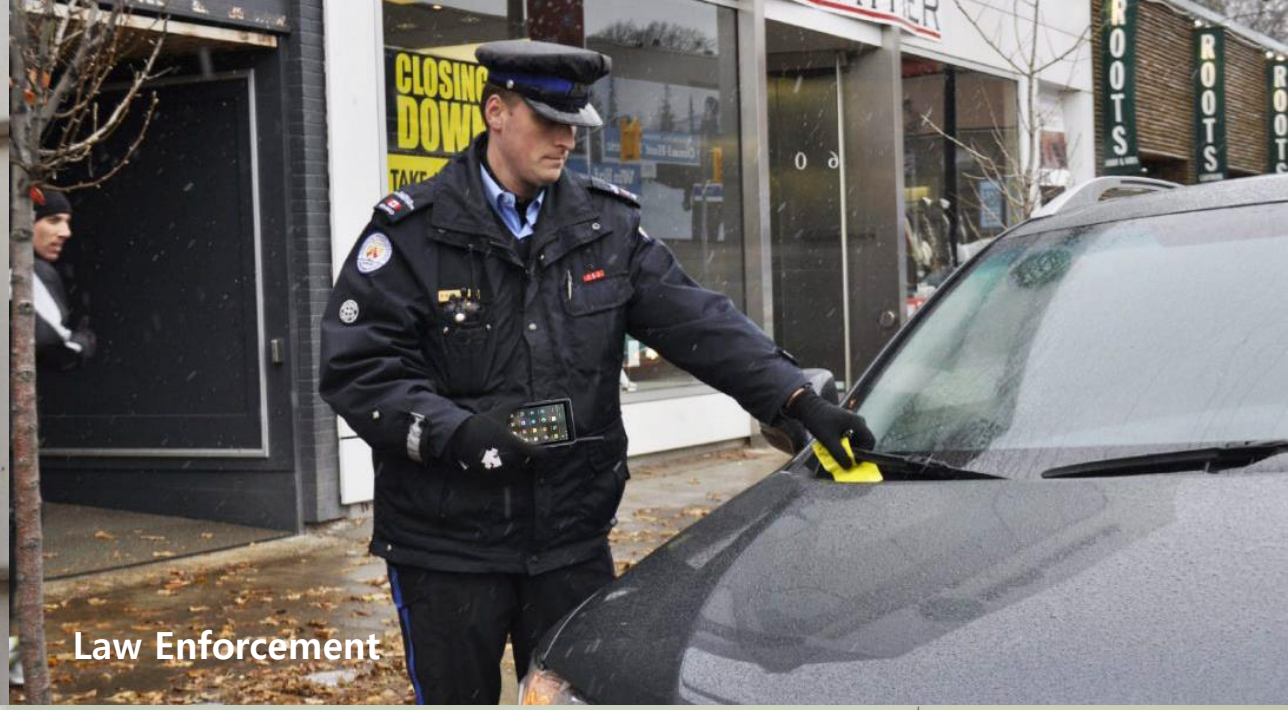
Meter Reading




Law Enforcement

Logistics

Transportation

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