



**MODEL:
MODAT-531**

**5.3" Mobile Data Collector with Quad-Core ARM® Cortex®-A7
1.2 GHz CPU, Android 4.2.2 OS, Capacitive Touchscreen, 3.75G,
Bluetooth 4.0 LE, 802.11b/g/n Wi-Fi, 1D/2D Barcode Scanner,
GPS, NFC, 8-Megapixel Camera, IP 67, RoHS Compliant**

User Manual

Revision

| Date | Version | Changes |
|--------------------|---------|-----------------|
| September 11, 2014 | 1.00 | Initial release |

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Chapter

1

Introduction

1.1 Overview



Figure 1-1: MODAT-531

The MODAT-531 is an Android-based mobile data collector with a 5.3" touchscreen. At the heart of the system is the quad-core ARM[®] Cortex[®]-A7 1.2 GHz CPU. Wireless communication technologies include 802.11b/g/n Wi-Fi, Bluetooth 4.0 LE and 3.75G. Other peripherals include an 8-megapixel camera, a 1D/2D barcode scanner, a microSD card slot, a Micro USB port, a headset jack and a speaker.

1.2 Features

Some of the MODAT-531 features include:

- 5.3" LCD with capacitive touchscreen
- Quad-core ARM[®] Cortex[®]-A7 1.2 GHz CPU
- Android 4.2.2 OS
- 8-megapixel camera with flashlight
- Bluetooth 4.0 LE, 802.11b/g/n Wi-Fi and 3.75G wireless communication technologies
- Built-in GPS with internal antenna
- 1D/2D barcode scanner

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- IP 67 protection
- RoHS compliant

1.3 Front Panel

The front panel of the MODAT-531 has a 5.3" LCD with capacitive touchscreen, a receiver, a microphone and a LED indicator.

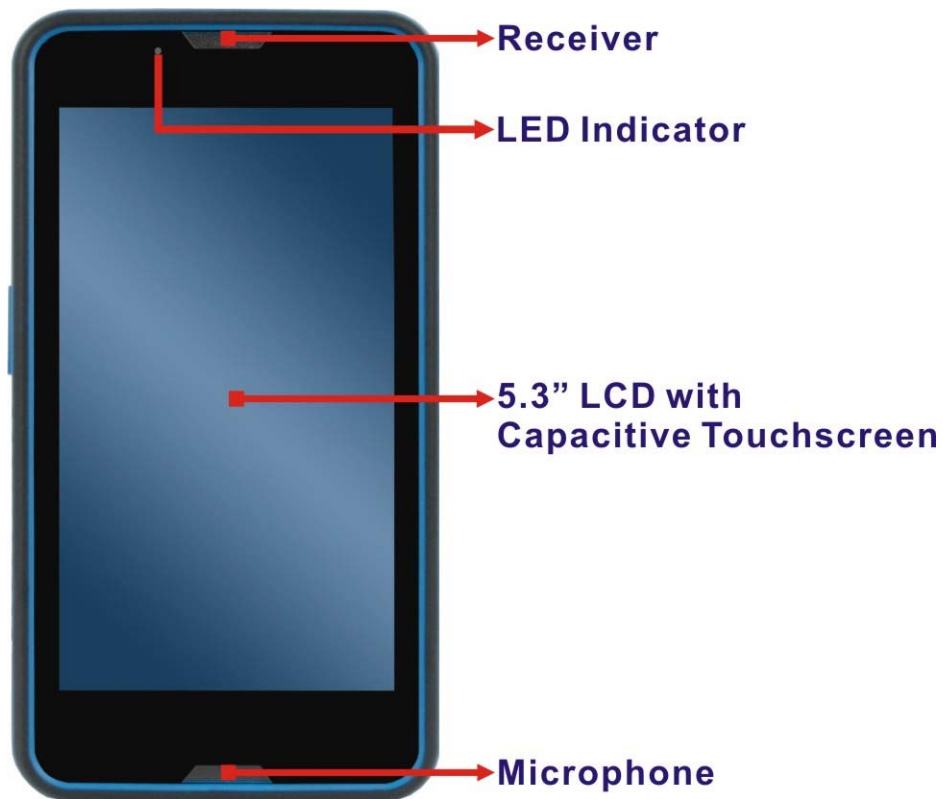


Figure 1-2: Front Panel

1.4 Rear Panel

The rear panel consists of an 8-megapixel camera with flashlight, a speaker, a microphone and the NFC area.



Figure 1-3: Rear Panel

MODAT-531 Mobile Data Collector

1.5 Side Panels

The side panels contain a power button, two barcode trigger buttons and a Micro USB port.

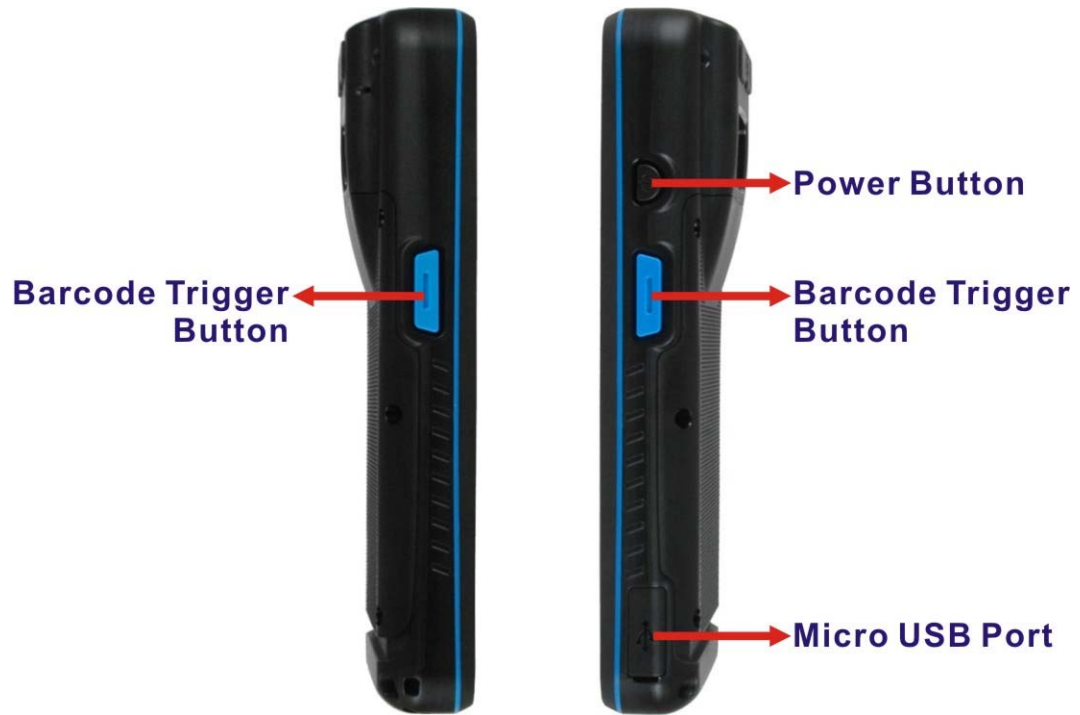


Figure 1-4: Side Panel

1.6 Top Panel

The top panel contains a 1D/2D barcode scanner and a headset jack.

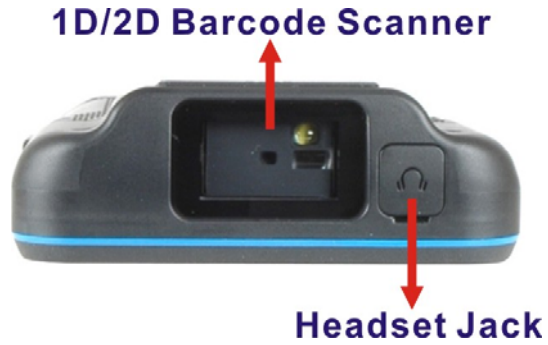


Figure 1-5: Top Panel

1.7 Bottom Panel

The bottom panel has a docking connector



Figure 1-6: Bottom Panel

MODAT-531 Mobile Data Collector

1.8 Technical Specifications

The MODAT-531 technical specifications are listed in the table below.

| Display | |
|---------------------------------|--|
| LCD Size | 5.3" |
| Brightness (cd/m ²) | 350 |
| Max. Resolution | 480 (H) x 854 (V) |
| Viewing Angle | 70/70/70/70 degree |
| Touchscreen | 5-point capacitive |
| System | |
| CPU | Quad-core ARM [®] Cortex [®] -A7 1.2 GHz |
| Operating System | Android 4.2.2 |
| Memory | 4 GB eMMC 1 GB LPDDR2 |
| Storage | 1 x microSD card slot (up to 32 GB) |
| Communication | |
| Wi-Fi | 802.11b/g/n |
| Bluetooth | Bluetooth 4.0 LE |
| Modem | GSM 850/900/1800/1900 WCDMA 850/2100 (HSPA+, HSDPA 42 Mbps, HSUPA 11.5 Mbps) (optional) |
| GPS | GPS |
| Data Collection | |
| Barcode | 1D/2D imager scan engine |
| Camera | 8-megapixel AF rear camera with flashlight |
| NFC | Yes |
| Indicator and Buttons | |
| LED Indicator | Battery charging (red)/fully charged (green) |

| | |
|-------------------------------------|---|
| Buttons | Power button 2 x Barcode trigger buttons |
| Sensors | |
| Magnetometer | Yes |
| Gravity Sensor | Yes |
| I/O Interface | |
| Audio | 1 x Headset jack 2 x Microphone 1 x Receiver 1 x Speaker (0.5 W) |
| USB | 1 x High-speed Micro USB 2.0 port |
| Power | |
| Power Adapter | 5V, 2.6A |
| Battery | 3900mAh |
| Environment | |
| Operating Temperature | -10°C ~ 55°C |
| Storage Temperature | -20°C ~ 60°C |
| Battery Charging Temperature | 0°C ~ 45°C |
| Humidity | 5% ~ 95%, non-condensing |
| Drop Survival | 1.2 m |
| Environment Protection | IP 67 |
| Certification | CE (Class A: Telecommunication centers only) |
| Physical Characteristics | |
| Dimensions (LxWxH) | 160.9 mm x 85.4 mm x 28.85 mm |
| Weight | 386 g |

Table 1-1: Technical Specifications

MODAT-531 Mobile Data Collector

1.9 Dimensions

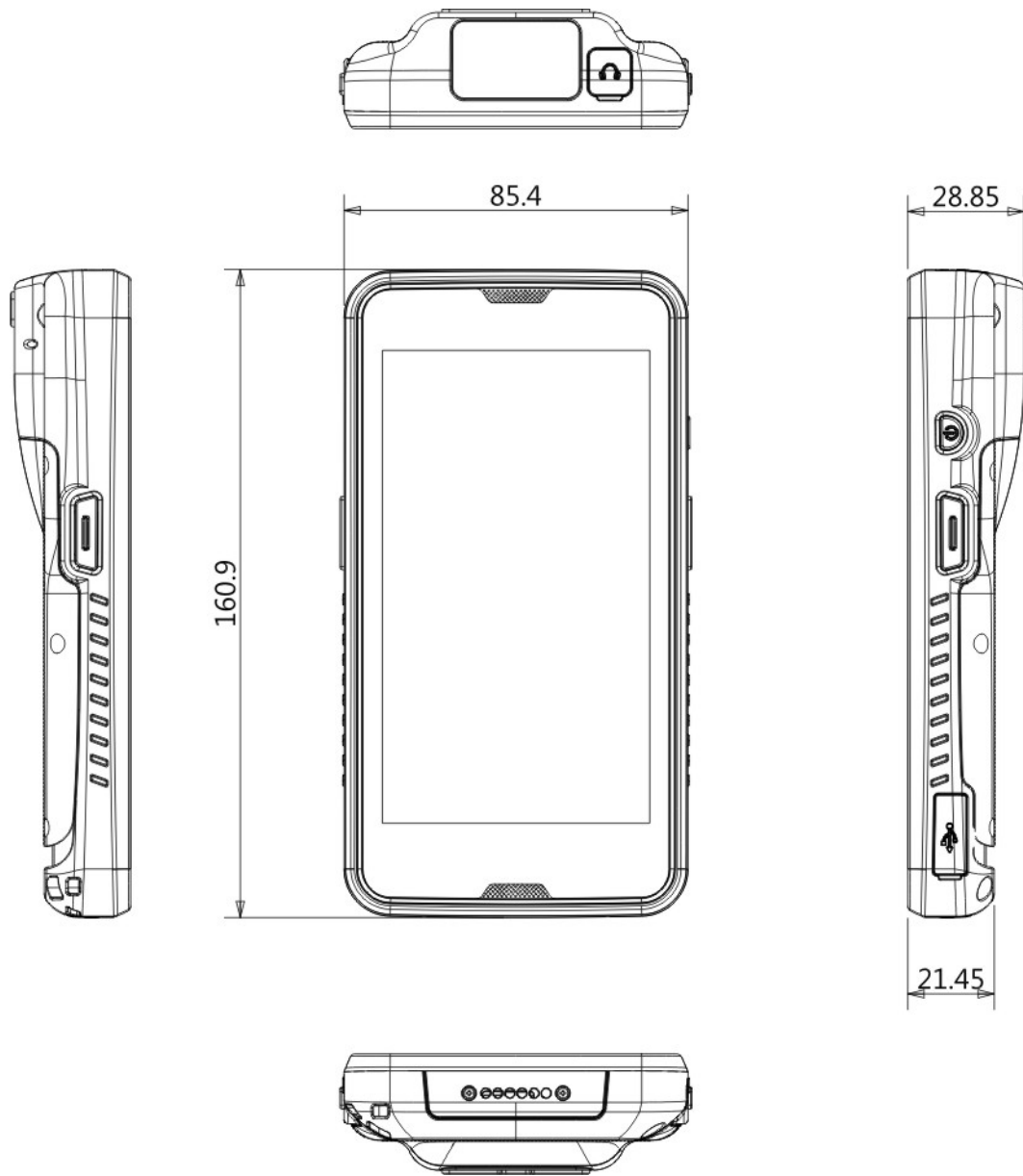


Figure 1-7: Dimensions (units in mm)

Chapter

2

Unpacking

MODAT-531 Mobile Data Collector

To unpack the MODAT-531, follow the steps below:



WARNING!

Only remove the protective plastic cover stuck to the front screen after installation. The plastic layer protects the monitor surface during installation process.

Step 1: Carefully cut the tape sealing the box. Only cut deep enough to break the tape.

Step 2: Open the box.

Step 3: Lift the MODAT-531 out of the box.

Step 4: Pull the plastic cover off the MODAT-531.

Step 5: Make sure all the components listed in the packing list are present.

The MODAT-531 is shipped with the following components. If any of these items are missing or damaged, contact the distributor or sales representative immediately.

| Quantity | Item | Image |
|----------|---|--|
| 1 | MODAT-531 |  |
| 1 | Power adapter (P/N: 63040-290013-000-RS) |  |
| 1 | Micro USB cable (P/N: 32001-014300-100-RS) |  |


| Quantity | Item | Image |
|----------|--------------------------------------|--|
| 1 | Hand strap (P/N: 46035-000300-RS) |  |

Table 2-1: Packing List

Chapter

3

Installation

3.1 Anti-static Precautions

**WARNING:**

Failure to take ESD precautions during the maintenance of the MODAT-531 may result in permanent damage to the MODAT-531 and severe injury to the user.

Electrostatic discharge (ESD) can cause serious damage to electronic components, including the MODAT-531. Dry climates are especially susceptible to ESD. It is therefore critical that whenever the MODAT-531 is accessed internally, or any other electrical component is handled, the following anti-static precautions are strictly adhered to.

- ***Wear an anti-static wristband:*** - Wearing a simple anti-static wristband can help to prevent ESD from damaging the board.
- ***Self-grounding:*** - Before handling the board touch any grounded conducting material. During the time the board is handled, frequently touch any conducting materials that are connected to the ground.
- ***Use an anti-static pad:*** - When configuring the MODAT-531, place it on an anti-static pad. This reduces the possibility of ESD damaging the MODAT-531.
- ***Only handle the edges of the PCB:*** - When handling the PCB, hold the PCB by the edges.

3.2 Installation Precautions

When installing the MODAT-531, please follow the precautions listed below:

- **Power turned off:** When installing the MODAT-531, make sure the power is off. Failing to turn off the power may cause severe injury to the body and/or damage to the system.
- **Certified Engineers:** Only certified engineers should install and modify onboard functionalities.

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- **Anti-static Discharge:** If a user open the rear panel of the MODAT-531, to configure the jumpers or plug in added peripheral devices, ground themselves first and wear an anti-static wristband.

3.3 Charging the System

To start using the MODAT-531, the user must charge the MODAT-531 by the power adapter. To charge the MODAT-531, please follow the steps below.

Step 1: Open the protective rubber cover to expose the Micro USB port.



Figure 3-1: MODAT-531 Micro USB Port

Step 2: Connect the Micro USB plug of the Micro USB cable to the Micro USB connector of the MODAT-531 (**Figure 3-2**).



Figure 3-2: Connecting the Micro USB Cable to the MODAT-531

Step 3: Connect the other end of the Micro USB cable to the USB connector of the power adapter (**Figure 3-3**).

Then plug the power adapter to a power source.

OR connect the Micro USB cable directly to a computer.



Figure 3-3: Connecting the MODAT-531 to the Power Adapter

Step 4: The LED indicator on the front panel lights up in red to indicate that the battery is charging. When the battery is fully charged, the LED indicator turns green.

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3.4 SIM Card Installation

Follow the steps below to install a SIM card.

Step 1: Release the six retention screws that secure the battery cover to the MODAT-531.



WARNING:

Before removing the battery cover, make sure that the system power is turned off and all power to the system has been disconnected. Failing to do so may cause severe damage to the MODAT-531 and injury to the user.



Figure 3-4: Battery Cover Retention Screws

Step 2: Lift the battery cover up to remove.

Step 3: Remove the battery (**Figure 3-6**).



Figure 3-5: Removing the Battery

Step 4: Locate the SIM card slot and insert a SIM card into it (**Figure 3-6**).



Figure 3-6: SIM Card Installation

3.5 microSD Card Installation

This section covers the installation of a microSD card.

Step 1: Refer to **Step 1 ~ Step 2** in **Section 3.4** to remove the battery cover.

Step 2: Locate the microSD card slot and insert a microSD card into it.

MODAT-531 Mobile Data Collector



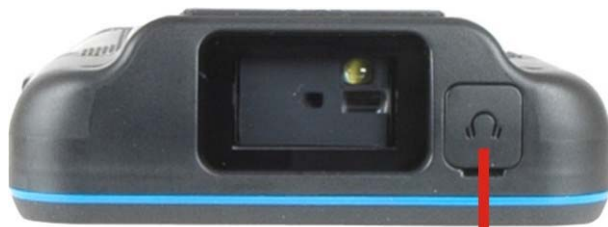
Figure 3-7: microSD Card Slot

3.6 I/O Connectors

The I/O connectors are protected by a rubber cover. Open the rubber cover before connecting any peripheral devices to the MODAT-531.

3.6.1 Headset Jack

The headset jack on the top panel enables the MODAT-531 to be connected to a headset. Open the protective rubber cover to expose the headset jack before connection.



Headset Jack

Figure 3-8: MODAT-531 Headset Jack

3.6.2 Micro USB Connector

The MODAT-531 is equipped with a Micro USB connector that allows connection to a computer or the supplied power adapter. Refer to **Step 1 ~ Step 3** in **Section 3.3** to connect the MODAT-531 to a computer or power adapter by using the supplied Micro USB cable.

When the MODAT-531 is connected to a computer, the screen in **Figure 3-9** should be displayed on the MODAT-531. Tap **Turn on USB storage** to allow the connected computer to recognize the MODAT-531 and assign it a drive letter. Then the user can transfer files between them.

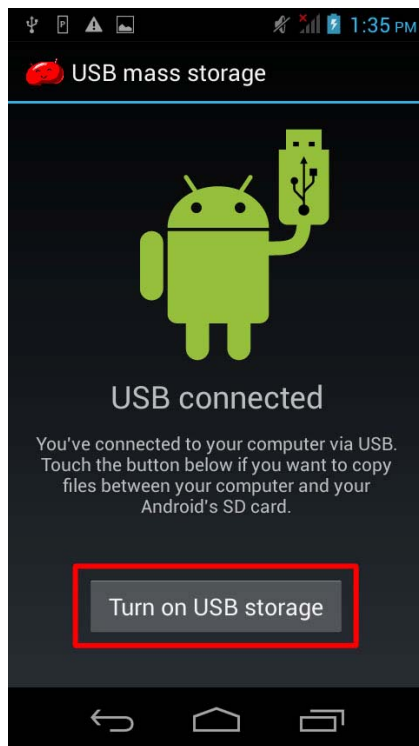


Figure 3-9: USB Mass Storage Screen

3.7 System Maintenance

If the components of the MODAT-531 fail, they must be replaced. Please contact the system reseller or vendor to purchase the replacement parts.



NOTE:

A user cannot replace a motherboard. If the motherboard fails it must be shipped back to IEI to be replaced. Please contact the system vendor, reseller or an IEI sales person directly.

Chapter

4

Using the MODAT-531

MODAT-531 Mobile Data Collector

4.1 Powering On/Off

To power on/off the MODAT-531, please follow the steps below:

- **Powering On:** Press the power button until the start-up screen displays.



Figure 4-1: Power Button

- **Powering Off:** Press and hold the power button until the option menu as shown in Figure 4-2 appears. Tap **Power off** > **OK** to turn off the MODAT-531.

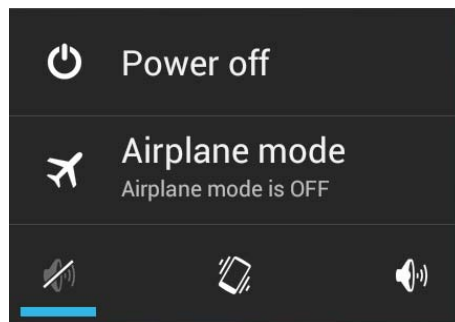


Figure 4-2: Option Menu



NOTE:

When the MODAT-531 is powered on, press the power button once to suspend the MODAT-531 or to resume from the suspend mode.

4.2 Home Screen

The MODAT-531 has multiple home screens allowing users to customize the screen with widgets, apps, folders and shortcuts. The following sections describe the basic technique to manage the home screen.

4.2.1 Switching between Home Screens

Swipe left or right to switch between home screens.




Figure 4-3: Multiple Home Screens

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4.2.2 Favorites Tray

The Favorites tray at the bottom of each home screen allows users to keep the most important or frequently used shortcuts and folders.

Tap the  (All Apps) button at the center of the Favorites Tray to access the launcher/widget page.

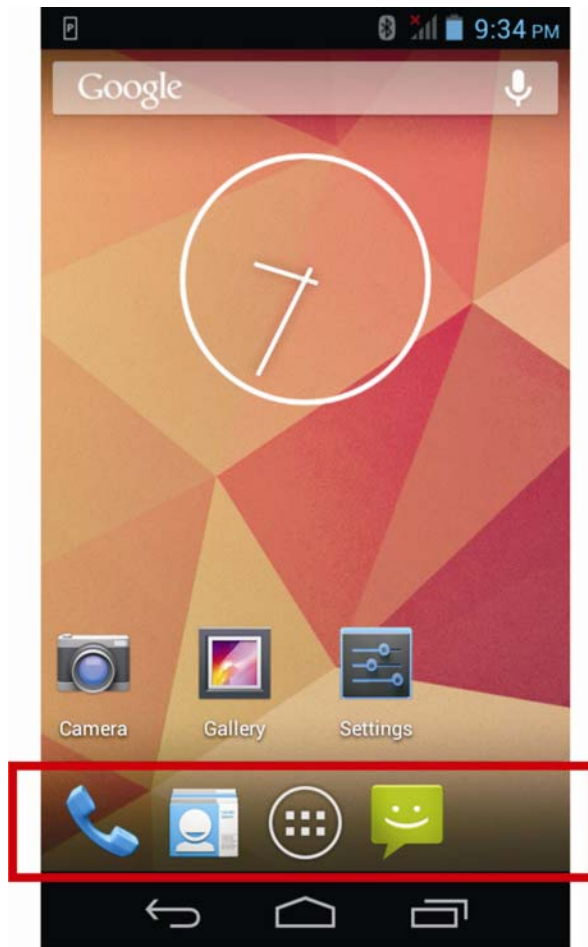


Figure 4-4: Favorites Tray

4.2.3 Adding Shortcuts

To add app or widget shortcuts on the home screen, follow the steps below.

Step 1: Tap the All Apps button on the home screen to access the launcher/widget page.

Step 2: Long press an app icon or a widget (click the WIDGETS tab to access the widgets page) and drag it to the home screen.

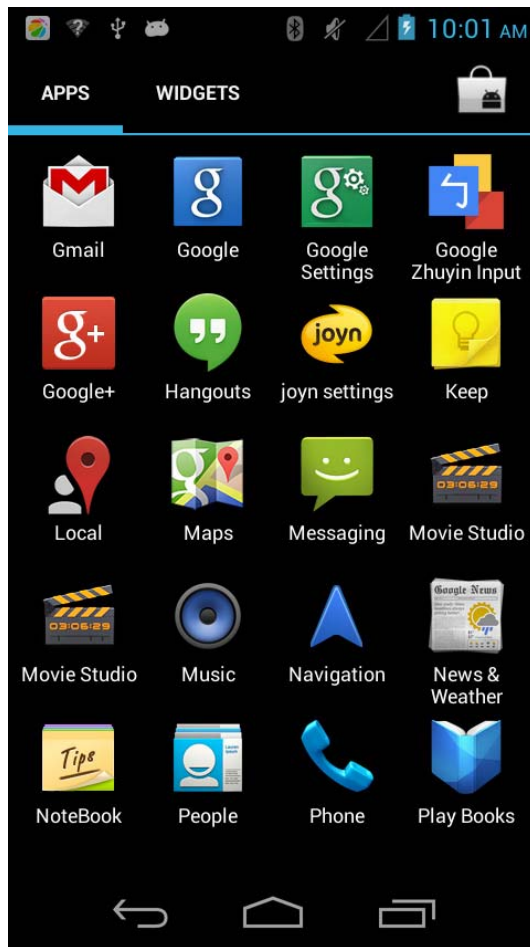


Figure 4-5: Launcher Page

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4.2.4 Arranging the Home Screen

The items on the home screen can be moved and deleted. Long press an item on the home screen and drag it where you want. To trash the item on the desktop, drag it to the Remove icon. Release the icon when it turns red.



Figure 4-6: Move and Trash Item on Home Screen

4.3 Navigation Buttons

The three navigation buttons shown in **Figure 4-7** can always be found at the bottom of every screen.

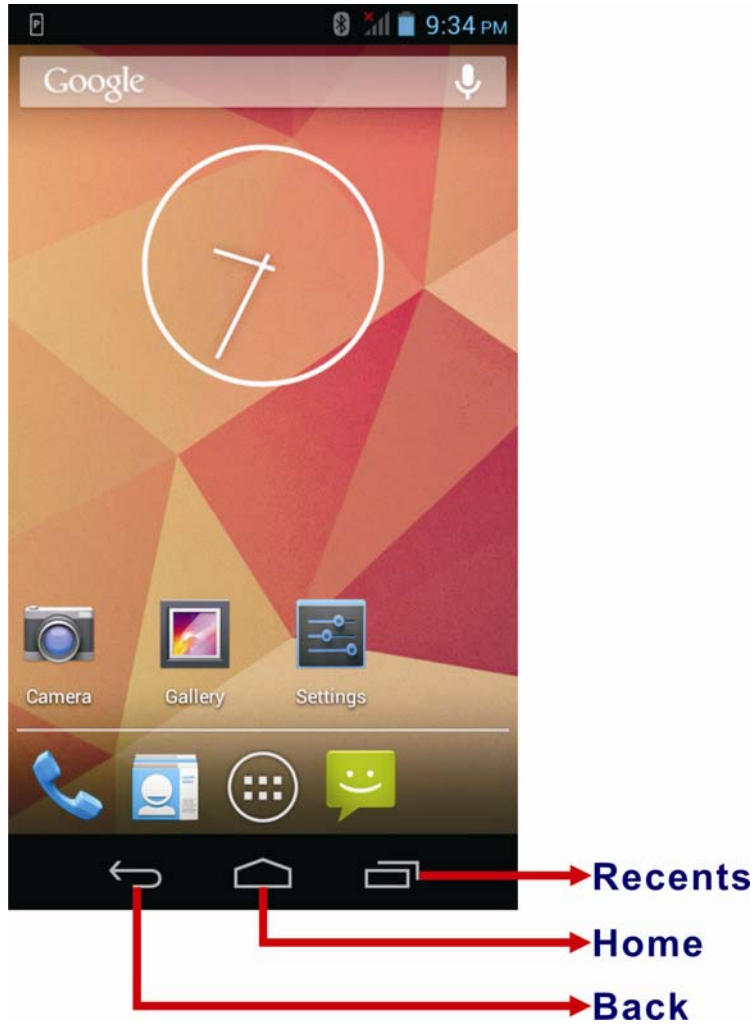


Figure 4-7: Navigation Buttons

| Buttons | Description |
|----------------|--|
| Back | Tap to return to the previous screen. |
| Home | Tap to return to the home screen. |
| Recents | Tap to display all the recently used applications. |

Table 4-1: Navigation Buttons

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4.4 Status Bar

The status bar on the top of the screen (**Figure 4-8**) displays the pending notifications and status, such as battery level or signal strength. Swipe down from the status bar to view notification details.

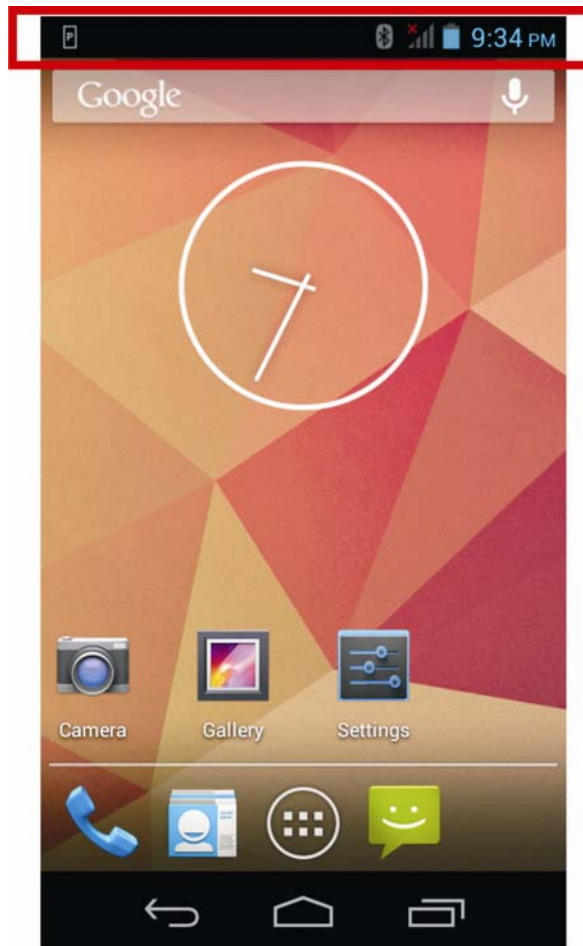


Figure 4-8: Status Bar

4.5 Settings

The Settings menu allows configuration to the MODAT-531, such as Wi-Fi, volume, display brightness, etc. To enter the Settings menu, tap **Settings** on the launcher page.

4.5.1 WIRELESS & NETWORKS

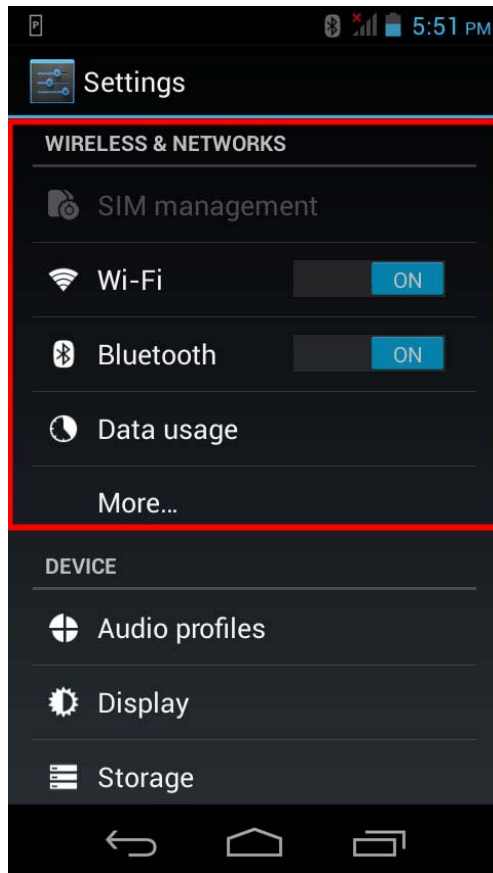


Figure 4-9: Wireless and Networks Settings

In the WIRELESS & NETWORKS field, the user can turn on/off the Wi-Fi and Bluetooth functions, and view the data usage status.

- **Wi-Fi:**
Allows the user to turn on or off the Wi-Fi function. When the Wi-Fi function is turned on, tap this item to manage the access points.

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- **Bluetooth:**
Allows the user to turn on or off the Bluetooth function. When the Bluetooth function is turned on, tap this item to manage the Bluetooth connections.
- **Data usage:**
Allows the user to view data usage status.

4.5.1.1 More Settings

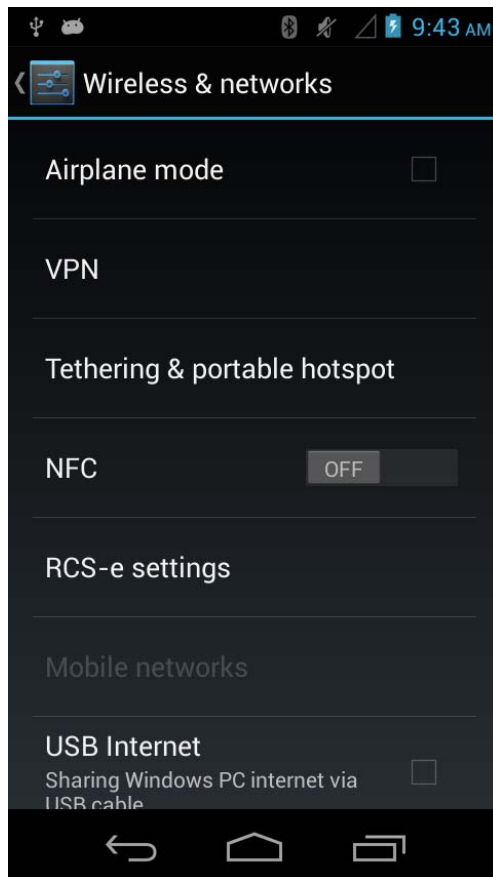


Figure 4-10: More Settings Menu

After tapping **More...** in the WIRELESS & NETWORKS field, the user can configure the following network settings.

- **Airplane mode:**
Turns on or off the airplane mode.

- **VPN:**
Sets up and manages Virtual Private Networks (VPNs).
- **Tethering & portable hotspot:**
Allows the user to set this device as a portable Wi-Fi hotspot and configure the hotspot settings.
- **NFC:**
Turns on or off the NFC function.
- **RCS-e settings:**
Allows the user to configure the joyn service.
- **Mobile networks:**
Configures the mobile network settings.
- **USB Internet:**
This item is available only when the MODAT-531 is connected to a computer via the Micro USB cable. Enabling this feature allows the connected computer to share its internet connection via the Micro USB cable.

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4.5.2 Audio Profiles

The Audio Profiles menu allows the user to configure the audio settings.

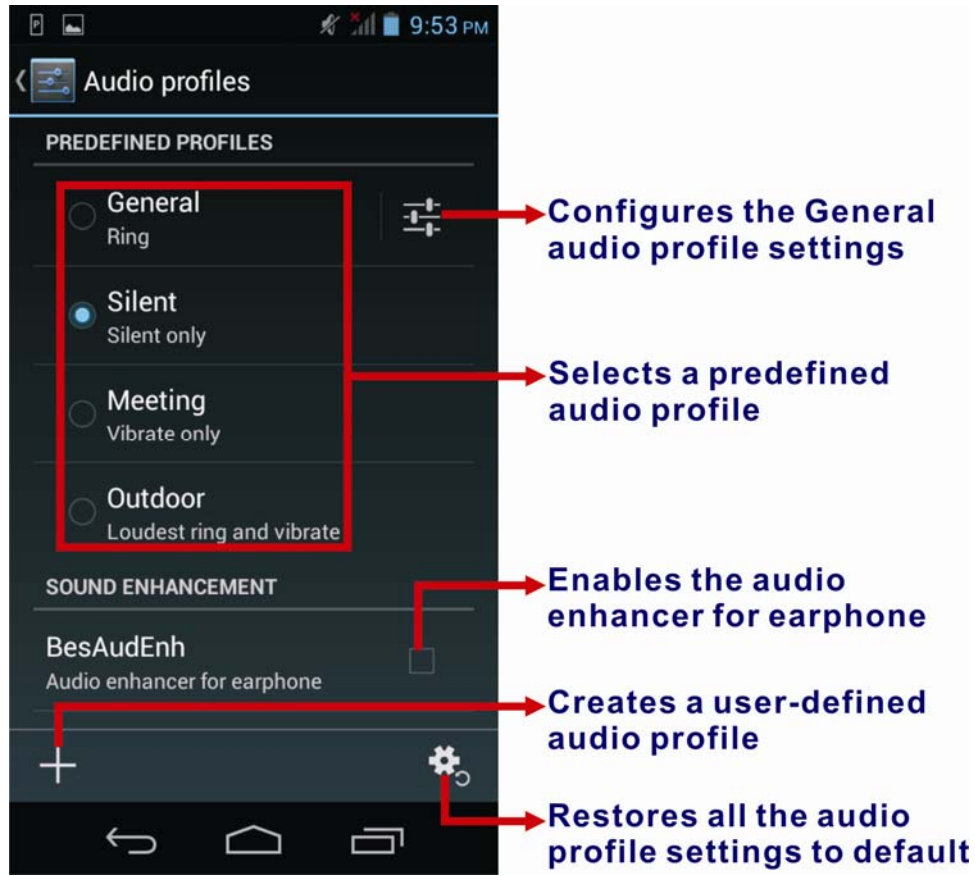


Figure 4-11: Audio Profiles Menu

4.5.3 Display

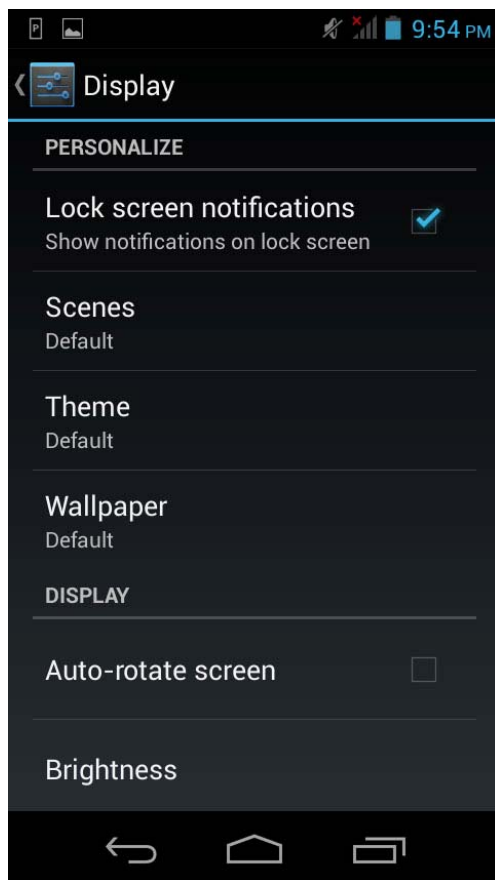


Figure 4-12: Display Menu

Use the Display menu to configure the following items.

- **Lock screen notifications:**
Enables to show notifications on lock screen.
- **Scenes:**
Sets up the scene.
- **Theme:**
Sets up the theme color.
- **Wallpaper:**
Sets up the wallpaper.
- **Auto-rotate screen:**
Turns on or off the auto-rotate function of the screen.

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- **Brightness:**
Adjusts the screen brightness.
- **Daydream:**
Configures the screensaver settings.
- **Font size:**
Sets up the font size.
- **Sleep:**
Sets up the time of inactivity after which the screen turns to sleep mode.
- **Wireless display:**
Turns on or off the wireless display function and configures its settings.

4.5.4 Storage

The Storage menu displays the status of the internal storage and the inserted microSD card, and allows users to manage the data stored in them.



Figure 4-13: Storage Menu

4.5.5 Battery

The Battery menu displays the battery status and allows showing the battery percentage on the status bar.

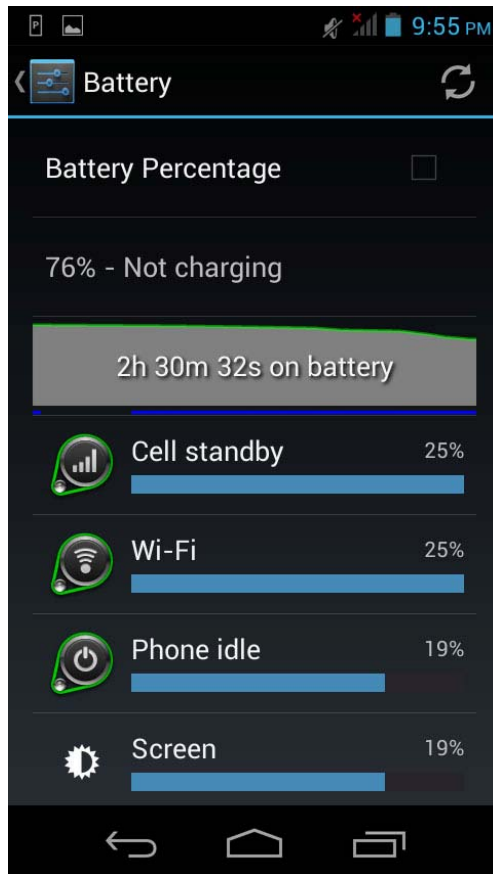


Figure 4-14: Battery Menu

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4.5.6 Apps

The Apps menu displays the applications installed in the device, and allows users to manage them.

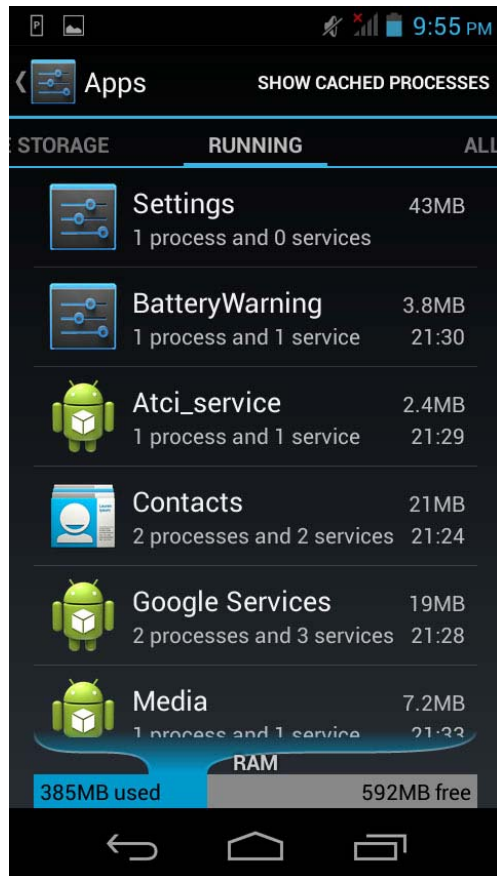


Figure 4-15: Apps Menu

4.5.7 Barcode

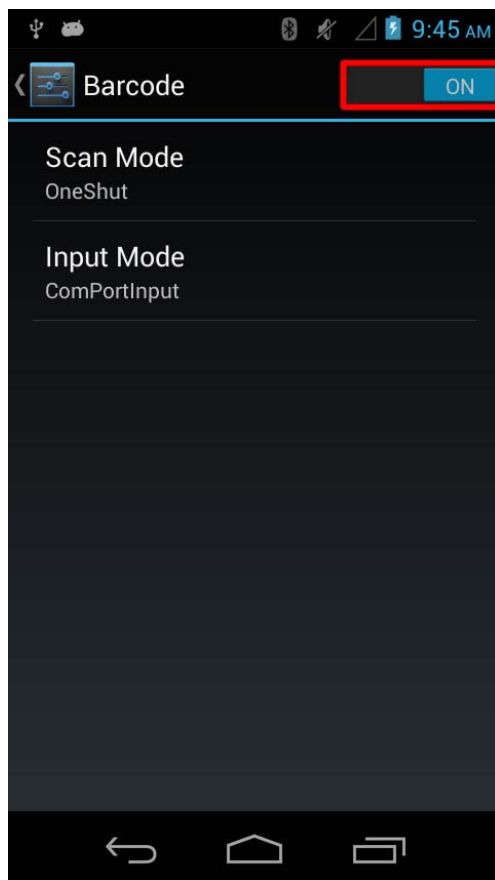


Figure 4-16: Barcode

Use the Barcode menu to turn on the barcode reader and configure its settings. The items in this menu can be configured only when the **Barcode** function is set to **ON** (Figure 4-16).

- **Scan Mode:**
Sets up the scan mode.
- **Input Mode:**
Sets up the input mode.

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4.5.8 Location Access

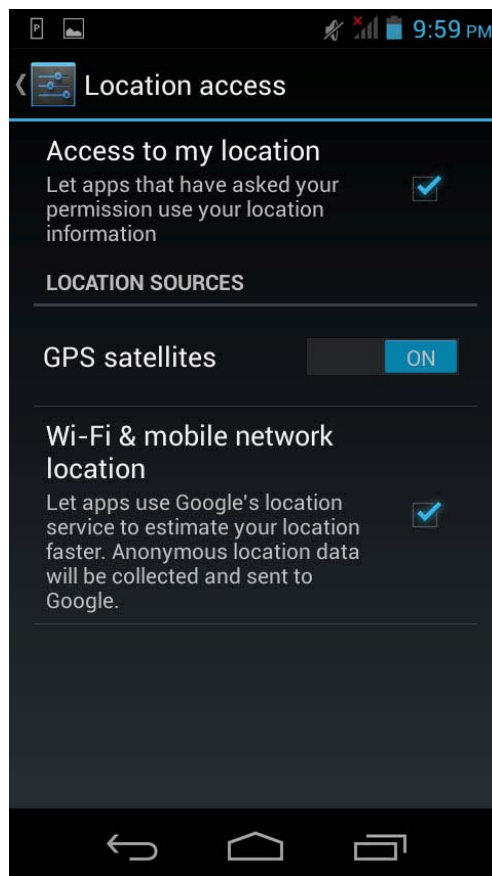


Figure 4-17: Location Access Menu

Use the Location access menu to configure the following items.

- **Access to my location:**
Turns on to let the apps obtain the user's location information.
- **GPS satellites:**
This item is available only when the **Access to my location** item is enabled. Enabling this item allows the apps to use the GPS in the device to pinpoint the user's location.
- **Wi-Fi & mobile network location:**
This item is available only when the **Access to my location** item is enabled. Enabling this item allows the apps to use Google's location service to estimate the user's location.

4.5.9 Security



Figure 4-18: Security Menu

Use the Security menu to configure the following items.

- **Screen lock:**
Sets up the way to unlock the screen.
- **Owner info:**
Enables to show the information of device owner on the lock screen.
- **Encrypt phone:**
Once this item is enabled, the user will need to type a numeric PIN or password to decrypt the MODAT-531 each time when powering on.
- **Make passwords visible:**
Enables to show password when typing.

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- **Device administrators:**
Views or deactivates the device administrators.
- **Unknown sources:**
Enables to allow installation of applications from unknown sources.
- **Verify apps:**
Enables to verify apps before installation.
- **Trusted credentials:**
Taps to display the CA certificates.
- **Install from SD card:**
Taps to install certificates from the microSD card.

4.5.10 Language & Input

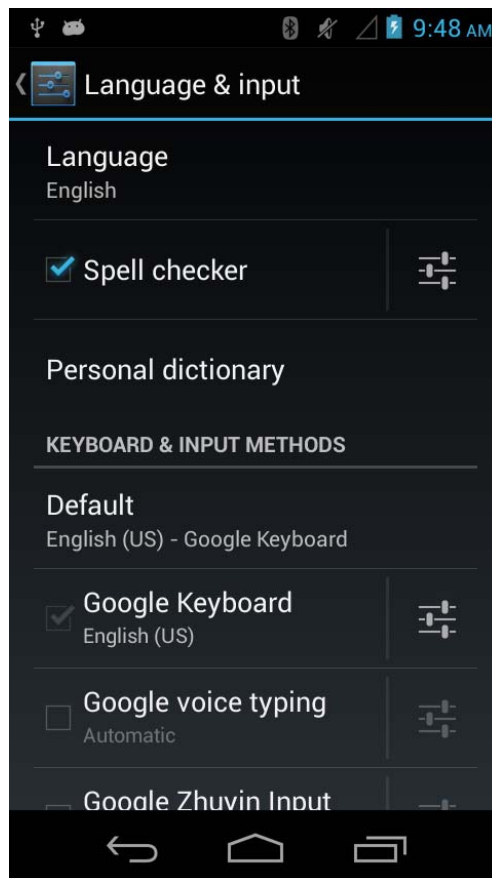


Figure 4-19: Language & Input Menu

Use the Language & input menu to configure the following items.

- **Language:**
Sets up the language for MODAT-531.
- **Spell checker:**
Allows the user to enable the spell checking function and to configure its settings.
- **Personal dictionary:**
Configures the user dictionary.
- **KEYBOARD & INPUT METHODS:**
Sets up the input methods.
- **Voice Control:**
Configures the voice control settings.
- **Voice Search:**
Configures the voice search settings.
- **Text-to-speech output:**
Configures the text-to-speech settings.
- **Pointer speed:**
Sets up the pointer speed.

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4.5.11 Backup & Reset

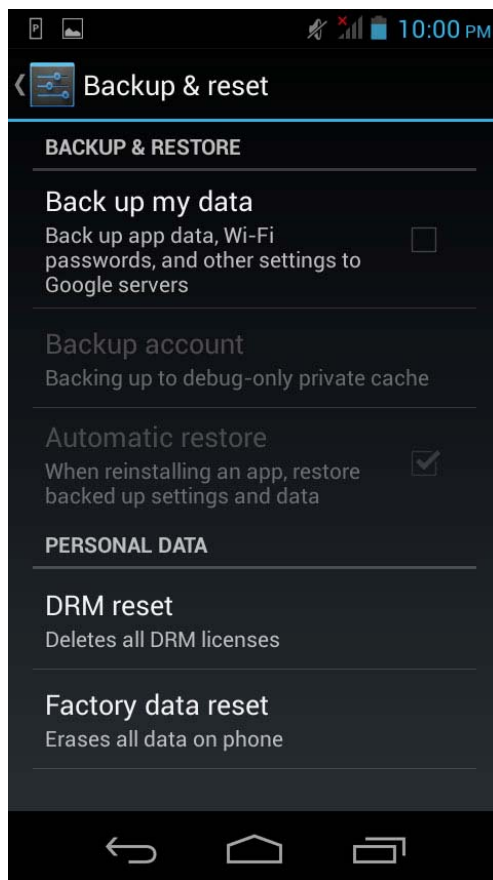


Figure 4-20: Backup & Reset Menu

Use the Back & reset menu to configure the following items.

- **Back up my data:**
Enables to back up the app data, Wi-Fi passwords and other settings to Google servers.
- **Automatic restore:**
This item is available only when the **Back up my data** item is enabled. Enabling this item to restore backed up setting and data when reinstalling an app.
- **DRM reset:**
Deletes all the DRM licenses on the MODAT-531.
- **Factory data reset:**
Erases all data from the internal storage of the MODAT-531.

4.5.12 Add an Account

Tap **Add account** to start setting up an e-mail or corporate account.

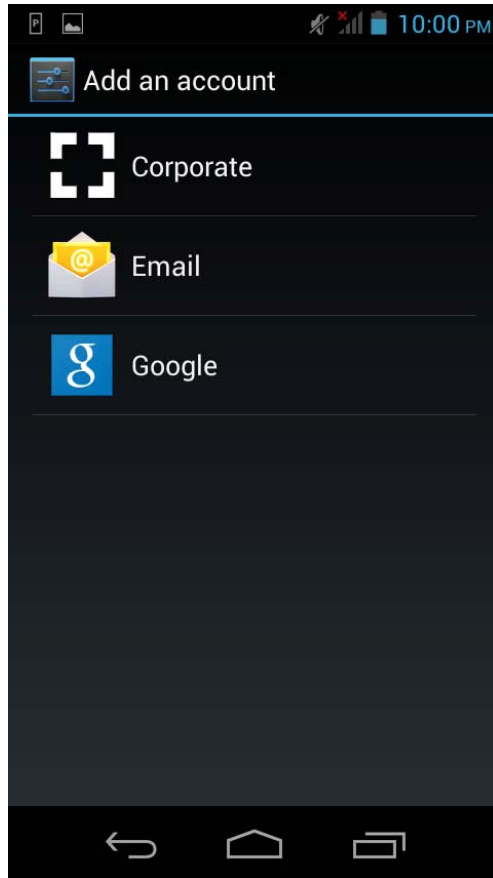


Figure 4-21: Add Account Menu

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4.5.13 Date & Time

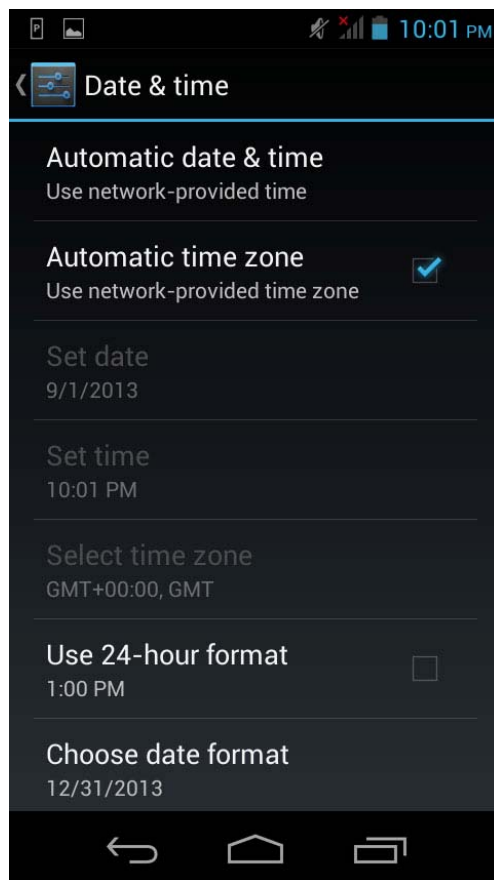


Figure 4-22: Date & Time Menu

Use the Date & time menu to configure the following items.

- **Automatic date & time:**
Turns on to use the network-provided or GPS-provided time.
- **Automatic time zone:**
Turns on to use the network-provided time zone.
- **Set date:**
Sets up the system date. This item is available only when the **Automatic date & time** item is set to **Off**.
- **Set time:**
Sets up the system time. This item is available only when the **Automatic date & time** item is set to **Off**.

- **Select time zone:**
Sets up the time zone. This item is available only when the **Automatic time zone** item is disabled.
- **Use 24-hour format:**
Turns on to use the 24-hour format.
- **Choose date format:**
Sets up the date format.

4.5.14 Scheduled Power On & Off

The Scheduled power on & off menu allows the user to set up a power-on/off schedule.

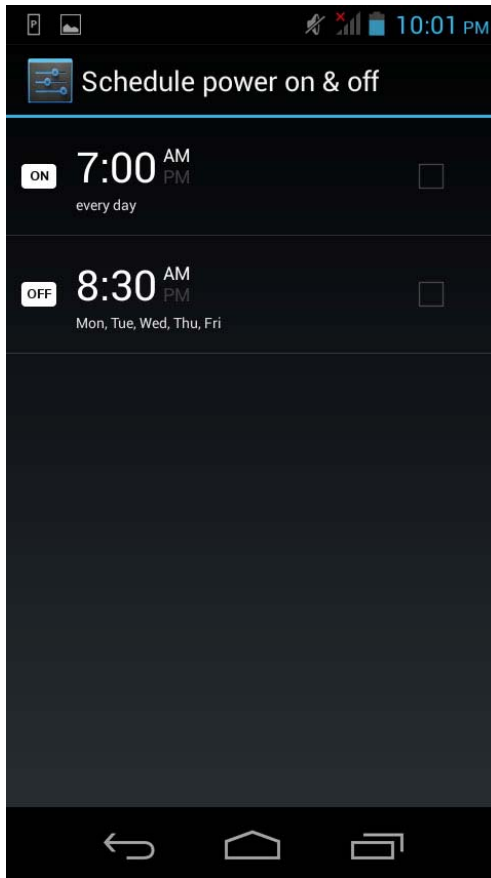


Figure 4-23: Scheduled Power On & Off Menu

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4.5.15 Accessibility

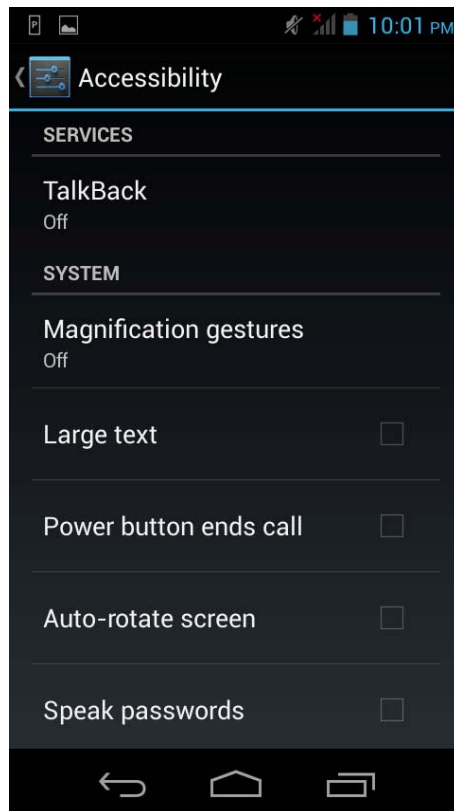


Figure 4-24: Accessibility Menu

Use the Accessibility menu to configure the following items.

- **TalkBack:**
Enables to provide spoken feedback to help blind and low-vision users.
- **Magnification gestures:**
Enables to zoom in and out by triple-tapping the screen.
- **Large text:**
Turns on to use large text.
- **Power button ends call:**
Turns on to set the power button to end calls.
- **Auto-rotate screen:**
Turns on or off the auto-rotate function of the screen.
- **Speak passwords:**
Turns on or off the speak password function.

- **Text-to-speech output:**
Configures the text-to-speech settings.
- **Touch & hold delay:**
Configures the touch & hold delay settings.
- **Enhance web accessibility:**
Turns on to allow apps to install scripts from Google that make their web content more accessible.
- **Quick boot:**
Turns on or off the quick boot function.

4.5.16 Developer Options

The Developer options menu contains several settings for development use only which may cause the device and the applications on it to break or misbehave. Be cautious prior changing these settings. The items in this menu can be configured only when the **Developer options** is enabled (**Figure 4-25**).



Figure 4-25: Developer Options Menu

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4.5.17 About Phone



Figure 4-26: About Phone Menu

Use the About phone menu to check for new versions of software/system and display the following items.

- **System updates:**
Taps to update the system.
- **Software updates:**
Taps to check for new version software.
- **Status:**
Taps to display the status of batteries, network, signal, etc.
- **Legal information:**
Taps to display the legal information.

- **Model number:**
Displays the model number.
- **Software version:**
Displays the software version.
- **Android version:**
Displays the Android OS version.
- **Kernel version:**
Displays the kernel version.

4.6 Camera

The MODAT-531 equips with an 8-megapixel camera with flashlight. Tap **Camera** on the application page to launch it.

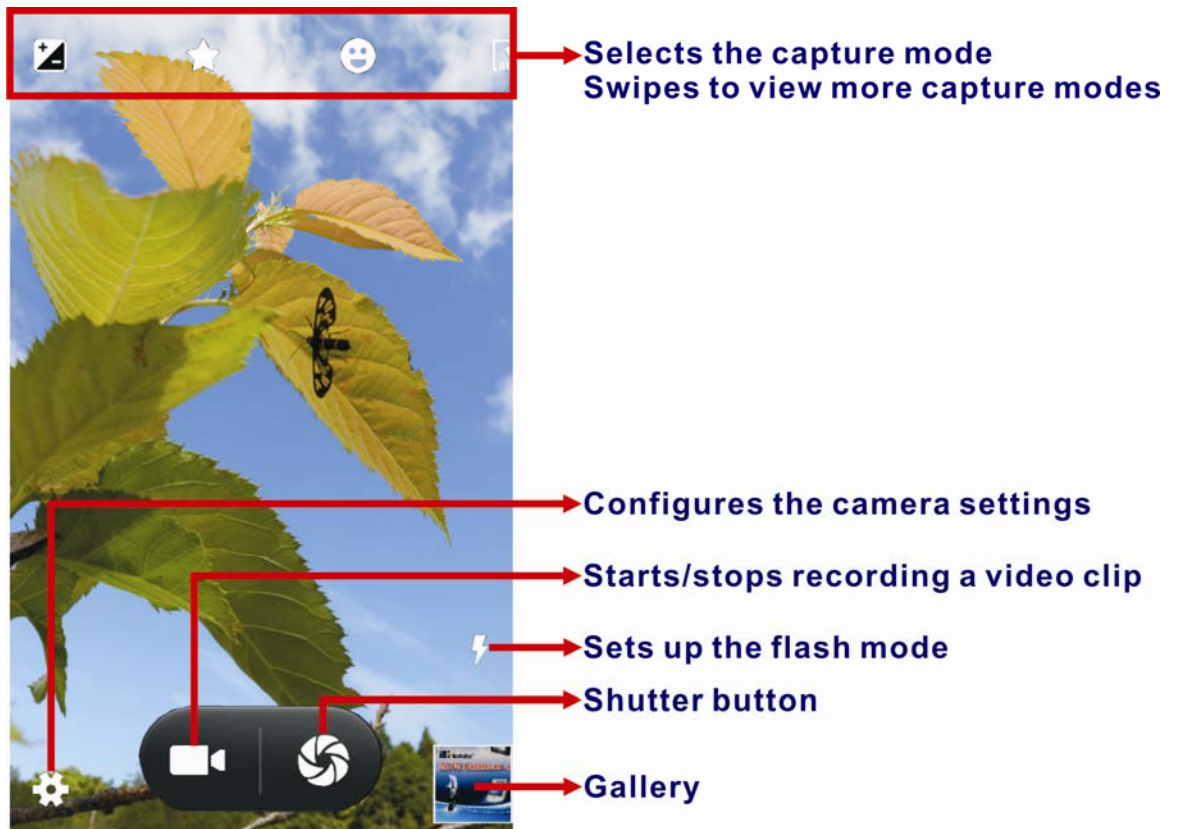


Figure 4-27: Camera Application

Appendix

A

Safety Precautions

**WARNING:**

The precautions outlined in this chapter should be strictly followed. Failure to follow these precautions may result in permanent damage to the MODAT-531.

A.1 Safety Precautions

Please follow the safety precautions outlined in the sections that follow:

A.1.1 General Safety Precautions

Please ensure the following safety precautions are adhered to at all times.

- **Follow the electrostatic precautions** outlined below whenever the MODAT-531 is opened.
- **Make sure the power is turned off and the power cord is disconnected** whenever the MODAT-531 is being installed, moved or modified.
- **Do not apply voltage levels that exceed the specified voltage range.** Doing so may cause fire and/or an electrical shock.
- **Electric shocks can occur** if the MODAT-531 chassis is opened when the MODAT-531 is running.
- **Do not drop or insert any objects** into the ventilation openings of the MODAT-531.
- **If considerable amounts of dust, water, or fluids enter the MODAT-531,** turn off the power supply immediately, unplug the power cord, and contact the MODAT-531 vendor.
- **DO NOT:**
 - Drop the MODAT-531 against a hard surface.
 - Strike or exert excessive force onto the LCD panel.
 - Touch any of the LCD panels with a sharp object
 - In a site where the ambient temperature exceeds the rated temperature

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A.1.2 Anti-static Precautions



WARNING:

Failure to take ESD precautions during the installation of the MODAT-531 may result in permanent damage to the MODAT-531 and severe injury to the user.

Electrostatic discharge (ESD) can cause serious damage to electronic components, including the MODAT-531. Dry climates are especially susceptible to ESD. It is therefore critical that whenever the MODAT-531 is opened and any of the electrical components are handled, the following anti-static precautions are strictly adhered to.

- ***Wear an anti-static wristband:*** Wearing a simple anti-static wristband can help to prevent ESD from damaging any electrical component.
- ***Self-grounding:*** Before handling any electrical component, touch any grounded conducting material. During the time the electrical component is handled, frequently touch any conducting materials that are connected to the ground.
- ***Use an anti-static pad:*** When configuring or working with an electrical component, place it on an anti-static pad. This reduces the possibility of ESD damage.
- ***Only handle the edges of the electrical component:*** When handling the electrical component, hold the electrical component by its edges.

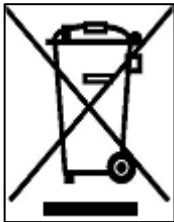
A.1.3 Product Disposal

**CAUTION:**

Risk of explosion if battery is replaced by an incorrect type. Only certified engineers should replace the on-board battery.

Dispose of used batteries according to instructions and local regulations.

- Outside the European Union - If you wish to dispose of used electrical and electronic products outside the European Union, please contact your local authority so as to comply with the correct disposal method.
- Within the European Union:



EU-wide legislation, as implemented in each Member State, requires that waste electrical and electronic products carrying the mark (left) must be disposed of separately from normal household waste. This includes monitors and electrical accessories, such as signal cables or power cords.

When you need to dispose of your display products, please follow the guidance of your local authority, or ask the shop where you purchased the product. The mark on electrical and electronic products only applies to the current European Union Member States.

Please follow the national guidelines for electrical and electronic product disposal.

A.2 Maintenance and Cleaning Precautions

When maintaining or cleaning the MODAT-531, please follow the guidelines below.

A.2.1 Maintenance and Cleaning

Prior to cleaning any part or component of the MODAT-531, please read the details below.

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- Except for the LCD panel, never spray or squirt liquids directly onto any other components. To clean the LCD panel, gently wipe it with a piece of soft dry cloth or a slightly moistened cloth.
- The interior of the MODAT-531 does not require cleaning. Keep fluids away from the MODAT-531 interior.
- Be cautious of all small removable components when vacuuming the MODAT-531.
- Turn the MODAT-531 off before cleaning the MODAT-531.
- Never drop any objects or liquids through the openings of the MODAT-531.
- Be cautious of any possible allergic reactions to solvents or chemicals used when cleaning the MODAT-531.
- Avoid eating, drinking and smoking within vicinity of the MODAT-531.

A.2.2 Cleaning Tools

Some components in the MODAT-531 may only be cleaned using a product specifically designed for the purpose. In such case, the product will be explicitly mentioned in the cleaning tips. Below is a list of items to use when cleaning the MODAT-531.

- **Cloth** – Although paper towels or tissues can be used, a soft, clean piece of cloth is recommended when cleaning the MODAT-531.
- **Water or rubbing alcohol** – A cloth moistened with water or rubbing alcohol can be used to clean the MODAT-531.
- **Using solvents** – The use of solvents is not recommended when cleaning the MODAT-531 as they may damage the plastic parts.
- **Vacuum cleaner** – Using a vacuum specifically designed for computers is one of the best methods of cleaning the MODAT-531. Dust and dirt can restrict the airflow in the MODAT-531 and cause its circuitry to corrode.
- **Cotton swabs** - Cotton swaps moistened with rubbing alcohol or water are excellent tools for wiping hard to reach areas.
- **Foam swabs** - Whenever possible, it is best to use lint free swabs such as foam swabs for cleaning.

Appendix

B

Hazardous Materials Disclosure

B.1 Hazardous Materials Disclosure Table for IPB Products Certified as RoHS Compliant Under 2002/95/EC Without Mercury

The details provided in this appendix are to ensure that the product is compliant with the Peoples Republic of China (China) RoHS standards. The table below acknowledges the presences of small quantities of certain materials in the product, and is applicable to China RoHS only.

A label will be placed on each product to indicate the estimated “Environmentally Friendly Use Period” (EFUP). This is an estimate of the number of years that these substances would “not leak out or undergo abrupt change.” This product may contain replaceable sub-assemblies/components which have a shorter EFUP such as batteries and lamps. These components will be separately marked.

Please refer to the table on the next page.

| Part Name | Toxic or Hazardous Substances and Elements | | | | | |
|---|--|-----------------------|-----------------------|------------------------------------|--------------------------------------|---|
| | Lead (Pb) | Mercury (Hg) | Cadmium (Cd) | Hexavalent Chromium (CR(VI)) | Polybrominated Biphenyls (PBB) | Polybrominated Diphenyl Ethers (PBDE) |
| Housing | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Display | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Printed Circuit Board | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Metal Fasteners | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Cable Assembly | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Fan Assembly | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Power Supply Assemblies | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Battery | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <p>O: This toxic or hazardous substance is contained in all of the homogeneous materials for the part is below the limit requirement in SJ/T11363-2006</p> <p>X: This toxic or hazardous substance is contained in at least one of the homogeneous materials for this part is above the limit requirement in SJ/T11363-2006</p> | | | | | | |

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此附件旨在确保本产品符合中国 RoHS 标准。以下表格标示此产品中某有毒物质的含量符合中国 RoHS 标准规定的限量要求。

本产品上会附有“环境友好使用期限”的标签，此期限是估算这些物质“不会有泄漏或突变”的年限。本产品可能包含有较短的环境友好使用期限的可替换元件，像是电池或灯管，这些元件将会单独标示出来。

| 部件名称 | 有毒有害物质或元素 | | | | | |
|--------|-----------|-----------|-----------|-----------------|---------------|-----------------|
| | 铅 (Pb) | 汞 (Hg) | 镉 (Cd) | 六价铬 (CR(VI)) | 多溴联苯 (PBB) | 多溴二苯醚 (PBDE) |
| 壳体 | O | O | O | O | O | O |
| 显示 | O | O | O | O | O | O |
| 印刷电路板 | O | O | O | O | O | O |
| 金属螺帽 | O | O | O | O | O | O |
| 电缆组装 | O | O | O | O | O | O |
| 风扇组装 | O | O | O | O | O | O |
| 电力供应组装 | O | O | O | O | O | O |
| 电池 | O | O | O | O | O | O |

O: 表示该有毒有害物质在该部件所有物质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。
X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。