



# Nokia Industrial 5G handheld HHRA501a

User manual

Issue 01



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## 1 Device overview /functions



### 1\_RECEIVER

**2\_FUNCTION KEY RED:** A long press of the SOS key sends an emergency call to a pre- saved emergency number (only in connection with a Lone Worker Protection app), See 9.2 for more details.

### 3\_FRONT CAMERA

**4\_16-PIN INTERFACE:** Connection for approved 16pin accessories, such as



PTT headset / RSM

**5\_SIDE KEY RIGHT:** Optional function, example, camera - function can be assigned via "Custom Key"-App (system integrated).

**6\_MICROPHONE**

**7\_USB INTERFACE:** Connection for the USB-C Cable or for connection to other devices.

**8\_LOUDNESS CONTROL:** Volume up/Volume down.

**9\_SIDE KEY LEFT:** Optional function - function can be assigned via "Custom Key"- App (system integrated)

**10\_POWER KEY:** A long press switches the device on/off. A short press switches the stand- by mode on/off.

**11\_SENSORS:** Proximity sensor, light sensor.

**12\_HAND STRAP HOLE**



#### **13\_BACK CAMERA**

#### **14\_LED FLASH**

**15\_NOISE CANCELLING:** Noise cancelling microphone.

**16\_LOUDSPEAKER:** Loudspeaker for hands-free function.

**17\_BATTERY:** Integrated design of battery and battery cover.

**18\_CHARGING CONTACTS:** To connect the desktop charger (accessory).

#### **CELL BROADCAST**

The device supports cell broadcast. Cell broadcast is a cellular service for sending messages to all recipients within a cell.



## 2 Introduction

This document contains information and safety regulations that must be observed for the safe operation of device Nokia Industrial 5G handheld HHRA501a under the described conditions. Non-observance of information and instructions can have serious consequences and may violate regulations. Please read the manual and these safety instructions before using the device. In the case of any doubt, the English version takes precedent.



### 3 Reserved

The content of this document is presented as it currently exists. Nokia Innovations Oy does not provide any explicit or tacit guarantee for the accuracy or completeness of the content of this document, including, but not restricted to, the tacit guarantee of market suitability or fitness for a specific purpose unless applicable laws or court decisions make liability mandatory.

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Nokia Innovations Oy cannot be held responsible for any data or other loss and direct or indirect damages caused by any improper use of this device.






## 4 Safety advises

- Do not touch the screen of the device with sharp objects. Dust particles and fingernails can scratch the screen. Keep the screen clean. Gently remove dust from the screen with a soft cloth and do not scratch the screen.
- Do not leave the device in environments with excessive temperatures, as this could lead to the battery overheating, resulting in fire or explosion.
- Do not charge the device near any flammable or explosive substances.
- Only charge the device in dry indoor conditions.
- Do not charge the device in dusty or humid environments.
- Do not use the device in any areas where use is prohibited by regulations or legislation.
- Do not expose the device or charger to strong magnetic fields, such as those emitted from induction ovens or microwaves.
- Do not attempt to open or repair the device.
- Incorrect repair or opening can lead to the destruction of the device, fire or explosion.



- Only authorized personnel are permitted to repair the device.
- Only use accessories approved by Nokia Innovations Oy.
- Power off the device in hospitals or other places where the use of mobile phones is prohibited.
- This device may adversely affect medical equipment, such as pace-makers.
- Always keep a distance of at least 15 cm between the device and such equipment.
- Make sure the volume level is not set at an excessive level when connecting earphones and headphones to protect your hearing. 
- Observe all corresponding laws that are in force in the respective countries regarding the use of devices while operating a vehicle.
- Power off the device and disconnect the charging cable before cleaning the device.
- Do not use any chemical cleaning agents to clean the device or the charger.
- Use a damp and anti-static soft cloth for cleaning.
- The adapter must be installed near the equipment and be easily accessible.



- The product shall only be connected to a USB interface of version USB2.0 and USB3.0.
- Do not discard old and abandoned lithium batteries into household waste, take them to a designated waste disposal point.
- The user is solely liable for any and all damages and liabilities caused by malware downloaded when using the network or other data-exchange functions of the device. Nokia Innovations Oy cannot be held responsible for any such claims.

## **WARNING**

Nokia Innovations Oy will not assume any liability for damage caused by dis-regarding any of this advice or by any inappropriate use of the device.



## 5 Maintenance / repair

The device itself has no user-serviceable parts. It is recommended to perform inspections according to the safety regulations and advises. If there is a problem with the device, please contact your vendor or consult the service center. If your device needs repair, you can either contact the service center or your vendor.



## 6 Battery

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



## 7 What is in the box?

The list of items in the Nokia Industrial 5G handheld HHRA501a phone box are:

- Nokia Industrial 5G handheld HHRA501a handheld device
- USB type-C Cable
- Power adaptor
- Screwdriver
- Screen protector
- Belt clip
- Quick start guide



## 8 Preparation

### 8.1 Install and take out the battery/Install the Nano-SIM card and Micro SD card

To install and take out the battery or install the Nano-SIM card and Micro SD card, please follow the steps below:

1. Loosen the screws on the battery using the Screwdriver provided, remove the battery from the battery compartment.
2. Insert the Nano-SIM card and/or the Micro SD card.
3. Press the battery assembly into battery compartment.
4. Hand-tighten the screws.



#### **Note:**

Please ensure that all gaskets are closed to ensure water and dust tightness.



## 8.2 Activate eSIM

You can activate the eSIM in several ways, please follow the steps below:

1. Via the Android Setup Wizard during initial device setup:

Scan the eSIM QR code that you have received from your service provider or manually enter the eID that you have received from your service provider.

2. Via the settings menu of the smartphone:

Settings > Network & Internet > Mobile network (add Network)  
> Download SIM > scan (or manually enter) eSIM QR code that you have received from your service provider.

## 8.3 APN setting steps

You can set up the APN via the settings menu of the smartphone:

Settings > Network & Internet > Mobile network > Access Point names > APNs (add APN) > Edit access point, manually enter APN information that you have received from your service provider, save your setting.

Back to previous menu (APNs) and select the APN that you just set up.





## 8.4 Install and disassemble the Waist clip

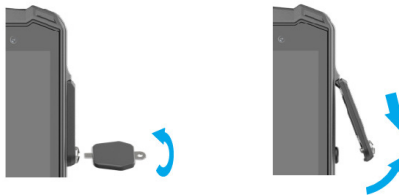
Install and disassemble the Waist clip as shown below:



## 8.5 16 pin interface

Loosen the screw on the 16 pin interface cover using the screwdriver provided.

Remove the cover as shown below:



Connect the plug of the 16pin accessory to the 16 interface as shown;

Hand-tighten the screws using the Screwdriver.

Check that the plug is seated correctly and securely.



## 8.6 Charging

The Nokia Industrial 5G handheld HHRA501a supports 5V/2A charging, only use valid Nokia licensed chargers and cables because unlicensed products may cause the battery to explode or damage the device.

The device must only be charged in an ambient temperature range of +0°C to +45°C. The normal operating temperature of this mobile phone is -10°C to 50°C.

The Nokia Industrial 5G handheld HHRA501a provides charging contacts on the rear side to charge the device via the Desktop Charger (optional accessory). The Desktop Charger also provides a second charging slot for spare batteries (optional accessory).

# NOKIA

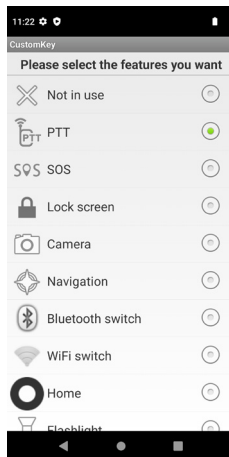




## 9 Functional introduction

### 9.1 PTT/ customize keys

Your phone supports custom buttons, so you can use them to use quick applications. The main function of the custom button is to quickly open the application you specify. PTT in the list means: long press the custom key to enable software talkback.



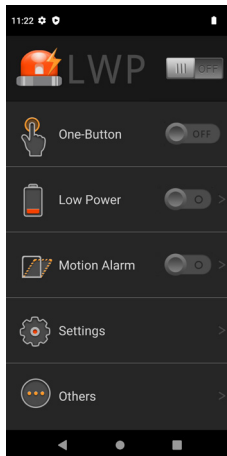
### 9.2 Multifunctional Alarm (LWP)

The multifunctional alarm is the feature that detects the status of the mobile phone status during motion and rest and automatically notifies the emergen-



cy contact via phone call/ SMS.

1. Default password: 1122.
2. After opening the application for the first time, a default phone number is required to be set for the alarm.
3. If the mobile phone uses two SIM cards, a default phone number is required to be set for calling/SMS.
4. Any aborted operation will cause the application process to be interrupted and it needs to [close/open] the application again in order to reset the alarm process.
5. The alarm will not be triggered when the mobile phone is connected to a USB charger.

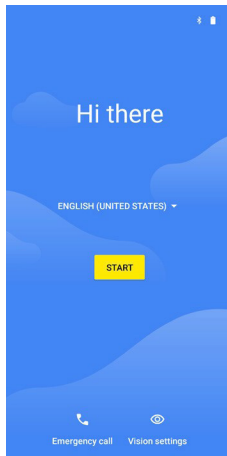




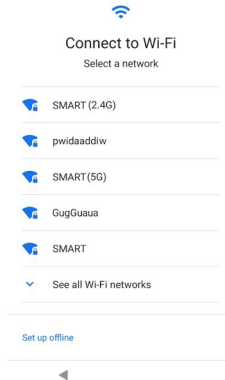
## 10 Setting up your phone

Follow the steps below to set up your device. For more information, follow the instructions displayed on your device screen.

1. When you turn on your device for the first time, the screen below is displayed. Follow the prompts to complete the set-up process.



2. Tap on Set up as new and connect to Wi-Fi screen is displayed. The device will start checking for updates.



3. Connect to a network to quickly set up your phone.

If you are not connected to the network, you will not have the ability to:

- Sign into your Google account
- Restore apps & data
- Get software updates
- Automatically set up time and date.

Tap on Continue to proceed.

4. You can use different Google services. Tap on More to know about the services.

5. By tapping on Accept you agree to the Google Terms of Services.

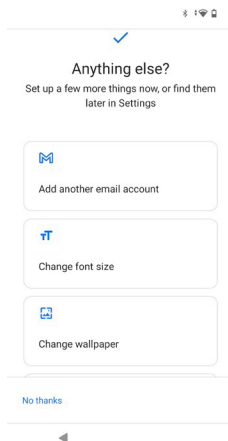
6. For added security, set up a screen lock. Choose from the following



combinations:

- Pattern
- PIN
- Password

7. Follow the screen instructions to set up your backup screen lock method (PIN, Pattern, or Password).
8. If you want to add another email account or wish to set up other services, you can also do it using Settings. Tap on No, thanks to proceed further.







## 11 Basic functions

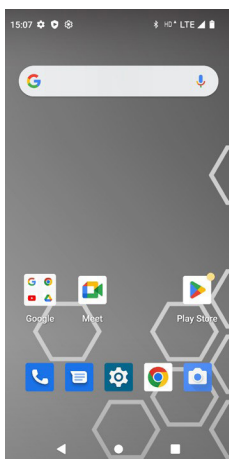
### 11.1 Lock and unlock the screen

Press power button to enter Sleep mode and meanwhile the screen will be locked; press power button again to wake up and then swipe up for unlock.

### 11.2 Make it yours

#### 11.2.1 Home screen

It is your starting point to access all the features on your phone. It displays application icons, widgets, shortcuts, and other features. Long press home screen, and then you can Modify Wallpaper.





### 11.2.2 Uninstall app

Long press and move the third-party app icon to the home screen to choose to remove or uninstall the app.



### 11.2.3 Create widgets

Long press the Home screen, select widgets from the pop-up menu list,  
Click the widgets list and choose the one you like (example, Clock), choose the icon Style, and drag it to the home screen  
Long press the widget if you want to move or remove



#### 11.2.4 Notification Bar

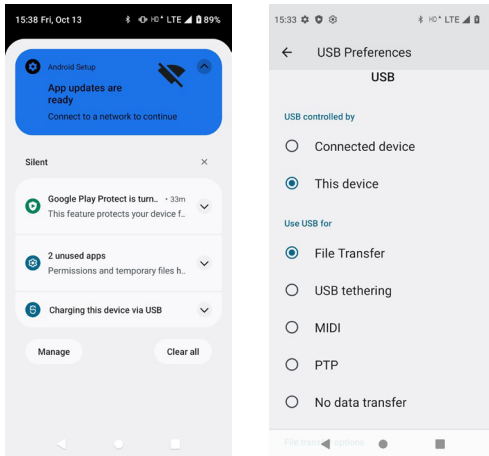
At the top of the screen, the Status Bar displays the time, status, and notifications. If there is a new message, missed call or something in the notification bar, you can drag it down to open notification panel and click the desired one to have a view. When you finished, you can close it by dragging the panel up or pressing “Back”.

#### 11.2.5 Android™ and computer connection

If you connect your phone to PC via USB, you can find the USB options, Choose This Device -> file Transfer option, you can see your phone memory

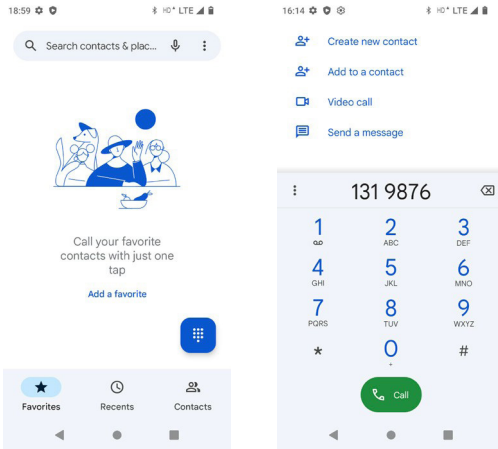


in PC, this is same function like USB storage.



### 11.3 Make a Call

Tap dial icon on home screen, enter a complete phone number to make a call on the Phone call interface.



### 11.3.1 Call Log

Enter Phone interface, tap Recents, you can check the call logs. In call log options, you can make calls, add new contact and send message etc.

### 11.3.2 Answering phone calls

When there is an incoming call, you can drag the icon up to answer it directly.

### 11.3.3 Reject a Call by Sending a Busy Message

When there is an incoming call and it is inconvenient to accept the call, you can select “Reject call” or “Reply by SMS” options to reject calls. If “Reply by



SMS" is selected, users can drag the message icon upward, and then some busy messages will show on the screen, short tap any of them to send out.

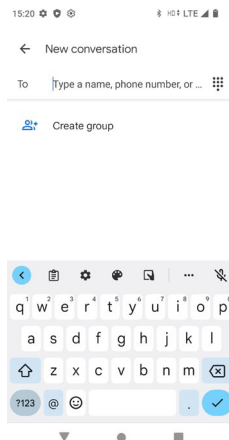
#### 11.3.4 Add a Contact

Tap Contacts to enter contacts and then add the details.

Tap CREATE NEW CONTACT to add a new contact to Phone or SIM card. Tap SAVE to complete the operation.

### 11.4 Messaging

Enter Messaging, then compose new message. You touch a text field where you want to enter text, to open the keyboard.





#### 11.4.1 Receiving a New Message

When there is a new message comes, a new message icon will appears in the notifications area of the status bar to notify you of a new text or multimedia message.

To open the message, press and hold the status bar, and then slide the status bar down to open the Notifications panel. Or go to Messaging, read the message directly.

#### 11.4.2 Editing SMS and MMS

-> When you are composing a new text message, you can select text for cutting or copying. Touch the text field or portion that contains text. You can select all contexts, copy, cut and share. The selected text is highlighted in Blue.

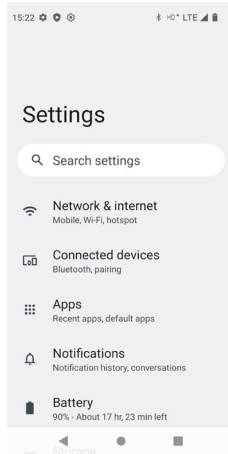
-> A multimedia message may contain video, pictures, audio, location, etc. Thus, when you are supposed to edit a MMS, you can just add videos, pictures and more to SMS and change to MMS.

#### 11.4.3 Message conversations

Text and multimedia messages that are sent to and received from a contact (or a number) are grouped into conversations or message threads in the All messages screen.



## 11.5 Settings



### 11.5.1 Wi-Fi

Settings> Network>Wi-Fi, open Wi-Fi, search nearly Wi-Fi and connect it, then you can use Internet or download apps for free.

### 11.5.2 Bluetooth

Settings> Connected device > Pair new device> Available devices

Open Bluetooth, connect to other phone, you can share something like music, photos, movies etc. to other people.





### 11.5.3 Security

Settings > Security > Screen lock > choose screen lock

There are four screen lock ways for you to choose: Swipe, Pattern, PIN, Password.

### 11.6 Back up your data

To ensure your data is safe, use the backup feature in your phone. Your device data (such as Wi-Fi passwords and call history) and app data (such as settings and files stored by apps) will be backed up remotely.

Switch on automatic backup

Tap Settings > System > Backup, and switch back up on.

### 11.7 Erase all data (factory reset)

On System screen, tap Reset options.

Tap this option to erase all data from your phone's internal storage. The data includes the following:

- Your Google Account
- System and app data and settings
- Downloaded apps
- Music



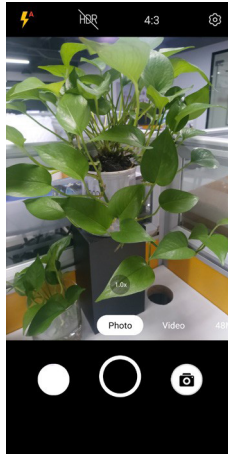
- Photos
- Other user data

Tap Erase all data to reset the device.



## 12 Using applications

### 12.1 Camera



#### 12.1.1 Take a photo

Shoot sharp and vibrant photos – capture the best moments in your photo album.

1. Tap Camera.
2. Take aim and focus. Tap the center circle.



### 12.1.2 Take a selfie

Tap Camera > to switch to the front camera.

### 12.1.3 Record a video

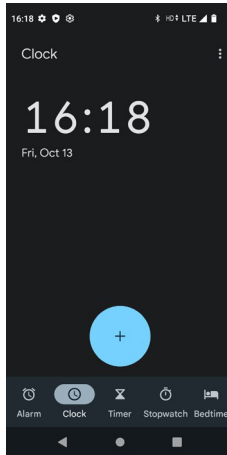
1. Tap Camera.
2. To switch to the video recording mode, tap Video, tap start recording.

### 12.1.4 View photos and videos on your phone

Tap Photos



## 12.2 Alarm clock



### 12.2.1 Set an alarm

1. Tap Clock > Alarm.
2. To add an alarm, tap
3. Select the hour and the minutes and tap OK.
4. To set the alarm to repeat on specific days, tap the corresponding weekdays.

### 12.2.2 Switch an alarm off

When the alarm sounds, swipe the alarm right.



### 12.3 Download applications from Play Store

1. Add Google™ account.
2. Tap Play Store.
3. Tap the search bar to look for apps or select apps from your recommendations.
4. In the app description, tap Install to download and install the app.

To see your apps, go to the home screen and swipe up from the bottom of the screen.

### 12.4 Manage Applications

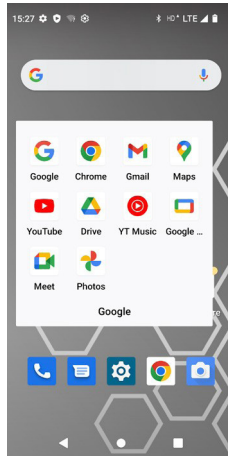
Enter Settings >Apps & notifications, then manage the applications. Tap any app to view the information of the applications, and you can also force the apps to stop or uninstall the apps.

### 12.5 Software update

1. On Settings screen, tap System>System update
2. Tap Check for updates. If there is any update required, system starts the updates.
3. Tap Continue update to continue the update process if already started.



## 13 Google apps



Google provides entertainment, social network, and business apps. You may require a Google account to access some apps. Refer to Accounts for more information.

To view more app information, access each apps in the help menu.

Tips: Some apps may not be available or may be labelled differently depending on the region or service provider.

### 1. Chrome

Search for information and browse webpages.



2. Gmail

Send or receive emails via the Google Gmail service.

3. Maps

Find your location on the map, search for locations, and view location information for various Places.

4. YT Music

Discover, listen to, and share music on your device.

Play Movies & TV Watch videos stored on your device and download various content to watch from the Play Store.

5. Drive

Store your content on the cloud, access it from anywhere, and share it with others.

6. Google

Search quickly for items on the Internet or your device.

7. Play Store

Download third-party apps from the Play Store

8. Meet

Video and voice call over the network.





### 13.1 Google

Configure your device's Google settings. Available options depend on your Google Account. From the Home screen, swipe up to access App screen, and tap Settings > Google.

If you did not log in to your Google Account yet, you can use this menu to sign in.

1. On Google screen, tap Sign into your Google Account.
2. Tap Google Account.
3. Follow the screen instructions to finish the setup.



## 14 Recycling

The crossed-out wheelie-bin symbol on the product, battery, literature, or packaging is a reminder that all electrical and electronic products, batteries, and accumulators must be taken to separate collection points at the end of their working life. This requirement applies in the European Union. Do not dispose of these products as unsorted municipal waste. Always return used electronic products, batteries, and packaging materials to dedicated collection points. This helps prevent uncontrolled waste disposal and promotes the recycling of materials. More detailed information is available from the product retailer, local waste authorities, national producer responsibility organizations, or your local Nokia Innovations Oy representative.





## 15 Industry Canada statement

① This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

- 1) this device may not cause interference, and
- 2) this device must accept any interference, including interference that may cause undesired operation of the device.

① Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

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

② This Class B digital apparatus complies with Canadian ICES-003.

② Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

③ This device complies with RSS-310 of Industry Canada. Operation is subject to the condition that this device does not cause harmful interference.

③ Cet appareil est conforme à la norme RSS-310 d'Industrie Canada. L'opération est soumise à la condition que cet appareil ne provoque aucune interférence



nuisible.

④ This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios.

④ Cet appareil et son antenne ne doivent pas être situés ou fonctionner en conjonction avec une autre antenne ou un autre émetteur, exception faites des radios intégrées qui ont été testées.

⑤ The County Code Selection feature is disabled for products marketed in the US/ Canada.

⑤ La fonction de sélection de l'indicatif du pays est désactivée pour les produits commercialisés aux États-Unis et au Canada.

FOR PORTABLE DEVICE (<20cm from body / SAR needed)

Radiation Exposure Statement:

The product comply with the Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

Additional statement for phones:



This device has been tested for compliance with IC SAR values at a typical operating near the body. To ensure that RF exposure levels below the levels tested, use accessories with this equipment to maintain a minimum separation distance of 15mm between the body of the user and the device. These accessories should not contain metallic components. It is possible that the accessories used close to the body that do not meet these requirements are not consistent with the SAR limits and it is advisable to avoid using them.

Déclaration d'exposition aux radiations:

Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.

Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel.

La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.

Additional statement for phones:

Ce dispositif a été testé pour la conformité avec les valeurs SAR à un fonctionnement typique près du corps . Pour assurer que les niveaux d'exposition aux radiofréquences en deçà des niveaux testés , utiliser des



accessoires avec cet équipement pour maintenir une distance de séparation minimale de 15mm entre le corps de l'utilisateur et l'appareil. Ces accessoires ne doivent pas contenir des composants métalliques . Il est possible que les accessoires utilisés près du corps qui ne répondent pas à ces exigences ne sont pas compatibles avec les limites SAR et il est conseillé d'éviter de les utiliser.

FOR WLAN 5GHZ DEVICE:

Caution :

- 1) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
  - 2) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and
  - 3) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.
  - 4) the worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in Section 6.2.2(3) shall be clearly indicated.
- <for 5G B2 with DFS devices only>



5) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:

1) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

2) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz

et 5470-5725 MHz doit se conformer à la limite de p.i.r.e.;

3) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

4) les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, et énoncée à la section 6.2.2 3), doivent être clairement indiqués. <for 5G B2 with DFS devices only>

5) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont



la priorité) pour les bandes 5250-5350 MHz

et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

#### Federal Communication Commission Interference Statement

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

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

- Reorient or relocate the receiving antenna.





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

FCC Caution:

- Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.
- Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

RF Exposure Information (SAR)

This device meets the government's requirements for exposure to radio waves.

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.



The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. \*Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

The highest SAR value for the model device as reported to the FCC when tested for use at the ear is 1.12 W/kg and when worn on the body, as described in this user guide, is 0.72 W/kg (Body-worn measurements differ among device models, depending upon available accessories and FCC requirements.)

While there may be differences between the SAR levels of various devices and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model device is on file with the FCC and can be found under the Display Grant section of [www.fcc.gov/oet/ea/fccid](http://www.fcc.gov/oet/ea/fccid)



after searching on FCC ID: 2AVO2-HHRA501A. For body worn operation, this device has been tested and meets the FCC RF exposure guidelines for use with an accessory that contains no metal and be positioned a minimum of 15mm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines. If you do not use a body-worn accessory and are not holding the device at the ear, position the handset a minimum of 15mm from your body when the device is switched on.

① This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

- 1) this device may not cause interference, and
- 2) this device must accept any interference, including interference that may cause undesired operation of the device.

① Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

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

② This Class B digital apparatus complies with Canadian ICES-003.

② Cet appareil numérique de la classe B est conforme à la norme NMB-003 du



Canada.

③ This device complies with RSS-310 of Industry Canada. Operation is subject to the condition that this device does not cause harmful interference.

③ Cet appareil est conforme à la norme RSS-310 d'Industrie Canada.

L'opération est soumise à la condition que cet appareil ne provoque aucune interférence nuisible.

④ This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios.

④ Cet appareil et son antenne ne doivent pas être situés ou fonctionner en conjonction avec une autre antenne ou un autre émetteur, exception faites des radios intégrées qui ont été testées.

⑤ The County Code Selection feature is disabled for products marketed in the US/ Canada.

⑤ La fonction de sélection de l'indicatif du pays est désactivée pour les produits commercialisés aux États-Unis et au Canada.

FOR PORTABLE DEVICE (<20cm from body / SAR needed)

Radiation Exposure Statement:

The product comply with the Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product



can be kept as far as possible from the user body or set the device to lower output power if such function is available.

Additional statement for phones:

This device has been tested for compliance with IC SAR values at a typical operating near the body. To ensure that RF exposure levels below the levels tested, use accessories with this equipment to maintain a minimum separation distance of 15mm between the body of the user and the device. These accessories should not contain metallic components. It is possible that the accessories used close to the body that do not meet these requirements are not consistent with the SAR limits and it is advisable to avoid using them.

Déclaration d'exposition aux radiations:

Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.

Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel.

La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.

Additional statement for phones:

Ce dispositif a été testé pour la conformité avec les valeurs SAR à un fonctionnement



## 16 Trademarks

All other trademarks and copyrights are the properties of their respective owners.



## 17 Maximum output power

Frequency bands	Maximum output power
GSM900	32.3 dbm
GSM1800	29.0 dbm
3G	23.5 dbm
4G	23.1 dbm
5G	24.99 dbm
BT	8.6 dbm
BLE	8.08 dbm
2.4G	15.74 dbm
5G	14.13 dbm
5.8G	12.93 dbm

### FREQUENCY BANDS

GSM 900/1800 MHz  
UTRA FDD Band I/VIII  
E-UTRA FDD Band 1/3/7/8/20/28  
E-UTRA TDD Band 38/40/41/42/43  
5G NR Standalone: n1/n3/n7/n8/n20/n28/n38/n40/n41/n77/n78  
Bluetooth: 2402 - 2480 MHz  
2.4G WiFi (20MHz): 2432 - 2472 MHz  
2.4G WiFi (40MHz): 2442 - 2462 MHz  
5G WiFi (20MHz): 5180 - 5320 MHz, 5500 - 5700 MHz  
5G WiFi (40MHz): 5190 - 5310 MHz, 5510 - 5670 MHz  
5G WiFi (80MHz): 5210 - 5290 MHz, 5530 - 5610 MHz  
5.8G Non-Specific SRD: 5745 - 5825 MHz  
NFC: 13.56 MHz  
GPS/Galileo/BDS/GLONASS/SBAS: 1559 - 1610 MHz (Rx)

