

# DECT/WiFi handset G966

SmartDECT handset with Android and WiFi



The SmartDECT handset G966 is a sophisticated handset providing enterprise grade capabilities and proven DECT voice quality with the flexibility of android application support.

- Sophisticated DECT handset with rich call control features and applications tightly integrated with the NEC communication servers and PBX systems to contribute to the effectiveness of staff in various businesses, hospitality and healthcare
- Mobile Unified Communications features with central directory, presence look-up, messaging/alarms and localization facilitated by DECT
- Android and WiFi to support business applications with the option to tightly integrate the application with the specific features of the G966 through its API
- Front camera for video-supported unified communications
- Bluetooth to connect to a variety of external devices
- Compatible with the rack/desktop charger of G266 and G566 handsets
- DECT compliance for high quality speech and security
- HD-Voice with G.722 codec in line with CAT-iq specifications



## At a Glance

- Appealing design and Smartphone user experience
- Large 4" high resolution touchscreen plus essential keys for call handling
- Ideal handset for integration with business applications while on the move
- Supporting key vertical applications like messaging and alarming
- High definition audio in line with CAT-iq
- Secure provisioning over the air
- Dedicated keys, e.g. SOS



## Features

<b>Android applications</b>	<ul style="list-style-type: none"> <li>• Phone (DECT dialler)</li> <li>• Email and Calender (server synchronization e.g. Exchange)</li> <li>• Calculator, Music player, Sound recorder, Camera</li> <li>• Clock</li> </ul>	<ul style="list-style-type: none"> <li>• People (personal contacts)</li> <li>• Messaging</li> <li>• Browser</li> <li>• File explorer</li> <li>• Gallery</li> </ul>
<b>Call handling<sup>1)</sup></b>	<ul style="list-style-type: none"> <li>• Android model dial application</li> <li>• Caller list (incoming, outgoing, failed)</li> <li>• Directory access with photo display</li> <li>• CLI (name and number support)</li> <li>• Last number redial</li> <li>• Recall/hold (enquiry)</li> <li>• Automatic call answer</li> </ul>	<ul style="list-style-type: none"> <li>• Call reject option</li> <li>• Loudspeaker mode</li> <li>• Microphone Mute</li> <li>• HD-Voice and seamless handover</li> <li>• On-hook number preparation</li> <li>• Silent Charging</li> </ul>
<b>Design</b>	<ul style="list-style-type: none"> <li>• Smartphone design</li> <li>• Large high resolution touchscreen (4")</li> <li>• Android 4.0 (Ice Cream Sandwich)</li> <li>• Bluetooth</li> <li>• HAC Compliant</li> </ul>	<ul style="list-style-type: none"> <li>• Vibrator mode</li> <li>• Dust and water resistance: IP40</li> <li>• RGB LED to provide four colour message indications</li> <li>• Antenna diversity</li> </ul>
<b>Directory</b>	<ul style="list-style-type: none"> <li>• (IP) DECT Corporate Directory Application</li> </ul>	<ul style="list-style-type: none"> <li>• Personal contacts (People Application of Android)</li> <li>• Exchange server Corporate Directory</li> </ul>
<b>Display</b>	<ul style="list-style-type: none"> <li>• 16M Color touch display, 4" IPS TFT 480 x 800 pixels (384K)</li> <li>• Illuminate display on incoming calls, messages, notifications</li> </ul>	<ul style="list-style-type: none"> <li>• Date &amp; time synchronized with PBX clock or internet</li> <li>• WideChar (UFT-16) character set</li> <li>• LCD backlit</li> <li>• Power saving by dimming display</li> </ul>
<b>Front Camera</b>	<ul style="list-style-type: none"> <li>• 2M Pixel CMOS camera</li> <li>• 65K colour depth (16 bits per pixel)</li> </ul>	<ul style="list-style-type: none"> <li>• Resolution 1600H x 1200V</li> <li>• Frame Rate: 15fps@UXGA(1600x1200), 30fps@SVGA(800x600)</li> </ul>
<b>Headset</b>	<ul style="list-style-type: none"> <li>• Wired Headset interface: 3.5 mm standard jack</li> <li>• Take call and release call on headset</li> </ul>	<ul style="list-style-type: none"> <li>• Bluetooth</li> </ul>
<b>Keys</b>	<ul style="list-style-type: none"> <li>• Recall (enquiry) key combined with on-hook key</li> <li>• Menu key</li> <li>• Distinctive home key</li> <li>• Back key</li> </ul>	<ul style="list-style-type: none"> <li>• Off-hook key</li> <li>• Three side keys, left (volume up, down, SOS)</li> <li>• One side key, right (on/standby)</li> <li>• White keypad backlight</li> </ul>
<b>Localization</b>	<ul style="list-style-type: none"> <li>• Supported languages: 14</li> <li>• Triple frequency band</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple (RF) power levels</li> </ul>
<b>Memory (internal)</b>	<ul style="list-style-type: none"> <li>• Total 580 MB</li> <li>• Can be expanded with optional memory card</li> </ul>	<ul style="list-style-type: none"> <li>• Approximately 500 MB available for Applications and user data</li> </ul>
<b>Memory card (optional)</b>	<ul style="list-style-type: none"> <li>• Storage of configuration and subscription data, personal phone book and caller filter</li> <li>• Blocking of changes to the configuration settings</li> <li>• Easy subscription to another handset by transferring the memory card</li> </ul>	<ul style="list-style-type: none"> <li>• Easy (pre-)installation by programming the memory card</li> <li>• Memory card type: micro SD card</li> <li>• Extending the internal memory for applications and user data</li> </ul>
<b>Messaging</b>	<ul style="list-style-type: none"> <li>• (IP) DECT Messaging Application</li> <li>• DECT LRMS support</li> <li>• Message waiting (voicemail)</li> <li>• Urgency levels: Normal, urgent and emergency</li> </ul>	<ul style="list-style-type: none"> <li>• Message broadcast support</li> <li>• Set-up of voice call to call back number in message</li> <li>• Compatible with DMLS open interface</li> </ul>
<b>Mobility</b>	<ul style="list-style-type: none"> <li>• Supports 10 DECT subscriptions</li> </ul>	<ul style="list-style-type: none"> <li>• Automatic selection</li> </ul>
<b>Motion sensor</b>	<ul style="list-style-type: none"> <li>• 3 Axis Orientation and Motion Detection</li> </ul>	<ul style="list-style-type: none"> <li>• Tilt Orientation Detection for Portrait/Landscape</li> </ul>
<b>Sound/Audio</b>	<ul style="list-style-type: none"> <li>• Adjustable ringer volume</li> <li>• Loudspeaker mode/hands free</li> <li>• Trembler</li> </ul>	<ul style="list-style-type: none"> <li>• Adjustable earpiece/loudspeaker volume</li> <li>• Microphone mute</li> <li>• Silent ring support</li> </ul>
<b>Service/Maintenance</b>	<ul style="list-style-type: none"> <li>• Software upgrading via air interface (WiFi)</li> <li>• Software upgrading via USB interface</li> </ul>	<ul style="list-style-type: none"> <li>• Backup of local data via micro SD card</li> <li>• (Auto) provisioning via air interface (WiFi)</li> </ul>
<b>User data</b>	<ul style="list-style-type: none"> <li>• Internal memory for storage of configuration data, personal phone book, messages, caller log, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Optional micro SD card</li> </ul>
<b>User Interface</b>	<ul style="list-style-type: none"> <li>• Full Graphical User Interface with touchscreen</li> <li>• Configurable tricolour LED indicator, e.g., for missed call and message waiting, low battery or (silent) charging</li> <li>• Selectable display backgrounds</li> </ul>	<ul style="list-style-type: none"> <li>• Widgets for DECT subscription, missed calls, voicemail indication and received messages</li> <li>• Android flexibility for ringing melodies, etc.</li> </ul>
<p>1) Features depend on the capabilities of the PBX and the DECT system used</p>		

## Physical Characteristics

<b>Dimensions</b>	<ul style="list-style-type: none"> <li>Handset: 129x63x12 mm</li> <li>Charger: 77x77x61mm mm</li> <li>Charger Rack: 462x77x61 mm</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>Handset: 161 g</li> <li>Charger: 78 g</li> <li>AC Adapter: 25 g</li> </ul>
<b>Protection</b>	<ul style="list-style-type: none"> <li>Handset: IP40</li> </ul>
<b>Range</b>	<ul style="list-style-type: none"> <li>Indoor: 50 m max <sup>2)</sup></li> <li>Outdoor: 300 m max <sup>2)</sup></li> </ul>
<b>Power Supply and charger</b>	<ul style="list-style-type: none"> <li>One desktop charger for G266, G566 and G966</li> <li>USB AC adapter</li> <li>Input: 100-240 VAC 50-60Hz /150mA</li> <li>Country variants for EU and US/UK/AU</li> <li>Output (USB AC adapter): 5.0 VDC 1000mA (EU version) and 900 mA (US/UK/AU version)</li> <li>Charging time: &lt; 3 hours to charge battery to 90% when handset in charger or connected via USB</li> </ul>
<b>Battery and battery life</b>	<ul style="list-style-type: none"> <li>3.7 VDC 1600 mAh Lithium-ion battery</li> <li>Talk time &gt; 8 hours (DECT mode only)</li> <li>Talk time &gt; 6 hours (WiFi mode only)</li> <li>Standby &gt; 72 hours (WiFi and BT are off, DECT is standby)</li> <li>Off time &gt; 336 hours</li> </ul>
<b>Colour</b>	<ul style="list-style-type: none"> <li>G966 handset: Black</li> <li>Desktop Charger (G266/G566 and G966): Black</li> <li>Charger Rack: Black</li> </ul>
<b>Audible indicators</b>	<p>Selectable audible indicators:</p> <ul style="list-style-type: none"> <li>Key click</li> <li>Coverage warning</li> <li>Charger warning</li> <li>Battery low alarm</li> <li>Confirmation tone</li> </ul>
<b>Status line indicators and selectors</b>	<p>Status line indicators in the display are:</p> <ul style="list-style-type: none"> <li>Battery condition and charging indication</li> <li>Time</li> <li>DECT signal strength</li> <li>WiFi signal strength</li> <li>Messages</li> <li>Notifications</li> </ul> <p>Selector bar with Wifi on/off, Bluetooth on/off, display illumination, sync on/off</p>
<b>LED indicators</b>	<p>Three of the following user selectable indicators can be assigned to the tricolour indicator LED:</p> <ul style="list-style-type: none"> <li>Battery low</li> <li>Missed call</li> <li>Text or voice message</li> </ul>
<b>Supported menu languages</b>	<p>The handset supports 14 selectable languages: Danish, Dutch, English, French, German, Greek, Italian, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Turkish</p>

*2) The radio coverage of DECT handsets depends on the environment and the presence of obstacles*

## Bluetooth

<b>Bluetooth<sup>3)</sup> version</b>	<ul style="list-style-type: none"> <li>Classic</li> </ul>
<b>Class</b>	<ul style="list-style-type: none"> <li>Class 2, 2.5mW</li> </ul>
<b>Datarate</b>	<ul style="list-style-type: none"> <li>V1.5, V2.0+EDR, V3+HS</li> </ul>
<b>Profiles supported</b>	<ul style="list-style-type: none"> <li>Health Device Profile (HDP)</li> <li>Hands-Free Profile 1.5 (HFP)</li> <li>Headset Profile (HSP)</li> <li>Advanced Audio Distribution Profile (A2DP)</li> </ul>

*3) Bluetooth is a registered trademark of Bluetooth SIG, Inc.*

## Handset package and accessories

<b>G966 package contents</b>	<ul style="list-style-type: none"> <li>G966 handset</li> <li>Lithium-ion battery</li> <li>Quick Reference Guide</li> </ul>
<b>G966 handset accessories</b>	<ul style="list-style-type: none"> <li>Horizontal pouch for belt (handset needs to be removed when used)</li> <li>Rugged holder with belt-clip (handset can be used while in holder)</li> <li>Bumper</li> <li>Memory card</li> <li>Battery pack</li> <li>Desktop charger with adapter</li> <li>Charger rack (6 handsets) with AC adapter</li> <li>Bluetooth headset</li> <li>Wired headset</li> </ul>

## Environmental Conditions

<b>Temperature range</b>	Operating: 0°C to +40°C
	Transport: -25°C to +70°C
	Storage: -5°C to +45°C
<b>Relative Humidity</b>	Operating: 10 to 95%
	Transport: 10 to 100%
	Storage: 10 to 95%

## DECT

<b>Transmitted radio RF power</b>	Less than 250 mW <sup>4)</sup>
<b>Average Radio RF power</b>	10mW
<b>Frequency band EMEA</b>	1880 – 1900 MHz
<b>Frequency band China<sup>5)</sup></b>	1900 – 1920 MHz
<b>Frequency band Latin America<sup>5)</sup></b>	1910 – 1930 MHz
<b>Frequency band North America<sup>5)</sup></b>	1920 – 1930 MHz
<b>Frequency band Korea</b>	1786 – 1792 MHz
<b>Security</b>	Automatic DECT encryption to secure calls
<b>Protocol</b>	Supports both GAP DECT, DECT 6.0 and CAT-iq
<b>Range</b>	EU: 50 m indoor 300 m outdoor USA: 40 m indoor 250 m outdoor
<b>Antenna</b>	Two antennas for diversity

*4) The transmitted Radio RF power is according to local regulations*

*5) The G966 handset has a triple frequency band and can be used in the EMEA, American and Chinese DECT frequency band.*



## Compatibility

<b>Platform Compatibility IP DECT</b>	<ul style="list-style-type: none"> <li>Aspire, IPC500 and SV8100</li> <li>2000IPS, SV8300</li> <li>SV7000, SV8500</li> <li>iS3000 with DECT or IP DECT</li> <li>SIP@Net</li> <li>XN120, IPC100 and SV8100</li> <li>Certified SIP enabled PBXs or SIP servers</li> <li>Certified systems of Alcatel Lucent and Cisco</li> </ul>
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## WiFi

<b>Standard compliancy</b>	• 802.11a/b/g/n
<b>Frequency band</b>	• 2.4 GHz: 802.11 b/g/n • 5 GHz: 802.11 a and n
<b>Data rates</b>	• 802.11 a/g: up to 54 Mbps • 802.11 b: up to 11 Mbps • 802.11 n: up to 72 Mbps
<b>Maximum transmit power</b>	• +18 dBm @6 Mbps • +14 dBm @54 Mbps
<b>Receiver sensitivity</b>	• -92 dBm @6 Mbps • -75 dBm @54 Mbps
<b>Encryption methods</b>	• WEP, TKIP, AES, WAPI
<b>Authentication methods</b>	• 802.1x, WPA-PSK, WPA2-PSK, WPS
<b>QoS prioritization</b>	• WMM (based on 802.11e)
<b>Antenna</b>	• MIMO 1x1
<b>Battery life enhancements</b>	• U-APSD
<b>Roaming enhancements</b>	• PMK caching
<b>Cisco Support</b>	• Cisco CCX4 support • CCX Lite (aligned with Cisco)

## Access Point



## Standards

<b>European Conformity</b>	The G966 handset complies with the following harmonised standards:
<b>EMC</b>	• EN 301 489-1, EN 301 489-6, EN 301 489-17 • EN 300 440-1, EN 300 440-2
<b>EMF</b>	• EN 50360
<b>RF DECT</b>	• EN 301 406
<b>RF WiFi</b>	• EN 300 328, EN 301 893
<b>RF Bluetooth</b>	• EN 300 328
<b>Safety</b>	• EN 60950-1

## Directives and Regulations

<b>European Union</b>	<ul style="list-style-type: none"> <li>R&amp;TTE directive 1999/5/EC</li> <li>EMC directive 2004/108/EC</li> <li>LVD directive 2006/95/EC</li> <li>ROHS directive 2011/65/EU</li> <li>WEEE directive 2012/19/EU</li> <li>ERP directive 2009/125/EC</li> </ul>
<b>USA and Canada</b>	<ul style="list-style-type: none"> <li>FCC part 15C, 15D</li> <li>RSS 210, RSS 213</li> <li>HAC/VC</li> </ul>



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## **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.

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

Note: This equipment has been tested and found to comply with the limits for a Class 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.

## **Specific Absorption Rate (SAR) information**

SAR tests are conducted using standard operating positions accepted by the FCC with the phone 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 phone while operating can be well below the maximum value, in general, the closer you are to a wireless base station antenna, the lower the power output.

Before a new model phone is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the exposure limit established by the FCC, Tests for each phone are performed in positions and locations (e.g. at the ear and worn on the body) as required by the FCC.

For body worn operation, this model phone has been tested and meets the FCC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that

Contains no metal and that positions the handset a minimum of 1.5 cm from the body.  
Non-compliance with the above restrictions may result in violation of RF exposure guidelines.

Privacy of communications may not be ensured when using this telephone!

#### Customer Information

1. This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the bottom of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.
2. A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.
3. If this equipment [US:T7HW4NANCT8152] causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.
4. The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.
5. If trouble is experienced with this equipment [US:T7HW4NANCT8152], for repair or warranty information, Service can be facilitated through our office at:  
U.S. Agent Company name: RTX America Inc  
Address: 501 AirTech Parkway Plainfield IN 46168 USA  
Tel: (408) 441 8600  
If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.
6. Please follow instructions for repairing if any (e.g. battery replacement section); otherwise do not alternate or repair any parts of device except specified. For repair procedures, follow the instructions outlined under the limited warranty.
7. Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.
8. If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this [CT8152] does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.
9. If the telephone company requests information on what equipment is connected to their lines, inform them of:
  - a) The ringer equivalence number [NAN]

- b) The USOC jack required [N/A]
  - c) Facility Interface Codes (“FIC”) [N/A]
  - d) Service Order Codes (“SOC”) [N/A]
  - e) The FCC Registration Number [US: T7HW4NANCT8152]
10. The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. The REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point. For this product the FCC Registration number is [US: T7HW4NANCT8152] indicates the REN would be NAN.
11. This product is hearing aid compatible.

## IC Warning

### CS03:

This product meets the applicable Industry Canada technical specifications. / Le présent matériel est conforme aux spécifications techniques applicables d'Industrie Canada.

### RSS(Category I Equipment):

This device complies with Industry Canada licence-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.

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

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la

puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

The device has been tested and compliance with SAR limits, users can obtain Canadian information on RF exposure and compliance

Le présent appareil est conforme

Après examen de ce matériel aux conformité aux limites DAS et/ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur l'exposition aux radiofréquences et la conformité and compliance d'acquérir les informations correspondantes