

Nokia ONT

G-1425G-B User manual and Quick installation guide

 $No kia is a registered trademark of No kia Corporation. Other products and company \ names \ mentioned \ herein \ may be trademarks or tradenames of their respective \ owners.$

 $The information \ presented \ is \ subject \ to \ change \ without \ notice. \ No \ responsibility \ is \ assumed \ for \ inaccuracies \ contained \ herein.$

© 2023 Nokia.

Contains proprietary/tradesecret information which is the property of Nokia and must not be made available to, or copied or used by anyone outside Nokia without its written authorization. Not to be used or disclosed except in accordance with applicable agreements



G-1425G-B Globe variants

Kit code 3FE49881BH

Product Overview

The Nokia optical network terminal (ONT) G-1425G-B is the solution for home networking that is delivered by Gigabit Passive Optical Network (GPON). The device has built-in concurrent dual-band Wi-Fi® 802.11b/g/n and 802.11ac networking for high-capacity Wi-Fi connectivity. The G-1425G-B supports Wi-Fi 5 and Wi-Fi EasyMesh™, to create a whole home mesh network.

This coverage can be expanded at any time by installing additional Wi-Fi EasyMesh-capable beacons to ensure seamless roaming throughout the home.

The G-1425G-B includes the Nokia WiFi Mesh Middleware which ensures the best possible Wi-Fi performance. The end-user experience is enhanced by the intuitive Nokia WiFi mobile app and by the service provider's Wi-Fi management capabilities in the cloud.

Front panel



Figure 1-1 G-1425G-B Indoor ONT LEDs (Only one telephony)



| Indicator | LED color and behavior | LED behavior description |
|-----------------|------------------------|---|
| POWER | Green solid | Power on |
| | Green flashing | Light failed on startup (for example corrupt flash), or selftest failed on startup, or selftest failed during regular operation or when executed over OMCI |
| | Off | Power off |
| LINK | Green solid | GPON link between ONT and OLT is operating normally |
| | Off | GPON link is down or no link is connected |
| AUTH | Off | Fiber is not connected or no power is received to the ONT |
| | Green solid | ONT is configured on the OLT and is in service (UP) |
| | Green flashing | ONT is in the process of ranging or synchronizing over the OLT |
| LAN 1 to 4 | Off | ONT power is off or Ethernet is not connected |
| | Green solid | ONT is connected to the associated LAN port (includes devices with wake-on-LAN capability where a slight voltage is supplied to an Ethernet connection) |
| TEL | Green solid | Phone is off hook. |
| | Green flashing | Phone is in 'call in' or 'talking' condition |
| | Off | All phones are on hook |
| VOIP | Green solid | VoIP service is built up and can provide service |
| | Off | VoIP service is not built up or out of service |
| WPS | Green solid | Wi-Fi protected setup link is up (negotiation and auto-configuration successful) |
| | Green flashing | Wi-Fi protected setup link activity (negotiation and auto-configuration ongoing) |
| | Off | Wi-Fi protected setup link down or no link connected (negotiation has not started or has failed). Wi-Fi protected setup processing exception or multiple peers using WPS simultaneously |
| WLAN 2.4 GHz | Green solid | WLAN link is enabled in 2.4 GHz |
| | Green flashing | Traffic is passing through the WLAN link |
| | Off | WLAN link is disabled or no link is connected |
| WLAN 5 GHz | Green solid | WLAN link is enabled in 5 GHz |
| | Green flashing | Traffic is passing through the WLAN link |
| | Off | WLAN link is disabled or no link is connected |
| INTERNET | Green solid | IP connected (the device has a WAN IP address from IPCP/DHCP/Static and Broadband link is up) and no traffic detected. If the IP or PPPoE session is dropped due to an idle timeout, the light will remain green if PON link is still present. If the session is dropped for any other reason, the light is turned off. |
| | Green flickering | PPPoE or DHCP connection is in progress. |
| | Off | Broadband physical connection power off, device in bridged mode with no IP address assigned to the device, or Broadband physical interface connection not present |

Figure 1-2 G-1425G-B indoor ONT LED descriptions



Technical Specifications

Dimension:

• Height: 138 mm (5.4 in) (without antennas)

• Width: 180 mm (7.1 in)

• Depth: 37 mm (1.5 in) (without base)

Features:

G-1425G-B product features:

- Four RJ-45 10/100/1000 Ethernet ports
- One POTS port for voice service
- Wireless IEEE 802.11 b/g/n: 2.4GHz
- Wireless IEEE 802.11ac: 5GHz
- Network Address Translation (NAT) and firewall
- Voice interworking function from the analog POTS line to the voice over IP (VoIP) and Ethernet layers
- Dual-band concurrent Wi-Fi: 2.4GHz and 5GHz
- Optics support received signal strength indication (RSSI)
- Supports virtual private network (VPN)
- Support Layer 2 Tunneling Protocol (L2TP) and IPSec
- Port forwarding and demilitarized zone (DMZ)
- Dynamic Domain Name System (DDNS)

Environmental specifications:

Temperature: -5°C to 45°C (23°F to 113°F)

Relative humidity: 10% to 90%

Power consumption:

- Local powering with 12 V input (feed uses external AC/DC adapter)
- Dying gasp support
- Power consumption: 18 W



Safety Guidelines

Warning - Risk of electric shock or fire Connect the Product power adaptor or cord to the right supply voltage of Local Philippine Government.

The socket-outlet shall be easily accessible. Pay attention to the power load of the electrical outlet and possible extension cord.

An overburdened power outlet or damaged cords and plugs may cause electric shock or fire. Check the power cords regularly. If you find any damage, replace the cord immediately.

- Do not connect the plug into an extension cord, receptacle, or other outlet unless the plug can be fully inserted with no part of the blades exposed. Leave adequate space for heat dissipation to avoid any damage caused by overheating the Product.
- Do not cover the Product or its ventilation holes. Blocking the ventilation holes may cause fire. Use the power adapter provided with your Product and do not fasten the power cable to building surfaces. Ensure the cable can move freely. Do not place heavy objects on the cable.
- Do not use the Product outside, and make sure all the connections are indoors.
- Do not install, use, or service this Product during a thunderstorm. There is a remote risk of electric shock from lightning.



Install the ONT

Installation precautions

The device should only be installed by qualified personnel according to local laws and regulations.

Please check the voltage rating before connecting the power. It is recommended not to share the same power socket with other high power-rated devices (examples: hairdryer, refrigerator, iron).

Do not place the device near flammable or conductive materials, high temperature (direct sunlight), moisture, or other appliances that produce heat.

Always make sure the device is properly ventilated, do not place any objects on the device to avoid over-heating.

Ensure the device is installed on an even surface.

The power socket and power cable shall be inspected regularly and must be replaced if damaged to avoid risk of electric shock or fire.

Operation Cautions

Follow these recommendations to protect yourself and the Product from harm:

- Do not look directly at the optical port without protection.
- Do not insert any sharp object into the openings of a Product.
- Do not put the Product near a heat source. Avoid placing the Product in direct sunlight.
- Do not put the Product in damp or wet locations, for example, near a bathtub, washbowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool.
- Do not spill any liquid on the Product.
- Do not touch the Product or its power adapter or cord with wet hands.
- Do not place the Product on an unstable surface or support.
- Do not place heavy objects on top of the Products.
- Do not use liquid or aerosol cleaners; unplug the Product and use a soft, dry cloth for cleaning.
- When connecting a PC or other electronic device to a Product, make sure you use the right cables and connect the device to the right port of the Product. Incorrect connections may damage the device and/or the Product.
- Do not open or try to open the Product. Opening or removing covers can expose you to dangerous high voltage points or other risks.

It is recommended that users and other individuals maintain a distance of at least 10 cm between themselves and the Product to avoid exposure. The Product contains



components that emit an electromagnetic field and could interfere with pacemakers or other electronic medical devices.

If you have a pacemaker or other implantable or personal medical device, please consult your physician or medical device manufacture about the required minimum safe distance between the Product and your medical device.

Keep your product and accessories out of reach of pets. They could damage it and cause injury or electrocuting. If the Product malfunctions or fails to perform as expected, stop using it immediately.

The product is expected to operate at a temperature of -5 to 45 degrees Celsius for a relative humidity between 10% and 90%.

Accessing the web GUI

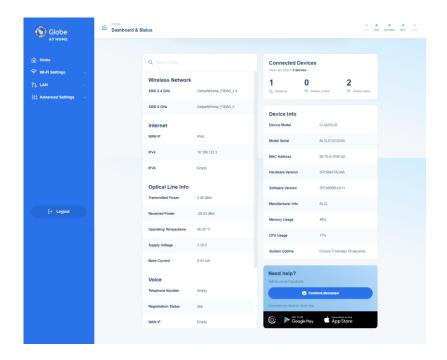
You may customize the configuration of your ONT using the web graphical user interface. Altering the default configuration is not recommended if you are unfamiliar with the settings.

- 1. Set the LAN setting to obtain an IP Address automatically.
- 2. Open a web browser and enter the default gateway IP address http://192.168.254.254 in the web browser address bar for accessing the device GUI. The default gateway IP address is <u>printed on the product label</u> <u>on the back panel of ONT</u>. You can connect to this IP address using your web browser after connecting your PC to one of Ethernet ports of the ONT. The static IP address of your PC must be in the same subnet as the ONT. The login window appears.
- 3. Enter your username and password in the Log in window.
 The default username and password are printed on the product label on the back panel of ONT.
- 4. Click Login.

The web GUI opens. The web GUI displays device information and provides menu options for WAN status, Network settings, Wi-Fi setting and other options for configuration changes. Altering the network setting is not recommended when internet connections are already established and working.

After Login, you may check the ONTs internet and WIFI connection status in the "dashboard and status" page as below, configure the LAN/WIFI attributes by clicking the configuration item at left:





About Nokia

At Nokia, we create technology that helps the world act together.

As a B2B technology innovation leader, we are pioneering networks that sense, think and act by leveraging our work across mobile, fixed and cloud networks. In addition, we create value with intellectual property and long-term research, led by the award-winning Nokia Bell Labs.

Service providers, enterprises and partners worldwide trust Nokia to deliver secure, reliable and sustainable networks today – and work with us to create the digital services and applications of the future.

© 2023 Nokia

Nokia OYJ Karakaari 7 02610 Espoo Finland

Tel. +358 (0) 10 44 88 000

Document code: SR18xxEN (April) CIDXXXXXX