

Optical Network Terminal (ONT) Product Specification

2466GN

V0.1

2025-Feb

Revision History

Rev	Date	ECO	Author
V0.1	2025-2-17		Alex- Initial Version

■ Summary

2466GN is cost effective FTTH residential home gateway. It provides customers 4 Gigabit Ethernet, 1 VoIP POTS port and a USB2.0.

■ Highlights

- ❖ ITU G.984.x GPON port with 2.488Gbps (downstream) and 1.244Gbps (upstream)
- ❖ 4x 10/100/1000BASE-T Ethernet RJ45 ports
- ❖ 1x POTS port
- ❖ 1x USB2.0
- ❖ 2x2 802.11ax 5G Wi-Fi, provide high bandwidth and low delay service, Maximum rate can 2.4Gbps(160MHz)
- ❖ 2x2 802.11ax 2.4G Wi-Fi, provide high bandwidth and low delay service ,Maximum rate can 574Mbps(40MHz)

■ Standard Compliance

- ❖ ITU-T G.984.x
- ❖ ITU-T G.984.2 Amendment 1, Class B+
- ❖ ITU-T G.988 OMCI
- ❖ IEEE 802.1p QoS
- ❖ IEEE 802.1q VLAN
- ❖ IEEE 802.3 Ethernet
- ❖ IEEE 802.11n
- ❖ IEEE 802.11ac
- ❖ IEEE 802.11ax

■ Specifications

General

Model	2466GN
ONT Type	GPON Home Gateway with Wi-Fi6
Chipset	CPU: BCM68252C SLIC: Le9643 Wi-Fi: BCM6705
Uplink	GPON
Downlinks	4*GE, 1*POTS, 1*USB2.0
Operating Temperature	0 to 40C
Storage Temperature	-40 to 85C
Operating Humidity	10% to 95%, non-condensing
Installation	Desktop, Wall Mount
Dimensions	252*148*38mm
Net Weight	380g

GPON

GPON Interface	1x SC/APC connector, single mode fiber
Standard Compliance	ITU G.984.2 Class B+ Laser safety standard IEC-60825 Class I
Transmitter	1.244Gbps upstream DFB transmitter in 1310nm, with ≥ 10 dB Extinction Ratio Mean launch power in 0.5 to 5dBm range Turn on/off time at burst mode < 12.8 ns
Receiver	2.488Gbps downstream APD receiver in 1490nm, with -8 to -28dBm working range Isolation (1441-1450nm),(1530-1539nm) ≥ 25 dB Isolation (1260-1441nm),(1539-1625nm) ≥ 35 dB
TC Layer	Types 1 to 5 TCONT as defined in G.984.3 32 TCONT, 256 GEM Ports Flexible mapping between TCONT and GEM Ports
GPON Features	Dying Gasp, Forward Error Correction (FEC), Configurable AES decryption in the downstream direction

GE LAN

Ethernet Interface	4x RJ45 connectors (Yellow)
Standard Compliance	IEEE 802.3, 802.3u, 802.3ab

Link	Half-duplex and full-duplex operations; 10/100/1000BaseT auto-negotiation and manual configuration; MDI/MDIX auto detection
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POTS

POTS Interface	1x RJ11 connector
Ringin	5 REN
Soft Switch Support	SIP

2.4G Wi-Fi

MIMO	2x2
Antenna	Internal Antennas with 3dBi Gain
Standard	802.11b/g/n/ax
Speed	574Mbps
EIRP	27dBm

5G Wi-Fi

MIMO	2x2
Antenna	Internal Antennas with 3dBi Gain
Standard	802.11b/g/n/ac/ax
Speed	2.4Gbps
EIRP	28dBm

OAM

LEDs	STATUS/ BATT/ ALARM/ WAN/ INTERNET/ GE4/ GE3/ GE2/ GE1/ VOICE/ USB/ 2.4GHZ/ 5GHZ/ WPS
Buttons	Reset/ WPS
Management	OMCI, CLI, Telnet, HTTP, TR-69
Firmware Upgrade	Firmware upgrade, active and alternative firmware images
Diagnostics	Enhanced GPON debug and diagnostic functions Log files, memory allocation and crash check
Alarm	Alarm report and suppression (ARC)
PM	All standard PM counters

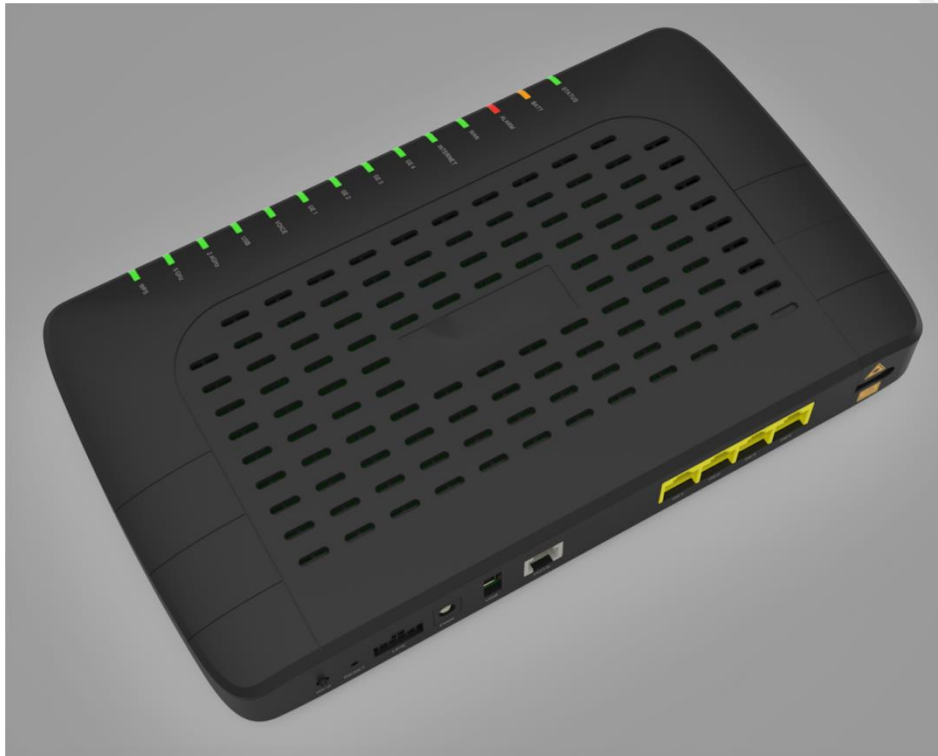
Power

Power Options	Wall adapter or UPS via 2x4 Molex connector
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Wall Adapter

Standard Barrel Connector
100-240VAC in, 50/60Hz
12VDC out, 1.5A max

■ Product Photos



FCC Warning

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

ISED Warning

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with Innovation, Science and Economic Development Canada's radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet appareil contient des émetteurs/récepteurs exemptés de licence qui sont conformes aux flux RSS exemptés de licence d'innovation, sciences et développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes:

1. Cet appareil ne peut pas causer d'interférences.
2. Ce dispositif doit accepter toute interférence, y compris celle qui peut provoquer un fonctionnement indésirable du dispositif.

Cet équipement est conforme aux limites d'exposition au rayonnement d'innovation, sciences et développement économique Canada établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20cm entre le radiateur et votre corps.

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