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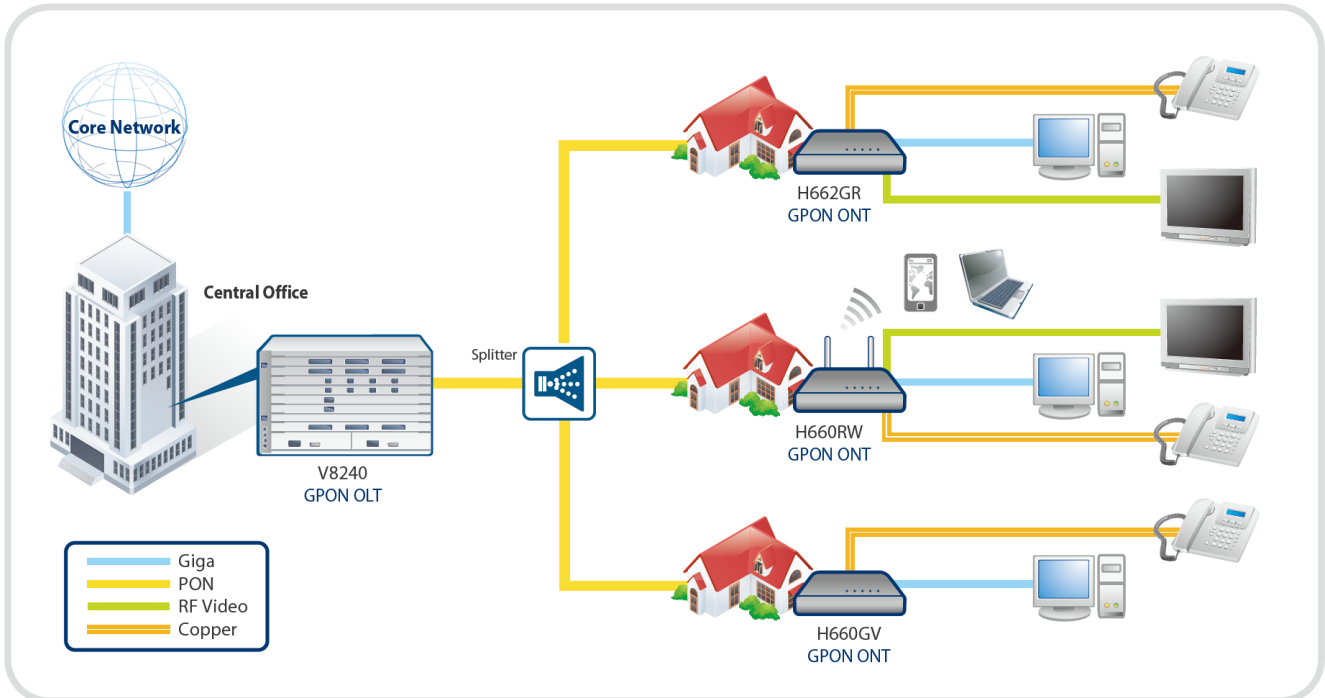
## **Product Overview**

DASAN Networks' H662GR optical network terminal is targeted for all subscribers requiring multiple POTS, RF interface and high-speed data interfaces in a cost-effective indoor housing. Fully compliant with ITU-T G.984 standards, the H662GR supports data rates of 1.25Gbps upstream and 2.5Gbps downstream. With DASAN's leading-edge GPON technology, users can enjoy bandwidth-intensive multimedia services such as real-time audio, video and gaming much easier and faster than ever before.

The H662GR provides one GPON uplink port, two Gigabit Ethernet (10/100/1000Base-T) ports, one RF out interface and one FXS voice port that enhance the ability to deliver demanding data/video/VoIP services. The H662GR uses Session Initiation Protocol (SIP) to terminate VoIP calls so that in-home wiring does not change and standard telephone sets may be used. The H662GR supports the full triple play of services including voice, video and high-speed Internet access services.

The H662GR contains both built-in wire-speed L2 switch and L3 routing gateway with port forwarding, NAT and NAPT address translation, PPPoE client support for high speed Internet service.

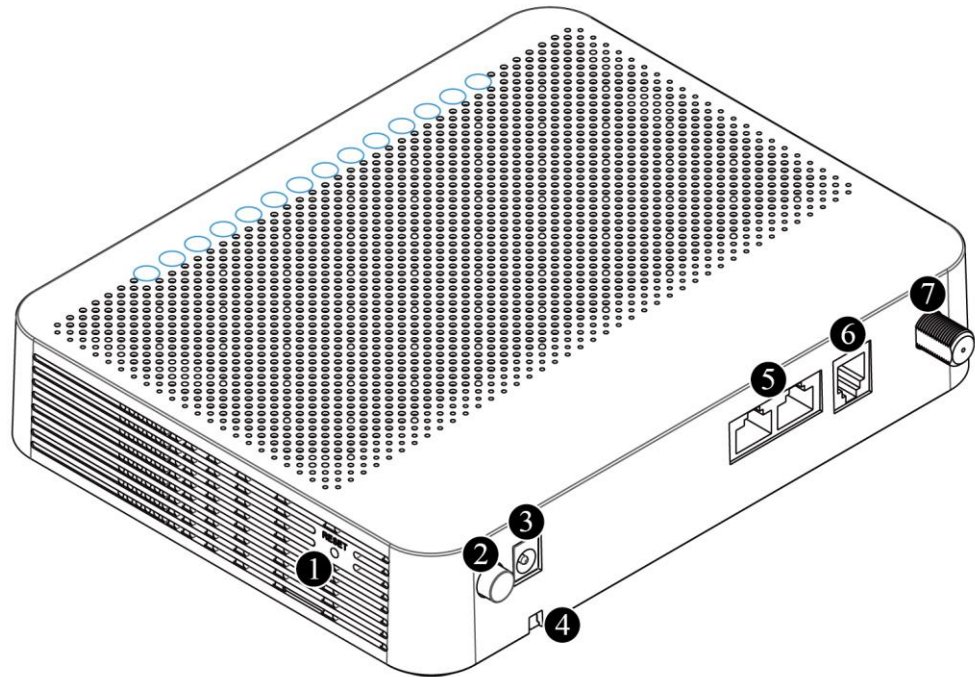
## Service Scenario for PON



A PON consists of an Optical Line Termination (OLT) located at the Central Office and a set of Multi Dwelling Units (MDUs) or Optical Network Terminals (ONTs) located at the customer's premises. Between them is the optical distribution network (ODN) comprised of fibers and passive optical splitters or couplers. A splitter is a device that divides an optical signal into two or more signals. The OLT connects the PON to the IP network that controls and manages the PON clients. An MDU (ONT) connects the user-specific network to the PON. The ONT can be utilized by a single subscriber or used as a multi-dwelling gateway for a local network.

## Interface Layout

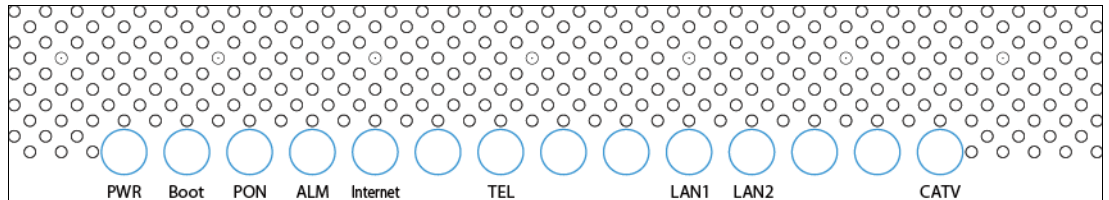
The following drawing shows the interface layout of the product.



Interface Name	Description	Connector Type
① RESET button	Reboot the unit	-
② ON/OFF button	Turn on/off the unit	-
③ Adaptor Jack	Connect an external power supply	-
④ OPTIC LINE	Connect to OLT via a passive optical splitter 1 GPON uplink interface	SC/APC
⑤ LAN 1-2	Connect to PC or LAN 2 10/100/1000Base-T interfaces for data communication	RJ45
⑥ TEL	Connect to VoIP phone 1 FXS interface for phone service	RJ11
⑦ CATV	Connect to TV	F-connector

## Operating Status LEDs

The status of the ONT is indicated by the LEDs located on the front of unit. LED indicators illuminate to show normal ONT operation, and will blink and/or turn off to indicate the current status or errors. Refer to the following table for details of each LED state.



Label	Color	Status	Description
PWR	Green	On	The device is receiving Power and working properly.
	Red	On	The Power to the device is too low.
		Off	The device does not receive Power.
Boot	Green	On	The device is functioning properly.
		Blinking	The device is booting.
		Off	The device is not ready or malfunctioned.
PON	Green	On	Optic signal normal. Normally registered. OMCI success.
		Blinking	Firmware being downloaded.
	Red	On	No optic signal, and the unit has not been registered.
ALM	Red	On	No optic signal, firmware update failure or other faults.
		Off	Received optical power is normal.
Internet	Green	On	The device has a PPPoA/PPPoE connection
		Off	The device does not have connection.
TEL	Green	On	The device has successful voice connection.
		Blinking	The device is using voice service.
		Off	The voice connection fail.
LAN 1-2	Green	On	The port link is up.
		Blinking	Port is sending or receiving data.
		Off	The link is down.
CATV	Green	On	The CATV is functioning properly.
		Off	The CATV is not ready or malfunctioned.

## Product Specifications

### Capabilities

#### System

- 128MB Flash Memory
- 128MB SDRAM
- GPON Interface Capacity:  
Up 1.25Gbps / Down 2.5Gbps

#### GPON ONT

- ITU-T G.984.x compliant
- Forward Error Correction (FEC)
- Multiple T-CONTs/GEM ports per device
- Flexible mapping between GEM port and T-CONT
- Priority queues and scheduling on Upstream
- Activation with automatic discovered Serial Number and password
- Dying Gasp

#### L2/L3

- Untagged port configuration
- IEEE802.1D and IEEE802.1Q bridging
- Standard Ethernet bridging
- MAC address learning with auto aging (Up to 4K MAC addresses)
- PPPoE client: multiple clients per RG ONT, Automatically initiating the session, Automatically keep alive
- DHCP server / client
- DNS Relay server (DNS relay, DNS transparent)
- NAT and NAT
- Port forwarding
- Integrated stateful packet inspection firewall with ACL

#### Multicast

- IGMP snooping
- IGMP proxy

#### Quality of Service

- HW-based internal IEEE 802.1p (CoS)
- Strict Priority (SP)
- 802.1Q (VLAN tag) QoS mapping, ToS/CoS
- 8 queues per port

#### Management

- ITU\_T 984.4 compliant OMCI interface
- IEEE802.3x flow control
- LED indications for maintenance
- Web-based management
- ONT service provisioning (on the OLT-side)

#### VoIP Features

- SIP (RFC3261/3262/3264)
- 5-REN per POTS
- RTP, RTCP (RFC3550/3551)
- DTMF dialing / Pulse dialing
- Multiple codecs: G.711, G.723.1, G729
- T.38 FAX mode
- Echo cancellation

#### Video (RF) Receiver Feature

- Standard F-Type connector
- RF Frequency Range: 47~1,000MHz
- Analog RF video over dedicated 1550nm wavelength
- RF Output Level AGC Adjustment
- RF enabled/disabled by OMCI and NMS
- AGC setting by OMCI and NMS
- Remote monitoring for RF status

## Physical Specifications

### Mechanics

- Dimensions (W x H x D)  
7.5 x 1.6 x 5.9 in  
(190 x 40 x 150 mm)

### Environmental Conditions

- Operating temperature  
23 to 122°F (-5 to 50°C)
- Storage temperature  
-22 to 140°F (-30 to 60°C)
- Operating humidity  
20 to 90% (non-condensing)

### Power Voltage (AC/DC Adapter)

- Input: 100-240VAC, 50/60Hz
- Output: 12VDC/2A

### Interface Parameter

- GPON i/f  
1 GPON port (SC/APC type)
- Gigabit Ethernet i/f  
2 10/100/1000Base-T ports  
(RJ45)
- FXS i/f  
1 FXS port (RJ11)
- Video i/f  
1 RF Video port (F-connector,  
coax)

### Operating Indicators (LED)

- PWR ON / OFF  
Power status
- Boot ON / Blinking / OFF  
Booting status
- PON ON / Blinking  
ONT registration status
- ALM ON / OFF  
Optical signal status
- Internet ON / OFF  
Configuration status
- TEL ON / OFF  
Off/On-hook status
- LAN ON / Blinking / OFF  
LAN port link status  
activity status
- CATV ON / OFF  
RF power status

## Ordering Information

Base Standard
<p><b><u>H662GR</u></b></p> <p>G-PON (Class B+, ITU-T G.984), 2-Port 10/100/1000Base-T, POTS, CATV</p> <ul style="list-style-type: none"><li>- PON MAC: Broadcom, Flash 128MB and SDRAM 128MB</li><li>- SC/APC Connector type</li><li>- Power Voltage: Input 100~240VAC, Output 12V/2A</li><li>- CE Certification</li></ul>

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