HALNy
High Availability Local Networks

# HL-4GX3V

**GPON Wireless Router**
**4x Gigabit LAN Port**
**Wi-Fi6 AX3000**
**With VoIP**



## Product Description

HALNy GPON Gateway is an innovative and powerful product for business and residential subscribers.

All products within the GPON family comply with current ITU-T standards for gigabit passive optical networks (GPONs). The solution is designed to optimize the deployment and roll-out of the service provider. **HL-4GX3V** design offers multi-interoperability with several OLT vendors. The ONT/ONU products are tested and have proven interoperability with most major GPON OLT Vendors.

The solution is designed to optimize the deployment and roll-out of the service provider. This includes interoperability GPON ONT with advanced support for L2 VLANs and Multicast IGMP, L3 Routing with NAT, PPPoE, and easy-to-use Provisioning.

HALNy specializes in cost-effective designs and works closely with service providers to improve their business case through a comprehensive range of standard products, supporting the industry's common demands. HALNy also provides custom designs and services to meet unique customer needs.

**Housing can be sold with the Operator logo on the top cover.**

DEVELOPED IN POLAND






All specifications are subject to change without notice. The above product picture is a sample for reference and may vary. Please check with your supplier for exact offers. Actual data throughput and Wi-Fi coverage will vary from network conditions and environmental factors, including the volume of network traffic, building material and construction, and network overhead, resulting in lower actual data throughput and wireless coverage. Quoted network speeds and bandwidth based on current IEEE specifications. Actual performance may be affected by network and service provider factors, interface type, and other conditions.

www.halny.com

**FIBRAIN Sp. z o.o.**
**36-062 Zaczernie 190F**
**Poland**

**phone** **+48 17 866 08 00**
**e-mail** **sales@halny.com**
**support@halny.com**



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## Hardware Specification

| | |
|---|---|
| **CPU** | Dual Core 1000MHz |
| **WAN Port** | GPON B+ SC/APC<br>2.488Gbps Downstream<br>1.244Gbps Upstream |
| **GPON Tx** | 0.5 ~ 5 dBm |
| **GPON Rx** | -10 ~ -27 dBm |
| **LAN Port** | 4 x port 10/100/1000BASE-T (RJ-45)<br>Auto-sensing, auto-detection MDI/ MDI-X |
| **TEL Port** | 1 x FXS, RJ11 |
| **WIFI** | 2T2R AX3000<br>2.4GHz & 5GHz MU-MIMO<br>External antennas (5dBi) |
| **Storage Temp.** | -20℃~70℃ (-4F~158F) |
| **Operating Temp.** | 0℃~40℃ (32F~104F) |

| | |
|---|---|
| **Operating Humidity** | 5% ~ 95%<br>(non-condensing) |
| **Power Supply** | DC +12V / 1.5A |
| **Buttons** | ON/OFF Power, WIFI, WPS, Reset |
| **Dimension (W x D x H)** | 152 x 107 x 36mm |
| **Operating Frequencies** | 802.11b/g/n:<br>2401-2484 MHz<br>802.11a/n/ac/ax:<br>5170-5835 MHz |
| **Maximum power of the transmitter** | 2.4 GHz: up to 20 dBm<br>5 GHz: up to 23 dBm<br>Transmit power control |
| **LED** | POWER, PON, LOS, NET, WiFi, LAN1-4, TEL |

## Frequency Band

**2.4GHz**

2412MHz – 2472MHz
2422MHz – 2462MHz
Transmit Power: 0.0589W
Modulation: DSSS/OFDM
Channel Width: 20/40MHz

**5GHz**

5180MHz – 5240MHz
5260MHz – 5320MHz
5500MHz – 5700MHz
Modulation: OFDM/BPSK/QPSK/16-QAM/64-QAM/, 256-QAM, 1024-QAM
Transmit Power: 0.0769W
Channel Width: 20/40/80/160MHz

5745MHz – 5825MHz
5755MHz – 5795MHz
Modulation: OFDM/BPSK/QPSK/16-QAM/64-QAM/ 256-QAM, 1024-QAM
Transmit Power: 0.0225W
Channel Width: 20/40/80/160MHz

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# Software Specification

| | |
|---|---|
| **GPON** | ITU-T G.984.x and G.988<br>OMCI G.984.4 / G.988<br>AES / FEC / DBA<br>Dying GASP<br>Multicast GEM |
| **Provisioning** | Easy to use provisioning for all ONT configuration<br><br>DOCSIS like provisioning over GPON/EPON<br>TR-069<br>OMCI<br>OTT Upgrade<br>DHCP 66/67 XML<br>RestAPI / JSON |
| **EasyMesh** | Controller and Agent |

| | |
|---|---|
| **L3 (HGU Mode)** | Router / NAT / PAT<br>PPPoE / DHCP Client<br>Static IP<br>DHCP Server<br>IGMP Proxy<br>VPN Pass-through<br>UPnP<br>DMZ / Port Forwarding<br>IPv4 / IPv6<br>IPv6 Dual Stack<br>IPv6 DS-Lite<br>IPv6 Firewall RFC-6092<br>WAN bridge |
| **Telephony** | SIP, DTMF, Dial Plan |
| **Management** | WEB (two user accounts)<br>Remote Syslog, OMCI |

# Interoperability Test Result

| | |
|---|---|
| **NOKIA** (Alcatel-Lucent) | **Cisco/Altice** |
| **DZS** | **FIBERHOME** |
| **ZTE** | **RAISECOM** |
| **HUAWEI** | **ZYXEL** |
| **CALIX** | **ZHONE** |
| **ADTRAN** | **ISKRATEL** |

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## Ordering Information

| | |
|---|---|
| **HL-4GX3V / HL-4GX3V-EU** | HALNY NETWORKS GPON ONT 4-PORT LAN 10/100/1000, 1-PORT, B+ SC/APC, WIFI B/G/N/AC/AX 2.4GHZ/5GHZ AX:2X3, 1XPOTS, Router/Bridge, with European Power Adapter |
| **HL-4GX3V-US** | HALNY NETWORKS GPON ONT 4-PORT LAN 10/100/1000, 1-PORT, B+ SC/APC, WIFI B/G/N/AC/AX 2.4GHZ/5GHZ AX:2X3, 1XPOTS, Router/Bridge, with North America Power Adapter |
| **HL-4GX3V-UK** | HALNY NETWORKS GPON ONT 4-PORT LAN 10/100/1000, 1-PORT, B+ SC/APC, WIFI B/G/N/AC/AX 2.4GHZ/5GHZ AX:2X3, 1XPOTS, Router/Bridge, with United Kingdom Power Adapter |
| **HL-4GX3V-NOPS** | HALNY NETWORKS GPON ONT 4-PORT LAN 10/100/1000, 1-PORT, B+ SC/APC, WIFI B/G/N/AC/AX 2.4GHZ/5GHZ AX:2X3, 1XPOTS, Router/Bridge, without Power Adapter |

Please **contact sales** for detailed order information




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