

#### **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-4GX3VR** 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.









## **Hardware Specification**

Flash / RAM	128MB / 256MB	Storage Temp.	-10°C~60°C (14F~140F)
CPU	Dual Core 900MHz	Operating Temp.	0°C~45°C (32F~113F)
WAN Port	GPON B+ SC/APC 2.488Gbps Downstream 1.244Gbps Upstream	Operating Humidity	10% ~ 90% (non-condensing)
<b>GPON Tx</b>	0.5 ~ 5 dBm	Power Supply	DC +12V / 1.5A
GPON Rx	-10 ~ -27 dBm	Buttons	ON/OFF Power, WIFI, WPS, Reset
LAN Port	4 x port 10/100/1000BASE-T (RJ-45) Auto-sensing, auto-detection MDI/ MDI-X	Dimension (W x D x H)	210 x 150 x 36mm
TEL Port	1 x FXS, RJ11	Operating Frequencies	802.11b/g/n: 2401-2484 MHz 802.11a/n/ac/ax:
RF Port	Bandwidth 45 ~ 863Mhz Output LeveL=> 78dBuV		5170-5835 MHz
WIFI	2T3R AX3000 2.4GHz & 5GHz MU-MIMO	Maximum power of the transmitter	2.4 GHz: up to 20 dBm 5 GHz: up to 23 dBm Transmit power control
	Internal antennas	LED	POWER, PON, LOS, NET, WLAN 2.4G, WLAN 5G, LAN1-4, TEL, CATV, WPS

#### **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





### **Software Specification**

**GPON** ITU-T G.984.x and G.988 OMCI G.984.4 / G.988

AES / FEC / DBA
Dying GASP
Multicast GEM

**Provisioning** Easy to use provisioning for all

**ONT** configuration

DOCSIS like provisioning over

GPON/EPON TR-069 OMCI

OTT Upgrade DHCP 66/67 XML RestAPI / JSON

EasyMesh Controller and Agent

L3 Router / NAT / PAT (HGU Mode) PPPoE / DHCP Client

Static IP DHCP Server IGMP Proxy VPN Pass-through

UPnP

DMZ / Port Forwarding

IPv4 / IPv6 IPv6 Dual Stack IPv6 DS-Lite

IPv6 Firewall RFC-6092

WAN bridge

**Telephony** SIP, DTMF, Dial Plan

**Management** WEB (two user accounts)

Remote Syslog, OMCI

### **Interoperability Test Result**

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





# **Ordering Information**

HL-4GX3VR / HL-4GX3VR-EU	HALNY NETWORKS GPON ONT 4-PORT LAN 10/100/1000, 1-PORT RF(CATV), B+ SC/APC, WIFI B/G/N/AC/AX 2.4GHZ/5GHZ AX:2X3, 1XPOTS, Router/Bridge, with European Power Adapter
HL-4GX3VR-US	HALNY NETWORKS GPON ONT 4-PORT LAN 10/100/1000, 1-PORT RF(CATV), B+ SC/APC, WIFI B/G/N/AC/AX 2.4GHZ/5GHZ AX:2X3, 1XPOTS, Router/Bridge, with North America Power Adapter
HL-4GX3VR-UK	HALNY NETWORKS GPON ONT 4-PORT LAN 10/100/1000, 1-PORT RF(CATV), B+ SC/APC, WIFI B/G/N/AC/AX 2.4GHZ/5GHZ AX:2X3, 1XPOTS, Router/Bridge, with United Kingdom Power Adapter
HL-4GX3VR-NOPS	HALNY NETWORKS GPON ONT 4-PORT LAN 10/100/1000, 1-PORT RF(CATV). B+ SC/APC. WIFI B/G/N/AC/AX 2.4GHZ/5GHZ AX:2X3. 1XPOTS.

Please contact sales for detailed order information

Router/Bridge, without Power Adapter

