# 10G xPON ONU Gateway

**NOVA2313**

for Residential and Business Subscribers

The Hitron NOVA2313 is a powerful 10G XGS-PON ONU gateway designed for operators delivering next-generation fiber broadband services. Unlike the entry-level NOVA2302, the NOVA2313 integrates advanced routing functionality and multiple Ethernet ports, enabling it to serve as a complete residential or SMB gateway for multi-gig connectivity.

## Multi-Gig XGS-PON Broadband

Equipped with a 10G XGS-PON interface, the NOVA2313 delivers true multi-gig fiber performance to subscribers. It supports a 10 GigE uplink port for maximum throughput alongside multiple GigE ports for additional devices, ensuring reliable and flexible connectivity for bandwidth-intensive households and small businesses.

## Integrated Routing & Operator Efficiency

The NOVA2313 adds full routing functionality, allowing it to operate as a standalone gateway without requiring a separate router. This integration simplifies deployments, reduces equipment costs, and enhances the subscriber experience with carrier-grade features like NAT, firewall, QoS, and IPv4/IPv6 support. Combined with advanced remote management via TR-069 and TR-369, operators gain the tools needed to reduce truck rolls and optimize network performance.

## Key Features

- ITU-T G.987.2 XG-PON Compliant
- ITU-T G.9807.1 XGS-PON Compliant
- One 1/2.5/5/10GBASE-T Ethernet Port
- Three 1GBASE-T Ethernet Port
- Router functionality
- Extensive Operator Control via Configuration File and IEEE 802.3ah OAM

## Interfaces

- 1 x SC-APC 10G Optical Port
- 1 x RJ-45 100M/1G/2.5G/5G/10G BASE-T
- 3 x RJ-45 100M/1G BASE-T Ethernet Port

## xPON Uplink

- 1x SC-APC Connector, Single Mode Fiber
  - TX Wavelength: 1270 nm
  - TX Max. Output Power: 6 dBm
  - RX Wavelength: 1577 nm
  - Sensitivity Max.: -29 dBm
- Compliant with ITU-T G987.2 XG-PON
- Compliant with ITU-T G.9807.1 XGS-PON

## Advanced Features

- XG-PON/XGS-PON (Choice of Protocol)
  - 128 GEM-Port-ID/XGEM-Port-ID
  - 32-TCONT
- Layer 2 Switching, supporting up to 4K MAC addresses
- VLAN Tagging and Stripping with Priority Tag Support and QinQ Support for full 4K VLAN Range
- Jumbo Frame Support up to 12 Kbyte
- QoS Functions (DSCP/802.1p/TC Arbitrary Mapping to Queues and Flows)
- Per Flow Packet Policing and Per Queue Traffic Shaping
- Customizable QoS (with WRED) and powerful ACL support

## Routing Support

- Protocol Support: IGMP v3 for IPTV service capability
- MAC Address Filtering (IPv4/IPv6)
- IP Source/Destination Address Filtering (IPv4/IPv6)
- IP over Ethernet (IPoE)
- Point-to-Point Protocol over Ethernet (PPPoE)
- DHCP and TFTP clients (IPv4/IPv6)
- DHCP Server supports RFC 1541 (IPv4)
- DHCPv6 obtains Prefix from DHCPv6 Server through Prefix Delegation
- DNS Proxy
- Port Forwarding and DMZ
- UPnP
- DSLite Support for IPv4 In-home Support with IPv6 Backbone
- 6RD Support for Quick IPv6 Deployment over IPv4 Backbone
- RIPv2 for Static IP Support

## Network Security

- Firewall with Stateful Inspection (IPv4/IPv6)
- Hacker Intrusion Prevention and Detection
- Application Content Filtering (IPv4/IPv6)
- Complete NAT Software Implemented as per RFC 1631 with Port and Address Mapping (IPv4)
- Port Blocking
- Keyword Filtering
- Device Filtering
- Instant Device Pause

## Management

- Web-based GUI Configuration and Management
- TR-069, TR-104, TR-143, TR-181, TR-369
- IEEE 802.3ah OAM
- OMCI(G.988)

## Mechanical

- LEDs: Power, Alarm, PON
- Factory Default Reset Button
- Dimensions: 51.90mm (H) x 179.95mm (W) x 153.45mm (D)

## Electrical

- Input Power: 12VDC
- Surge Protection: Ethernet RJ-45 sustains at least 4KV

## Environmental

- Operating Temperature: 0°C (32°F) ~ 40°C (104°F)
- Operating Humidity: 5% ~ 95% (Non condensing)
- Storage Temperature: -20°C ( -4°F) ~ 60°C (140°F)

## Regulatory Compliance

- RoHS Compliant
- FCC Part 15:2019, Subpart B, Class B
- FCC Part 15, Subpart C (Section 15.247)
- FCC Part 15, Subpart E (Section 15.407)
- FCC Part 2 (Section 2.1091) IEEE C95.3 -2002
- ANSI C63.4:2014
- ANSI C63.10:2013
- UL 62368-1
- UL 62368 with laser safety standard IEC-60825 Class 1
- Compliant with FDA 21, CFR 1040.10 and 1040.11
- cUL
- ICES-003
- CAN/CSA C22.2 No. 62368-1-14
- CE