



Dual-band WiFi7 XGSPON Gateway

with Voice Option

NOVA2335V

The Hitron NOVA2335V is a powerful XGS-PON residential gateway that delivers true 10G fiber performance, dual-band Wi-Fi 7, and integrated voice services in one platform. Designed for residential and small business subscribers, the NOVA2335V enables ultra-fast speeds, seamless wireless coverage, and carrier-grade manageability—ensuring operators can deliver premium broadband experiences today and tomorrow.

Multi-Gig Fiber & Wi-Fi 7 Performance

The NOVA2335V pairs a dedicated XGS-PON SC/APC interface with one 10 Gbps port and three GigE ports to deliver reliable, high-speed wired connectivity. On the wireless side, it features simultaneous dual-band Wi-Fi 7 with 4x4 radios on 2.4 GHz and 5 GHz, plus 4096 QAM, 160 MHz channels, Multi-Link Operation (MLO), MU-MIMO, and EasyMesh support. This ensures consistent, low-latency performance across multiple devices—perfect for UHD streaming, gaming, conferencing, and smart home applications.

Voice and Operator Efficiency

Equipped with one FXS voice port, the NOVA2335V supports integrated telephony, reducing the need for separate voice equipment and simplifying service delivery. Operators also benefit from full support for TR-069, TR-369, and USP, enabling advanced provisioning, monitoring, and troubleshooting. Combined with seamless roaming protocols (802.11k, r, v) and client steering, the NOVA2335V offers both subscribers and operators a more reliable, manageable, and efficient broadband experience.

Key Features

- Simultaneous Dual-band Wi-Fi 7
 - 4x4 2.4GHz 802.11be
 - 4x4 5GHz 802.11be
- 4096 QAM support on all bands (2.4GHz / 5GHz)
- Multi-Link Operation (Single radio / Dual radio)
- Seamless roaming using 802.11k, r, v
- Client steering & channel optimization
- MU-MIMO capable for simultaneous data streaming
- Supports EasyMesh
- One XGSPON SC/APC, one 10 GigE and three GigE
- One FXS Voice Port
- TR-069, TR-369, USP Support

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
- 1 x RJ-11 HD Voice Ports
- 1 x USB 3.0

XGS-PON Uplink

- 1x SC-APC Connector, Single Mode Fiber
- TX Wavelength: 1270 nm
- TX Max. Output Power: 7 dBm
- RX Wavelength: 1577 nm
- Sensitivity Max.: -29 dBm
- Compliant with ITU-T G.987.2 XG-PON
- Compliant with ITU-T G.9807.1 XGS-PON
- Data Rates: Upstream:10Gbps, Downstream:10Gbps

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

Wi-Fi

Wi-Fi Characteristics

- 802.11a/b/g/n/ac/ax/be
- 4T4R 5GHz 11be (5.7Gbps)
- 4T4R 2.4GHz 11be (1.3Gbps)
- 20/40/80/160MHz Channel Bandwidth
- Supports Standard 5GHz UNII Bands

Wi-Fi Features

- Up to 4 SSIDs per Radio
- Prioritized QoS: WMM/WMM-PS
- 4096 QAM support on band (5GHz)
- 4096 QAM support on band (2.4GHz)
- 160MHz channel support on 5GHz band
- Multi-Link Operation (Single radio / Dual radio)
- Transmit Power Control by Service Provider
- WPS (Wi-Fi Protected Setup) PBC, PIN
- Airtime Fairness (ATF)
- Band Steering (BS)
- Dynamic Frequency Selection (DFS)
- Wi-Fi Output Power Range: Max permitted by FCC/IC
- Roaming: 802.11r/k/v

Wi-Fi Security

- WPA2-PSK (TKIP/AES)
- WPA3-SAE
- WiFi Enhanced Open (OWE)

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)
- 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
- DS Lite Support for IPv4 In-home Support with IPv6 Backbone
- 6RD Support for Quick IPv6 Deployment over IPv4 Backbone
- RIPv2 for Static IP Support

Management

- App Configuration, Control and Management
- Cloud Managed Backend Support and Optimization
- Web-based GUI Configuration and Management
- TR-069, TR-104, TR-143, TR-181, TR-369
- IEEE 802.3ah OAM
- OMCI(G.988)

Voice

General Voice Features

- SIP v2 Call, SIP v2 Call Control
- DNS SRV
- Hook Flash Event Signaling
- RTP Audio Transport
- RFC2833 RTP Payload
- SIP INFO
- InBand DTMF Mode
- HD Voice Port with 16kHz sampling rate

Voice Audio Codecs

- G.711 (a-law and mu-law)
- G.722 (HD codec)
- G.723.1
- G.726
- G.728
- G.729
- AMR (narrowband)
- Adaptive Jitter Buffer
- G.167 Acoustic Echo Cancellation

FAX Relay Protocols Compliance

- T.38 Pass-through and over IP Fax/Modem Detection Control
- T.28 (IP) Compliant Group 3 and SG3 Fallback to Transport T.30
- V.34 Fax and Modem Bypass
- Automatic Fallback to G.711 support

CLASS Calling Features

- Call Waiting
- Call Hold
- Call Resume
- Call Forward Unconditional, Call Forward on Busy
- Caller ID
- 3-Way Conference
- Call Consultant
- Call Transfer and Network-initiated Class Services - MWI messaging, VMWI via FSK

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

Mechanical

- LEDs: Power, Alarm, TEL, Link speed for 1*10G LAN & 3*Gig LAN, PON, 2.4G, 5G
- Factory Default Reset Button
- Power Button
- Pair Button
- Dimension: 232mm(H)x210.5(W)x74mm(D)
- Net Weight: <1851g

Electrical

- Input Power: 12VDC
- Power Consumption: ~30 W
- Surge Protection: Ethernet RJ45 sustains at least 4KV
- ADP: 6KV

Environmental

- Operating Temperature: 0°C (32°F) ~ 40°C (104°F)
- Operating Humidity: 10% ~ 90% (Non-condensing)
- Storage Temperature: -40°C (-40°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