



10G xPON ONT/ONU with Voice (Optional)



NOVA-2004

The NOVA-2004 is a powerful ONT/ONU solution to provide high-speed Internet access for residential and business customers. With a 10 Gigabit PON fiber interface, this powerful solution delivers speeds up to 8.5 Gbps downstream and 8.4 Gbps upstream.

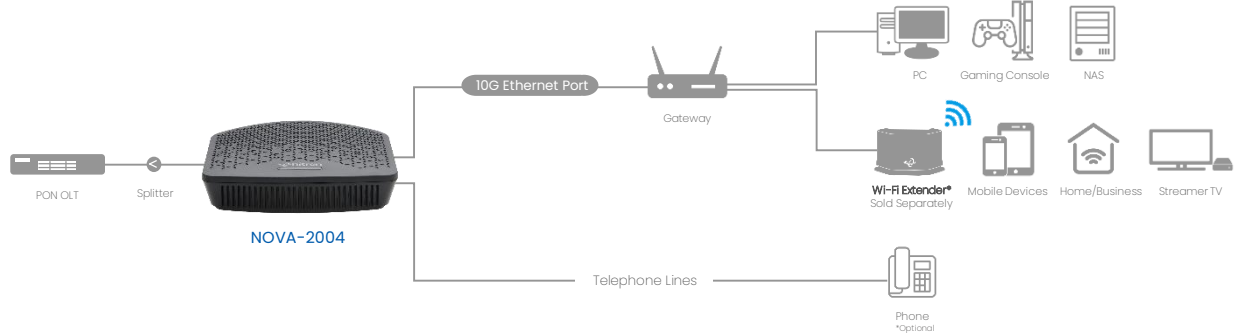
 IEEE 802.3av 10G-EPON compliant	 Ultra-fast 10GigE wired ports	 Two FXS VoIP ports *Optional
 DOCSIS DPoE 2.0 compliant		

Advanced feature

Key Features

- IEEE 802.3av 10G-EPON compliant
- ITU-T G.987.2 XG-PON compliant
- ITU-T G.9807.1 XGS-PON compliant
- DOCSIS DPoE 2.0 OAM compliant
- One 1/2.5G/5G/10GBASE-T Ethernet port
- One 10/100/1000BASE-T Ethernet port
- Built-in fiber tray
- Two FXS VoIP ports
- Extensive operator control via configuration file and IEEE 802.3ah OAM

Application



Specifications

xPON 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 IEEE 802.3av 10G-EPON
- Compliant with ITU-T G.987.2 XG-PON
- Compliant with ITU-T G.9807.1 XGS-PON

Advanced Features

- 10G-EPON (Choice of Protocol)
 - IEEE 802.3av (Clause 77) Compliance
 - IEEE 802.3ah (Clause 64) Compliance
 - 8 LLIDs in Multiple-LLID (M-LLID) Mode*
 - *Available to 32 LLIDs
 - Programmable VoQ per LLID
 - 8 Priority Queues (VoQs) in S-LLID Mode
 - Standard MPCP Protocol fully supported
- 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/8021p/TC Arbitrary Mapping to Queues and Flows)
- Per Flow Packet Policing and Per Queue Traffic Shaping
- Customizable QoS (with WRED) and powerful ACL support

Voice

General Voice Features

- PacketCable 2.0
- SIP v2 Call, SIP v2 Call Control
- MGCP
- DNS SRV
- Hook Flash Event Signaling
- RTP Audio Transport
- RFC2833 RTP Payload
- SIP INFO
- InBand DTMF Mode
- HD Voice Ports with 16kHz sampling rates

Voice Audio Codecs

- G.711 (a-law and mu-law)
- G.722 (HD codec)
- G.723
- G.726
- G.729
- 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

Interfaces

- 1x SC-APC 10G Optical Port
- 1x RJ-45 1/25/5/10GBASE-T Ethernet Port
- 1x RJ-45 10/100/1000BASE-T Ethernet Port
- 2x RJ-11 FXS Ports
- 1x 3.5mm Jack for Optional Battery Back-up
- 1x DC 12V Power Jack

Management

- IEEE 802.3ah OAM
- Web-based GUI Management
- LEDs clearly display network status and activity
- Power On Self-Diagnostic

Mechanical

- LEDs: Phone, Online, Battery
- Factory Default Reset Button
- Dimensions: 51.88mm (H) x 179.95mm (W) x 153.39mm (D)
- Net Weight: 435g
- Built-in Fiber Tray

Electrical

- Input Power: 12VDC
- Power Consumption: ~9.6W
- Surge Protection: Ethernet RJ-45 sustains at least 4KV

Environmental

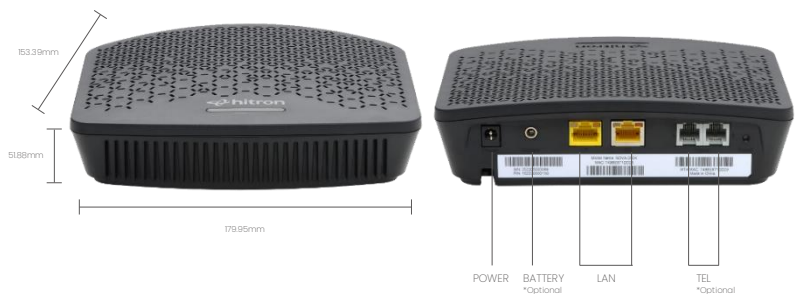
- Operating Temperature: 0°C (32°F) ~ 40°C (104°F)
- Operating Humidity: 5% ~ 95% (Non condensing)
- Storage Temperature: -20°C (-4°F) ~ 60°C (140°F)

Optional Accessories

- EBBU-0014: External Battery Back-up (24h)
- Replacement Batteries

Regulatory Compliance

- RoHS Compliant
- Compliant with FDA 21, CFR 1040.10 and 1040.11
- FCC/IC
- UL 62368 with laser safety standard IEC-60825 Class 1
- CE



*10Gbps are theoretical speeds. Speeds measured in laboratory settings are 8.5 Gbps downstream and 8.4 Gbps upstream. Specifications subject to change without further notice. Product photo may differ. Trademarks owned by Hitron Technologies Inc. © 2021 Hitron Technologies Inc. All rights reserved.