



10G xPON ONT/ONU



NOVA-2002

for Residential and Business Subscribers

Meet today and tomorrow's need for speed with Hitron's NOVA-2002 10G xPON ONT/ONU. With future-ready speeds up to 10 Gbps* downstream and 10 Gbps* upstream, you can deliver premium tier services to business and residential customers including telecommuting, HD and UHD video on demand, ultra high speed Internet access, interactive media services and more. Optional is battery back-up lasting over 24 hours.

Supports Multiple Fiber Access Standards

The NOVA-2002 offers IEEE 802.3av 10G-EPON, ITU-T G.987.2 XG-PON and ITU-T G.9807.1 XGS-PON, giving you the flexibility to deploy the right solution for your network and customers.

Compatible with Legacy DOCSIS Provisioning Systems

If you already have DOCSIS provisioning, billing and management systems in place today, you can seamlessly move to fiber. NOVA-2002 supports DOCSIS DPoE 2.0 (DOCSIS Provisioning over EPON), so it will look like a CMTS to your existing systems.

Uninterruptable Service with Optional Battery Backup

The NOVA-2002 can be configured with an optional battery backup to last over 24 hours during a commercial power outage.

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 Compliant
- One 1/2.5/5/10GBASE-T Ethernet Port
- One 10/100/1000BASE-T Ethernet Port
- Built-in Fiber Tray
- Optional Battery Back-up
- Extensive Operator Control via Configuration File and IEEE 802.3ah OAM



Interfaces

- 1x SC-UPC/APC 10G Optical Port
- 1x RJ-45 1/2.5/5/10GBASE-T Ethernet Port
- 1x RJ-45 10/100/1000BASE-T Ethernet Port
- 1x 3.5mm Jack for Optional Battery Back-up
- 1x DC 12V Power Jack

xPON Uplink

- 1x SC-UPC/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
 - CTC V3.0 Specification Compliance
 - 32 LLIDs in Multiple-LLID (M-LLID) Mode
 - 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/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

Management

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

Mechanical

- LEDs: Power, PON, Online, Link/Act
- 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 CableLabs DPoE
- Compliant with FDA 21, CFR 1040.10 and 1040.11
- FCC Part 15 - Class B - Subpart B
- UL 62368 with laser safety standard IEC-60825 Class 1
- cUL
- ICES-003

