



10G xPON ONT/ONU

NOVA-2000

for Residential and Business Subscribers



Meet everyone's bandwidth demands with Hitron's NOVA-2000 10G xPON ONT/ONU. This powerful solution delivers speed up to 10 Gbps* downstream and 10 Gbps* upstream based on a 10 Gigabit PON fiber interface (EPON or XGS-PON). You can deliver ultra-high symmetrical bandwidth for business customers, as well as premium tier residential services to meet the most demanding HD and ultra-HD video on demand, cloud gaming, multi-Gigabit data, telecommuting applications and more.

Flexible optics: 10G-EPON, XG-PON, XGS-PON

No matter your network needs, you get the flexibility to deploy the right solutions. NOVA-2000 supports IEEE 802.3av 10G-EPON, ITU-T G.987.2 XG-PON and ITU-T G.9807.1 XGS-PON.

DOCSIS Provisioning for EPON

You don't need to overhaul your existing provisioning, billing and management systems to move to fiber. With support for DOCSIS DPoE 2.0, the NOVA-2000 looks like a CMTS to your DOCSIS systems.

Full use of 10G access speeds

NOVA-2000 supports a 1/2.5/5/10GBASE-T Ethernet port, so your customer's LAN can make full use of the 10G fiber access speeds.

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
- Extensive operator control via configuration file and IEEE 802.3ah OAM
- Hardened case



Interfaces

- 1x SC-UPC/APC 10G Optical Port
- 1x RJ-45 1/2.5/5/10GBASE-T Ethernet Port
- 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 G987.2 XG-PON
- Compliant with ITU-T G.9807.1 XGS-PON

Advanced Features

- 10G-EPON (Protocol Selected Automatically)
 - 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 (Protocol Selected Automatically)
 - 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
- Factory Default Reset Button
- Dimensions: 106mm (H) x 162.5mm (W) x 51mm (D)
- Net Weight: 475g

Electrical

- Input Power: 12VDC
- Power Adapter: Customer External BBU
- Power Consumption: ~9.552W
- Surge Protection: Ethernet RJ-45 sustains at least 6KV

Environmental

- Operating Temperature (Hardened case):
 - 40°C (-40°F) ~ 60°C (140°F)
 - PSU limited to 0°C (32°F) ~ 40°C (104°F)
- Operating Humidity: 5% ~ 95% (Non condensing)
- Storage Temperature: -40°C (-40°F) ~ 60°C (140°F)

Regulatory Compliance

- RoHS Compliant
- Compliant with CableLabs DPoE
- Compliant with FDA 21, CFR 1040.10 and 1040.11
- FCC
- UL 62368 with laser safety standard IEC-60825 Class 1
- cUL
- ICES-003

