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10G xPON Hardened ONT/ ONU



NOVA2200
for Residential and Business Subscribers

Meet everyone's bandwidth demands with Hitron's NOVA2200 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, NOVA2200 supports ITU and IEEE based PON solutions.

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 NOVA2200 looks like a cable modem to your DOCSIS provisioning systems.

Full use of 10G access speeds

NOVA2200 boasts a multi-rate Ethernet port that can reach up to 10G, so your customer's LAN can make full use of the 10G fiber access speeds.

Stress-free ONT Install

Pair the NOVA2200 with Hitron's new PoE Injector and complete your install indoor or out*, without worrying about power. The PoE Injector can power the ONT from a power source that is up to 65 feet / 20meters away.

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
- PoE 10GBASE-T (Optional)
- Extensive operator control via configuration file and IEEE 802.3ah OAM
- Hardened case

MHz MEGA HERTZ Provided by: Mega Hertz | 800-883-8839 | info@go2mhz.com | www.go2mhz.com

Interfaces
- 1x SC-UPC/APC 10G Optical Port
- 1x RJ-45 1/2.5/5/10GBASE-T Ethernet Port
- 1x DC 15V 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: <500g

Electrical
- Input Power: 15VDC
- Power Adapter: Customer External BBU
- Power Consumption: <12W
- 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

*Outdoor installation enclosure not included **10 Gbps are theorectical 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.
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PoE Injector & Splitter

NOVA2200 Accessory



The PoE Injector/Splitter is a critical add-on for the NOVA2200, enabling the Optical Network Terminal (ONT) to be powered up to 20 meters away from the power source, even when placed inside an enclosure or where power is not readily available near the installation site. By integrating Ethernet connectivity and electrical power into a single CAT6 cable, it supports 10GigE passthrough, simplifying setup and reducing installation costs. This device offers versatile ONT/ONU placement options, allowing for installation both indoors and outdoors within weatherproof enclosures, ensuring the ONT can be placed adjacent to the fiber feed regardless of proximity to power sources.

Key Features

- ONT/ONU placement versatility regardles of proximity to power
- Reduces installation costs
- Single Power LED that lights up solid when NOVA2200 power adapter is plugged in.
- Standards: IEEE802.3, IEEE802.3u, IEEE802.3ab
- Max range of 20m with 10GBase-T
- Ideal for
  - Outdoor ONT Placement in enclosure
  - Indoor ONT Placement with no outlet nearby
  - MDU or Retirement home installs

Technical Specifications

Interfaces
- Splitter unit: Ethernet connector and power connector
- Injector: Ethernet port and power port

Electrical
- Input Power: NOVA2200 PSU 15v / 1.5A

Mechanical
- Injector Dimensions: 25.2mm (H) x 37.5mm (W) x 68.5mm (D)
- Splitter Dimensions: 25.2mm (H) x 37.5mm (W) x 180mm (D)

Environmental
- Operating Temperature: -20°C (-4°F) ~ 60°C (140°F)
- Operating Humidity: 10% ~ 90% (Non condensing)
- Storage Temperature: -20°C (-4°F) ~ 60°C (140°F)

Regulatory Compliance
- FCC

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https://www.go2mhz.com/product/10g-xpon-hardened-ont-onu/