intelligent Multiservice Gateways | Product Information

# Allied Telesis

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# AT-ON1000 GEPON Optical Networking Unit

The AT-ON1000 GEPON ONU is a small form factor optical networking unit (ONU) designed to support data services of up to one Gigabit over the Allied Telesis GEPON architecture.



## Deliver High Bandwidth Data Services over GEPON

The Allied Telesis AT-ON1000 GEPON ONU is a small form factor optical networking unit (ONU) designed to support data services of up to 1Gbps over a GEPON network. Ideal for businesses requiring high bandwidth data and video services, the ON1000 complements the Allied Telesis endto-end GEPON solution including the GEPON-equipped intelligent Multiservice Access Platform (iMAP) and intelligent Multiservice Gateway (iMG).

## Industry-Standard PON -Simplified

The ON1000 simplifies the delivery of data services over a PON network. Ideal for residences or businesses requiring a highbandwidth data connection, the ON1000 makes any business network GEPON ready by providing IEEE compliant 802.3ah PX20 WAN uplink and a 10/100/1000T LAN connection in a small 4"x4" metal enclosure. An ON1000 then converts existing Ethernet switches and routers into GEPON network termination points, allowing for a complete PON overbuild of service provider networks. AlliedView NMS manages and configures the complete GEPON solution, from AlliedTelesis routers and switches through the iMAP OLT and the ON1000.

# End-to-End PON Network

Allied Telesis provides a complete flexible GEPON solution with the iMAP 9000 GEPON OLT, GEPON iMG and the ON1000 to match any network requirement. The GEPON iMG and ON1000 are optimized for delivery of high bandwidth data and Triple Play services over a PON network. The ON1000 supports the low cost delivery of Ethernet services over service-differentiated VLANs, while the iMG746MOD PKG3 or iMG2426F-B04 (GEPON iMGs) also integrates VoIP and switching and routing functionality into a common platform. These interchangeable end points coexist on the same OLT PON, allowing maximum flexibility for network designs. Take advantage of a PON architecture to leverage existing fiber infrastructure to provide next-generation FTTx services.

# **Key Features**

- ▶ IEEE 803.2ah PX20 Compliant ONU
- ▶ 1Gbps Data Delivery
- Small Form Factor
- Flexible Mounting Options: Wall, Desk or Rack Mount
- External AC Adapter
- Securely Managed and Configured via AlliedView NMS

# AT-ON1000 | GEPON Optical Networking Unit

## **Specifications**

#### Ports

1 x 1Gbps PX20 WAN (SC/UPC) (optics budget exceeds PX20 specification) 1 x 10/100/1000bT LAN (RJ45)

#### **Protocols and Standards**

When used with iMAP GEPON OLT Blade (AT-TN-118)

IGMP v1/v2 Snooping DHCP Option 82, Snooping / Relay VLAN Support for up to 6 VLANs, 0 or 1 untagged Service Level Agreement Support: Minimum / Maximum Bandwidth guarantees per VLAN / Service Downstream and Upstream (using powerful DBA) Traffic Classifier Support Statistics Collection: RMON ifTable, ifXTable

MAC Address Filtering IEEE 802.1q VLAN Tagging IEEE 802.1p Prioritization

EPON Standard IFFF Std 802.3ah - 2004 IEEE 802.3ah OAM Clause 54 IEEE 802.3ah Optics Clause 60 (PX20) IEEE 802.3ah Multi-point MAC Control Clause 64

#### **Physical Characteristics**

Dimensions (W  $\times$  D  $\times$  H):10.2 cm x 9.3 cm x 2.4 cm 4.03 in x 3.65 in x 0.95 in) Weight 0.311 kg (11 oz)

LEDs 

PON	- Detect
OLT	– Link Ready
Pow Dup	
Link	/ Act

Solid when good optical input signal detected Solid Amber when registered to OLT Solid Green when configured by OLT Solid Green when Power okay Off - Half Duplex Solid - Full Duplex 10Mbps Link - Bottom LED solid 10Mbps Activity - Bottom LED flashing 100Mbps Link – Top LED solid 100Mbps Activity – Top LED flashing 1000Mbps Link – Both LEDs solid 1000Mbps Activity - Both LEDs flashing

#### Network Management

iMAP9100 GEPON OLT Blade, AlliedView NMS Management and firmware upgrades through 802.3ah OAM extensions from the OLT

#### **Power Characteristics**

Maximum Power Consumption: 6 Watts Voltage Requirements 12V DC

#### **Environmental Specifications**

Operating Temperature 0 °C to 50 °C (32°F to 122°F) Storage Temperature -20 °C to 50 °C (-4°F to 122°F) Operating Humidity 5% to 90% non-condensing Storage Humidity 5% to 95% non-condensing **RoHS** Compliant

#### **Regulatory Approvals** UL 60050 1 CAS C22 2 No

Safety	UL 60950-1, CAS C22.2 No. 60950-1-03, EN60950, EN60825 (TUV)
Emissions	EN55022 (European countries) FCC Part 15 Subpart B (USA) ICES 003 (Canada) AS/NZS (Australia, New Zealand) VCCI (Japan)
Immunity	EN55024

Warranty 1 year

### **Ordering Information**

#### AT-ON1000-60

**GEPON Optical Networking Unit** 

# Allied Telesis

**NETWORK SMARTER** 

North America Headquarters | 19800 North Creek Parkway | Suite 100 | Bothell | WA 98011 | USA | T: +1 800 424 4284 | F: +1 425 481 3895 Asia-Pacific Headquarters | 11 Tai Seng Link | Singapore | 534182 | T: +65 6383 3832 | F: +65 6383 3830 EMEA & CSA Operations | Incheonweg 7 | 1437 EK Rozenburg | The Netherlands | T: +31 20 7950020 | F: +31 20 7950021

#### alliedtelesis.com

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