

## AT-ON1000

### GEPON Optical Networking Unit



#### AT-ON1000-xx

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#### Deliver High Bandwidth Data Services over GEPON

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

#### Industry Standard PON - Simplified

The ON1000 simplifies the delivery of data services over a PON network. Ideal for residences or businesses requiring a high-bandwidth 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 GEPON solution with the iMAP 9000 GEPON OLT, GEPON iMG and the ON1000 for a flexible GEPON solution 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 iMG646PX (GEPON iMG) 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 802.3ah PX20 Compliant ONU
- 1 Gbps Data Delivery
- Small Form Factor
- Flexible Mounting Options: Wall, Desk, or Rack Mount
- External AC Adapter
- Securely Managed and Configured via AlliedView NMS

## 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  
IEEE 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 4.03" x 3.65" x 0.95"  
10.2 x 9.3 x 2.4 cm  
Width x Length x Height  
Weight 11 oz

### LEDs

PON — Detect Solid when good optical input signal detected  
OLT — Link Solid Amber when registered to OLT  
Ready Solid Green when configured by OLT  
Power Solid Green when Power okay  
Duplex Off — Half Duplex  
Solid — Full Duplex  
Link / Act 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  
Storage Temperature -20 °C to 50 °C  
Operating Humidity 5% to 90% non-condensing  
Storage Humidity 5% to 95% non-condensing  
RoHS Compliant

### Regulatory Approvals

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-xx

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Where xx = 10 for US  
30 for UK  
40 for Australian  
50 for European

### AT-TRAY2

Single Slot Media Converter Rack for Wall  
or Desk Mount with Integrated Fiber Management

Designed specifically for use with the AT-ON1000,  
AT-TRAY2 provides integrated fiber management and  
fiber splice protection. With room to store 1m of  
3mm buffer jacketed fiber, and a splice clip for a  
fusion splice, AT-TRAY2 can be used to desk or wall  
mount the ON1000.

If integrated fiber management is not required, the  
ON1000 has been designed for use with the following  
media converter mounting brackets:

### AT-TRAY1

Single Slot Rack for Wall or Rack Mount

### AT-TRAY4

Four Slot Rack for Rack Mount (19" rack)

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