GEPON OLT

With growing network services such as HDTV, IPTV, voice-over-IP (VoIP) and Multimedia broadband applications, the demand of broadband rises quickly. The current Broadband environment has not already accorded with needing; however, Passive Optical Network (PON) would be the most promising NGN (Next Generation Networking) technology to fulfill the demand.

PLANET EPL-1000 is a GEPON Optical Line Terminal (OLT) designed with one GEPON port, one Gigabit TP / SFP Combo Interface and one management port. It is easy for installation and maintenance of GEPON deployment. By applications with PLANET GEPON Optical Network Units (ONU) EPN series, PLANET EPL-1000 can provide highly effective GEPON solutions and convenient management for Broadband network. PLANET GEPON technology performs high bandwidth up to 1.25Gbps for both upstream and downstream, and up to 20km Long-Distance Coverage between equipment nodes. It is a cost-effective access technology to bring reliable, scalable and flexible network deployment for Triple-play service applications.

The EPL-1000 is an ideal solution for FTTx applications. With high split ratio at 1:32 and supporting the usage of PLANET ONUs, the EPL-1000 can minimize the investment cost for carriers. By using the advanced technology in the telecommunication industry, the EPL-1000 will also provide strong functionalities for Ethernet features such as QoS, VLAN, Multicast, DBA (Dynamic Bandwidth Allocation), and Access Control List.
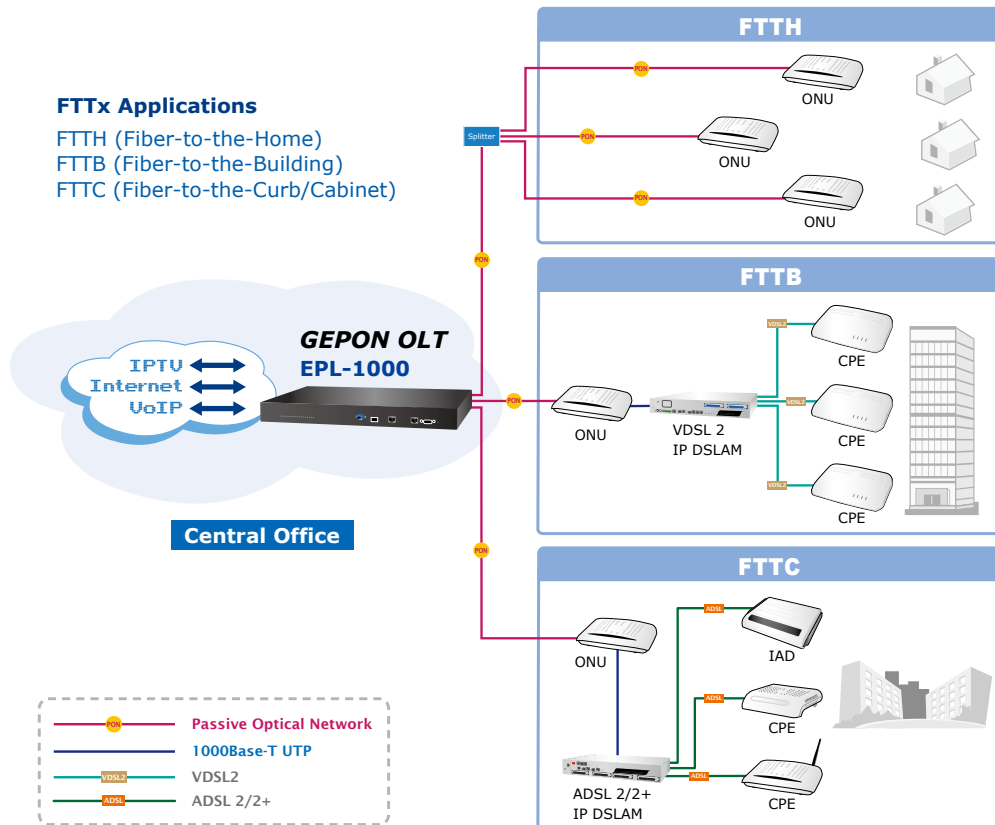
KEY FEATURES

- PON interface complies with IEEE 802.3ah

- One PON Port and One Gigabit TP / SFP Combo Interface

- Up to 20Km distance

- Up to 1.25Gbps Upstream and Downstream

- Dynamic bandwidth allocation (DBA) support

- Supports IEEE 802.1q VLAN

- Supports up to 4096 VLAN and 4K MAC Table

- Supports IEEE 802.1p QoS

- Point-to-Multipoint network topology

- LED indicators for link status

- Enhanced IGMP features

- User-Friendly GUI Management

- Maximum 32 ONUs supported by the PON port

Data Sheet

PLANET
Networking & Communication

EPL-1000

APPLICATIONS

High Bandwidth, Long Distance and Cost-Effective FTTx Applications

The PLANET EPL-1000 delivers high-speed voice, data and video services to residential and business subscribers. Through the PON technology, the EPL-1000 offers competitive advantages including a long-term life expectancy of the fiber infrastructure, lower operating costs from the reduction of "active" components, supporting up to 20km distance between equipment nodes, easy Installation and maintenance, and most importantly, providing much greater bandwidth. The EPL-1000 is the perfect solution for FTTx applications by offering benefits of cost-effectiveness, scalability and flexibility to network deployment.

FTTx Applications

FTTH (Fiber-to-the-Home)
FTTB (Fiber-to-the-Building)
FTTC (Fiber-to-the-Curb/Cabinet)

GEPON OLT
EPL-1000

IPTV
Internet
VoIP

Central Office

Passive Optical Network
1000Base-T UTP
VDSL2
ADSL 2/2+

SPECIFICATION

Product	GEPON OLT
Model	EPL-1000
Hardware	
Transmission speed	Downstream: 1.25 Gbps Upstream: 1.25 Gbps
Optical specification	Transmitter Power: >= 2 dBm Receiver Sensitivity: >= -26 dBm
Optical split ratio	Up to 1:32

Ports	Uplink Port	1 x Gigabit TP / SFP Combo Port (10/100/1000Base-T / SFP GbE)
	PON Port	1 x PON Port
	Console Port	RS-232 Serial Port (9600, 8, N, 1)
	MGMT Port	1 x RJ-45 (10/100Base-TX)

LED Indicators	1 x Power LED 4 x MGMT LED 4 x Uplink Port LEDs 7 x Status LED

Data Sheet

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Software	
EPON Features	– Compliant with IEEE 802.3ah – 802.3ah Forward Error Correction support – Operation Administration Management (OAM) protocol based on IEEE 802.3ah – Dynamic Bandwidth Allocation (DBA) Support
Standard	– IEEE 802.3ah – IEEE 802.3 – IEEE 802.3u – IEEE 802.3x – IEEE 802.3z – IEEE 802.1d – IEEE 802.1p – IEEE 802.1q – IEEE 802.1x
System Feature	– MAC address learning and binding – Service Level Agreement (SLA) support – Unicast, broadcast and multicast traffic control – 128-bit Advanced Encryption Standard (AES) encryption – MAC Filtering – Supports QoS based upon Port, IEEE802.1p, IPv4 Type of Service (ToS) or Differentiated Services (Diff-Serv), IPv6 Traffic Class, 802.1Q VLAN ID, Destination MAC address or Source MAC address – Supports IGMP Proxy / Snooping – Remote loop-back test – Up to 256 Logical Link IDs (LLID) – IPv4 and IPv6 support – Up to 4096 VLAN support – 4K MAC Addresses support – 32 Queues (upstream / downstream)
Management	– User-Friendly GUI Utility – Local RS-232 CLI management – Firmware and Configuration upgradeable via Utility – Remote ONU Management
Environment Specification	
Dimension (W x D x H)	432 x 207 x 43 mm
Power	100 – 240V AC
Temperature	Operating temperature: 0 ~ 50 Degree C Storage temperature: -30 ~ 60 Degree C
Humidity	Operating Humidity: 10 ~ 90% non-condensing Storage Humidity: 5 ~ 95% non-condensing
Emission	FCC, CE

ORDERING INFORMATION

EPL-1000	GEPON OLT (1 x PON Interface, 1 x Gigabit TP / SFP Combo Interface)

RELATED PRODUCTS

EPN-102	GEPON SFU ONU (1-PON Interface, 1-Port FE + 1-Port GE Interface)
EPN-104	GEPON SFU ONU (1-PON Interface, 4-Port FE Interface)

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