

# 2-PON-Port GEAPON OLT with Uplink 2 1000BASE-X SFP Slots



## Perfectly Designed for FTTx Applications

PLANET EPL-2000 is a GEAPON Optical Line Terminal (OLT) designed especially for Point to Multipoint (PtMP) FTTx applications. The EPL-2000 is equipped with two GEAPON ports, two Gigabit SFP uplink Interfaces and one management port in the 1U height case. With friendly centralized GUI management, it is easy for installation and maintenance of GEAPON deployment. When functioning with PLANET GEAPON Optical Network Units (ONU) EPN series, the EPL-2000 provides highly effective GEAPON solutions for broadband network.



## High-speed and Long-distance Coverage for Triple Play Services

The EPL-2000 is in the PLANET Gigabit Ethernet Passive Optical Network (GEAPON) solution family that provides a high bandwidth of up to 1.25Gbps for both upstream and downstream, and a long-distance coverage of up to 20km between equipment nodes for network deployment. It can fulfill the increasing demand for the home multimedia and entertainment areas.

The EPL-2000 makes many multimedia services come true on FTTx network such as:

- |                                    |                                  |
|------------------------------------|----------------------------------|
| ■ IPTV, Smart TV and HDTV          | ■ On-line Game                   |
| ■ VOD (Video on Demand)            | ■ Internet Radio / On-line Music |
| ■ Voice over IP                    | ■ Long-distance Education        |
| ■ Video Conferencing / Video Phone |                                  |

The EPL-2000 offers an excellent bandwidth of the reliable and scalable network to satisfy the triple play devices for home entertainment and communication.

## GEAPON Port

- 2 x SC type GEAPON OLT Port
- Up to 1.25Gbps data rate in both upstream and downstream directions
- Maximum distance of up to 20km
- Each OLT port supports up to 64 ONUs
- Fully compliant with IEEE 802.3ah
- Point-to-multipoint network topology
- LED indicators for link status

## Uplink and Management Port

- 2 x 1000BASE-SX/LX SFP Interface
- Maximum distance of up to 120km
- 1 x 10/100BASE-TX RJ45 management port

## Layer 2 Features

- Dynamic bandwidth allocation (DBA) support
- Supports VLAN
  - IEEE 802.1Q tagged VLAN
  - Up to 255 VLAN groups, out of 4094 VLAN ID
- Supports up to 8K MAC Address Table
- Enhanced IGMP features
- Supports Link Aggregation on two uplink ports

## OLT Management

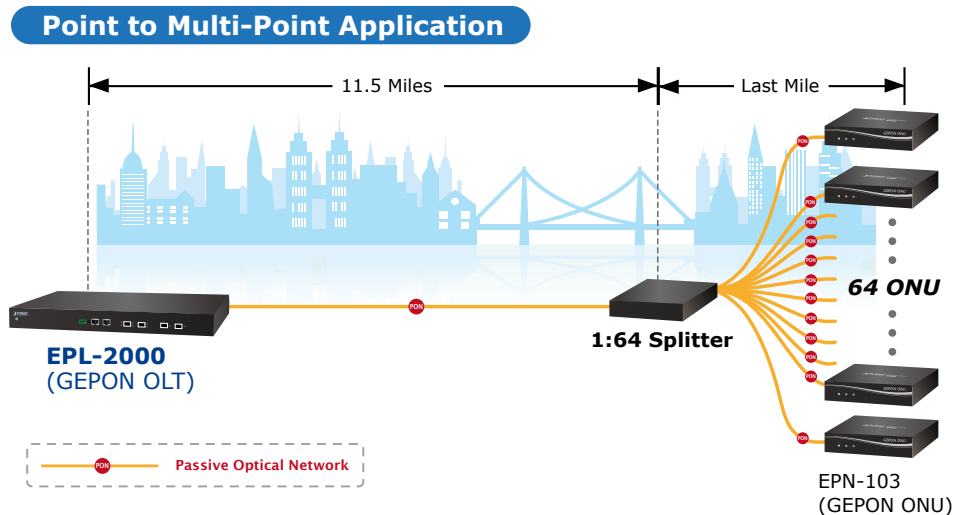
- User-friendly GUI Management
- IPTV multicast creation and management
- Up to 32 OLTs management through single GUI
- SNMP v1 / v2c monitoring
- Three user levels control
- 2 control interfaces
  - Out-of-band IP via the management RJ45 port
  - In-band IP via the two uplink ports
- Supports ONU authentication, averting illegal ONUs access to network
- Event message logging to system log
- SNMP trap for alarm notification

## ONU Management

- ONU Port control
- ONU Multicast control
- ONU IGMP fastleave
- ONU VLAN mode

### High Split Ratio / Cost-effective Network Connection Solution

With high split ratio at 1:64 and two PON ports equipped, the EPL-2000 supports the deployment of up to 128 PLANET ONUs which can minimize the investment cost for carriers. GE-PON is a point to multipoint communications protocol based on Gigabit Ethernet. It allows a Gigabit Ethernet communications fiber to be shared by multiple end users using a passive optical splitter. Each PON port of the EPL-2000 is available for a maximum of 1:64 WDM to transmit data based on forming fiber web via fiber and 64 GE-PON long-distance ONU equipment. Therefore, the EPL-2000 offers the network users the benefits of great capacity, excellent security, web-grouping flexibility and saving the line resources as well as the quantity of end equipment.

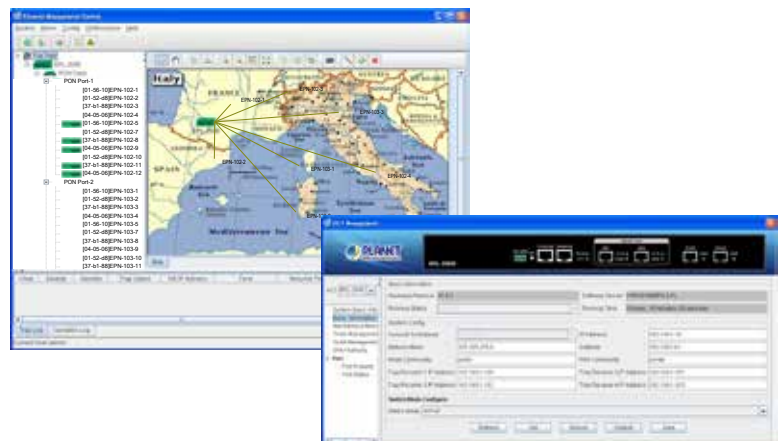


### Excellent Traffic Control

By integrating the advanced technology in the telecommunication industry, the EPL-2000 provides strong functionalities for Ethernet features such as VLAN, Multicast, DBA (Dynamic Bandwidth Allocation), and Access Control List. The EPL-2000 is an ideal solution for FTTx applications.

### High Scalability and Flexible OLT Maintenance

For efficient management, the EPL-2000 supports remote management functions. Via its user-friendly GUI utility, the administrators can manage and configure the OLT and ONU equipment on the central side. The GUI utility supports up to 32 EPL-2000 OLTs to be centrally managed through one control screen. The built-in **Element Management System (EMS)** offers an easy-to-use management and configuration facility to add to or remove PLANET OLTs and ONUs from the network architecture easily and economically. Its great flexibility is perfect for deployment among different network architectures. The EPL-2000 also supports standard **Simple Network Management Protocol (SNMP)** and can be managed via any standard-based management software.



### Robust ONUs Management

The EPL-2000 supports many operating and monitoring functions for efficient ONUs management, such as ONU auto-detection, auto-registration, testing link connection, binding MAC address and filtration, QoS, bandwidth control, flow control, and multicast stream control.

### Flexible and Extendable Solution

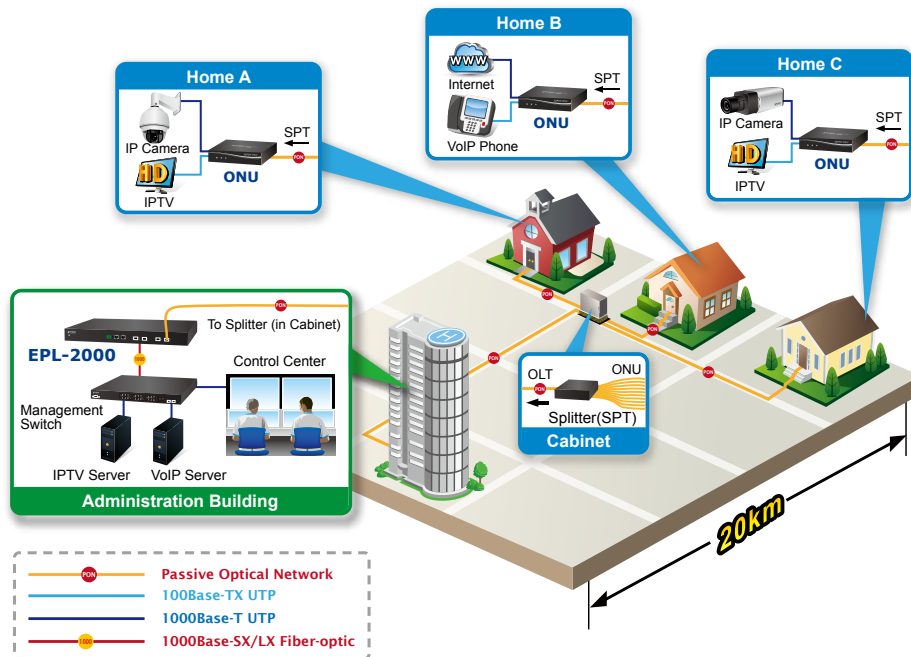
The two uplink mini-GBIC slots of the EPL-2000 are compatible with 100BASE-SX/LX and WDM SFP (Small Form Factor Pluggable) fiber-optic modules. The distance can be extended from 550 meters (Multi-mode fiber cable) up to 10/30/50/70/120 kilometers (Single-mode fiber or WDM fiber cable). They are well suited for FTTx applications to distributions data link.

## Applications

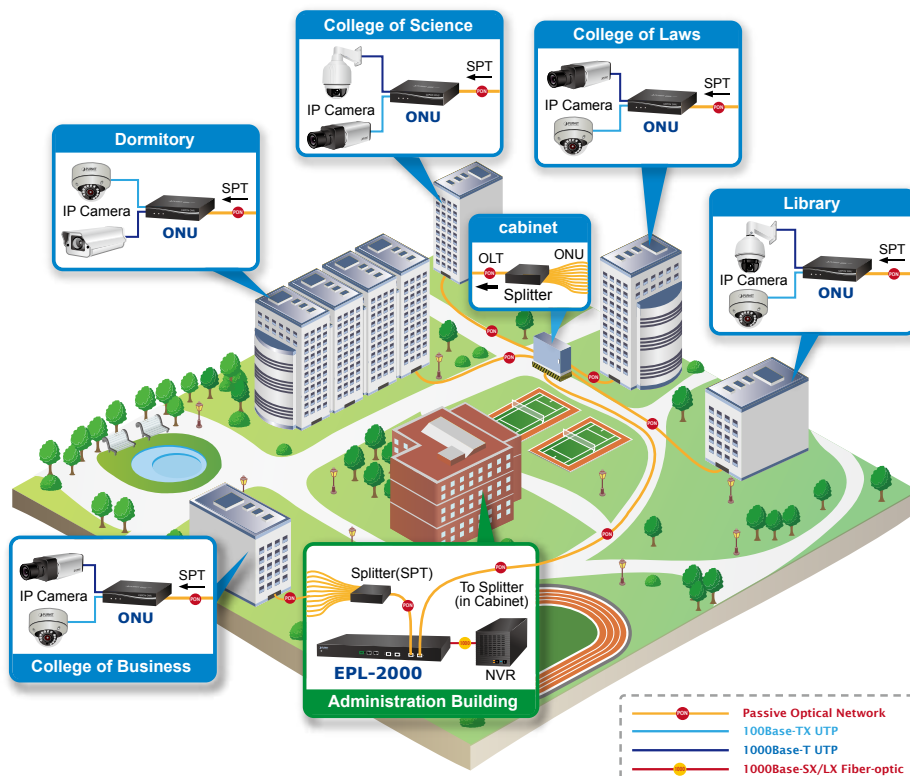
### *Cost-effective, Long-distance and High-bandwidth Triple Play or Surveillance Applications*

PLANET EPL-2000 delivers high-speed voice, data and video services to residential and business subscribers. With the PON technology, the EPL-2000 offers competitive advantages including a long-term life expectancy of the fiber infrastructure, lower operating costs from the reduction of “active” components, support of up to 20km distance between equipment nodes, easy Installation and maintenance, and most importantly, offering of much greater bandwidth. The EPL-2000 is the perfect solution for Triple Play or Surveillance applications by offering benefits of cost-effectiveness, scalability and flexibility to network deployment.

### Fiber To The Home (FTTH) Application



### IP Surveillance System Application in University



## Specifications

Product	EPL-2000
<b>Hardware Specifications</b>	
Transmission Speed	Downstream: 1.25 Gbps Upstream: 1.25 Gbps
Optical Split Ratio	Up to 1:64
Port	Uplink Port: 2 x 1000BASE-X SFP slot PON Port: 2 x 1.25Gbps PON Port MGMT Port: 1 x RJ45 (10/100BASE-TX)
LED Indicators	1 x Power LED 1 x System LED 4 x Uplink Port LED (ACT and Link) 2 x PON LED (Link)
<b>EMS Utility Specification</b>	
System Feature	IPTV multicast creation and management MAC address learning and binding MAC filtering Supports IGMP mode Supports the VLAN division on the basis of port Up to 4096 VLAN support 8K MAC Addresses support ONU Multicast control ONU IGMP fastleave ONU VLAN mode ONU Port Management
Management	User-friendly GUI Utility Firmware and Configuration upgradeable via Utility Remote ONU Management
<b>Standards Conformance</b>	
Safety	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3z Gigabit SX/LX IEEE 802.3x Flow Control and Back pressure IEEE 802.1Q VLAN Tagging
<b>Environment Specifications</b>	
Dimensions (W x D x H)	441 x 206 x 44 mm
Weight	2.31kg
Power	100 – 250V AC
Temperature	Operating temperature: 0 ~ 50 degrees C Storage temperature: -30 ~ 60 degrees C
Humidity	Operating humidity: 10 ~ 90% non-condensing Storage humidity: 5 ~ 95% non-condensing

## Ordering Information

EPL-2000	2-PON-Port GEAPON OLT with Uplink 2 1000BASE-X SFP Slots
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## Related Products

EPN-402NV	GEAPON Wi-Fi VOIP ONU
EPN-103	GEAPON SFU ONU with one GE + one FE Port
EPL-SPT-8	GEAPON Splitter (1 x 8 PLC Splitter, Wavelength 1260 ~ 1650 nm)
EPL-SPT-32	GEAPON Splitter (1 x 32 PLC Splitter, Wavelength 1260 ~ 1650 nm)
EPL-SPT-64	GEAPON Splitter (1 x 64 PLC Splitter, Wavelength 1260 ~ 1650 nm)

### PLANET Technology Corporation

11F., No.96, Minquan Rd., Xindian Dist., New Taipei City

231, Taiwan (R.O.C.)

Tel: 886-2-2219-9518

Email: sales@planet.com.tw

Fax: 886-2-2219-9528

www.planet.com.tw



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