GPON SFU ONT with 1-Port GbE Interface

GPN-100
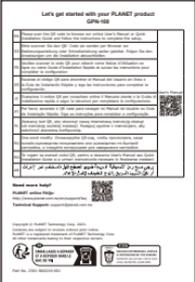
User's Manual

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1. Package Contents

Thank you for choosing PLANET GPON ONT. Before installing the range extender, please verify the contents inside the package box.

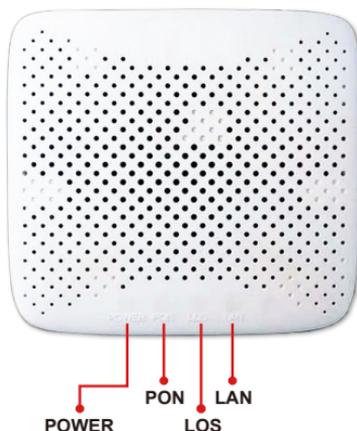| GPN-100 x 1	QR Code Sheet x 1	Power Adapter (12V, 0.5A)

Note	If there is any item missing or damaged, please contact the seller immediately.

2. Physical Introduction

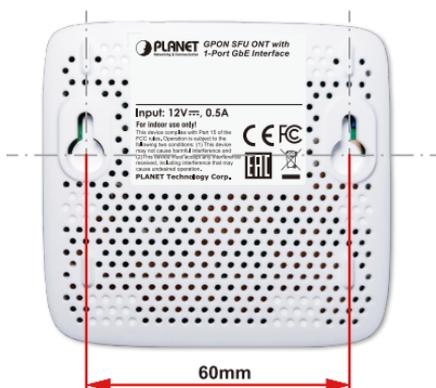**Top View and LEDs**

LED Indicators

LED	Color		Function
PWR	Blue	Lights	Indicates the ONT has power.
		OFF	The ONT doesn't receive power.
PON	Blue	Blinks	Indicates the port is not getting normal Optical Signal.
		Lights	Indicates the port is getting normal Optical Signal.
LOS	Red	Blinks	Optical Power is too low.
		OFF	Optical Power is normal.
LAN LNK/ ACT	Blue	OFF	No link
		Blinks	Indicates the link through that port is actively sending and receiving data.
		Lights	Indicates the link through that port is successfully established.

Rear View

DC JACK

GPON Port SC/UPC

10/100/1000BASE-T RJ45 LAN Port

Bottom View

PLANET
Networking & Communication
GPON SFU ONT with 1-Port GbE Interface

Input: 12V⎓, 0.5A
For indoor use only!
This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference and (2) This device must accept any interference received, including interference that may cause undesired operation.
PLANET Technology Corp.

CE FC

EAC

60mm

3. Hardware Installation

Safety Requirements

- Never look directly at the fiber or PON modules. The emitted light could cause damage to the eye.

- Make sure the GPON service is enabled.

- Ensure that the optical fiber is long enough to achieve the desired installation place.

- Put the ONT on a sturdy table.

- Don't open the device when the ONT is operating.

- Contact your local agent for permission if you want to remove the chassis.

- Allow about 10cm of ventilated space around the ONT chassis for heat dissipation.

Step 1: Connecting the RJ45 network cable.

      a. Plug in the RJ45 cable to 10/100/1000 GE port.

      b. Plug in the other side to your host or devices.

Step 2: Connecting the fiber cable.

      a. Remove the protective cap of the optical fiber.

      b. Remove the protective cap of the ONT optical interface (PON b. interface). Insert the fiber into the PON interface.

|	
⚠️ **Warning**	**Don't** connect the ONT/HGU directly to GPON SFP module (**GPL-GSFP-C+** or **GPL-GSFP-C++**). Doing so will damage the ONT/HGU optics. Use a PON splitter to add attenuation as needed.

📝 **Note**	1. Keep the optical connector and the optical fiber clean. 2. Make sure the bending diameter of the fiber is more than 6cm. Otherwise, the optical signal loss may be increased. 3. Cover a protective cap to guard against dust and water when the fiber is not used.

Step 3: Connecting Power Adapter.

> a. Connect the power adapter to the power socket on the ONT.
>
> b. Insert the other end into a power outlet.
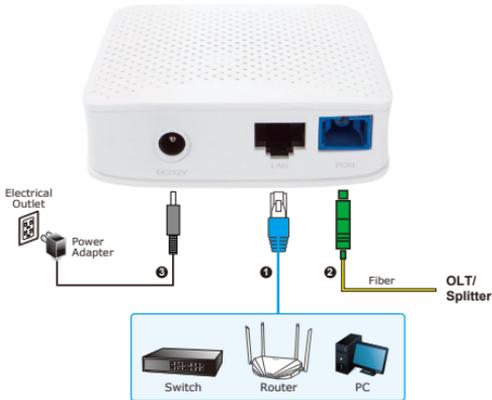
Verifying the Installation

● After powering on the ONT, the Power LED will be lit and ONT system will start to check the Optical signal.

● If the ONT system receives the optical signal, the PON LED will be lit and ONT system will start to register.

● If OLT and ONT register successfully, the Link LED will be lit which means that the connection is establishing.

Note	PLANET GPON ONT was designed with PLANET OLT GPL-8000 system. If your connection device is a third-party OLT system, the PON connection might be unstable and malfunctioned, due to the configurations of ONT which must depend on the OLT settings.

Note	If the ONT can't work properly with OLT of other brands, contact the third-party OLT vendor for technical support.

4. Specifications

Product		GPN-100
Hardware Specifications		
Transmission Speed		Downstream: 2.5 Gbps Upstream: 1.25 Gbps
Port	PON Port	1 x PON Port, SC/UPC
	Ethernet Port	1 x RJ45 (10/100/1000BASE-T)
Fiber Maximum Distance		20km
Optic Wavelength		TX: 1310mm RX: 1490mm
Optical Receive Sensitivity		-28 dBm
Optical TX Power		0.5~5 dBm
LED Indicators		1 Power LED 1 PON LED 1 LOS LED 1 LAN Link LED
EMS Utility Specifications		
ONT Features		MAC address learning Supports IGMP snooping 64 MAC addresses support Service level agreement (SLA) support Supports ACL and MAC filtering Remote loop-back test IEEE 802.3ah compliant forward error correction (FEC)
Environment Specifications		
Dimensions (W x D x H)		80 x 75 x 24 mm
Weight		100g
Power Input		12V DC, 0.5A
Temperature		Operating temperature: 0 ~ 50 degrees C Storage temperature: -40 ~ 85 degrees C
Humidity		Operating Humidity: 10 ~ 85% non-condensing Storage Humidity: 5 ~ 95% non-condensing

Standards Conformance	
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab 1000BASE-T IEEE 802.3x flow control and back pressure ITU-T G.984/G.988 ITU-T Y.1291
Safety	CE

Customer Support

Thank you for purchasing PLANET product. You can browse our online FAQ resource on PLANET website first to check if it could solve your issue. If you need more support information, please contact PLANET support team.

PLANET online FAQs:
https://www.planet.com.tw/en/support/faq

Support team mail address:
support@planet.com.tw

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If you find information in this manual that is incorrect, misleading, or incomplete, we would appreciate your comments and suggestions.

FCC Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the Instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at whose own expense.

CE Mark Warning

This device is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

WEEE Warning

To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

Energy Saving Note of the Device

This power required device does not support Standby mode operation. For energy savings, please remove the DC plug or slide the hardware-based Power Switch to the OFF position to disconnect the device from the power circuit. Without removing the DC plug from or switching off the device, the device will still consume power from the power source. In view of Saving the Energy and reducing the unnecessary power consumption, it is strongly suggested to power off or to remove the DC plug from the device if this device is not intended to be active.