

## Planet GPN-100

# Planet GPN-100 GPON SFU ONT 1-Port Optical Network Terminal User Manual

Model: GPN-100

## 1. INTRODUCTION

---

This manual provides comprehensive instructions for the installation, operation, and maintenance of the Planet GPN-100 GPON SFU ONT (Optical Network Terminal). The GPN-100 is designed to deliver high-speed fiber optic connectivity, offering efficient GPON solutions for FTTx and multi-service networks. Please read this manual thoroughly before using the device to ensure proper setup and optimal performance.

## 2. PACKAGE CONTENTS

---

Verify that all items listed below are present in your package. If any item is missing or damaged, please contact your vendor.

- 1 x Planet GPN-100 GPON SFU Optical Network Terminal with 1 Gb Ethernet Port
- 1 x Power Adapter (specifics may vary by region)
- 1 x Quick Installation Guide

## 3. PRODUCT OVERVIEW

---

The Planet GPN-100 is a compact and efficient GPON SFU ONT. It features one GPON port for fiber optic connection and one Gigabit Ethernet RJ45 interface for local network connectivity. Its plug-and-play design simplifies installation and maintenance.



Figure 1: Front view of the Planet GPN-100 GPON SFU ONT. This image shows the compact white casing of the device, typically featuring indicator lights and port labels.

### Key Features:

- Supports PON downstream rates of 2.5 Gbps and upstream rates of 1.25 Gbps.
- Equipped with one Gigabit Ethernet RJ45 port.
- Advanced DBA (Dynamic Bandwidth Allocation) for rate limit and accurate bandwidth control.
- Green networking technology for low power consumption.
- Cost-effective passive optical network solution.

### LED Indicators:

The device features several LED indicators to show its operational status. Refer to the quick installation guide for a detailed description of each LED's function (e.g., Power, PON, LOS, LAN).

## 4. SETUP

---

Follow these steps to set up your Planet GPN-100 GPON SFU ONT:

1. **Placement:** Choose a stable, flat surface for the device, away from direct sunlight, heat sources, and moisture. Ensure adequate ventilation.
2. **Connect Fiber Optic Cable:** Carefully connect the fiber optic cable from your GPON network to the GPON port on the GPN-100. Ensure the connector is clean and properly seated. (*Caution: Do not look directly into the fiber optic port when the device is powered on, as it may emit invisible laser radiation.*)
3. **Connect Ethernet Cable:** Connect one end of an Ethernet cable to the Gigabit Ethernet RJ45 port on the GPN-100 and the other end to your computer, router, or network switch.
4. **Connect Power Adapter:** Plug the power adapter into the DC power input port on the GPN-100, then plug the other end into a standard electrical outlet.
5. **Power On:** The device will automatically power on. Observe the LED indicators. The Power LED

should illuminate, and the PON LED should eventually turn solid, indicating a successful connection to the OLT.

## 5. OPERATING INSTRUCTIONS

---

Once the GPN-100 is successfully set up and connected to the GPON network, it operates automatically. It acts as a bridge between the fiber optic network and your local Ethernet devices.

- **Network Connectivity:** Your connected devices (computer, router) should automatically obtain an IP address from your network provider's DHCP server via the GPN-100.
- **Status Monitoring:** Monitor the LED indicators on the front panel to check the device's status. A solid PON LED indicates a stable GPON connection, and a blinking LAN LED indicates data activity.
- **Power Cycle:** If you experience network issues, a simple power cycle (unplugging the power adapter, waiting 10 seconds, and plugging it back in) can often resolve temporary problems.

## 6. MAINTENANCE

---

To ensure the longevity and optimal performance of your GPN-100, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Do not use liquid or aerosol cleaners.
- **Ventilation:** Ensure that the ventilation openings are not blocked. Do not place the device in an enclosed space without airflow.
- **Cable Management:** Keep cables neatly organized and avoid bending fiber optic cables sharply, as this can damage them.
- **Firmware Updates:** Firmware updates are typically managed by your service provider. Do not attempt to update firmware yourself unless instructed by your provider.

## 7. TROUBLESHOOTING

---

If you encounter issues with your GPN-100, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No Power LED	Power adapter not connected or faulty.	Check power connections. Ensure the power outlet is functional. Try a different outlet.
LOS LED is ON (Red)	Loss of optical signal. Fiber optic cable disconnected or damaged.	Check the fiber optic cable connection. Ensure it is securely plugged into the GPON port. Do not attempt to repair damaged fiber optic cables; contact your service provider.
PON LED is OFF or Blinking	No connection to OLT or OLT registration issue.	Ensure the fiber optic cable is properly connected. Wait a few minutes for the device to register with the OLT. If the issue persists, contact your service provider.
No Internet/Network Access	LAN cable issue, IP address conflict, or service provider issue.	Check the Ethernet cable connection. Power cycle the GPN-100 and your connected router/computer. Verify your service provider's network status.

If the problem persists after attempting these solutions, please contact your internet service provider or

Planet technical support for further assistance.

## 8. SPECIFICATIONS

---

Feature	Detail
Model Number	GPN-100
GPON Interface	1 x SC/APC GPON Port
Ethernet Interface	1 x Gigabit Ethernet (10/100/1000BASE-T) RJ45 Port
PON Downstream Rate	2.5 Gbps
PON Upstream Rate	1.25 Gbps
Dimensions (L x W x H)	3.15 x 2.95 x 0.94 inches (80 x 75 x 24 mm)
Weight	5.6 ounces (158.76 g)
Power Supply	External DC Power Adapter (e.g., 12V/0.5A)
Operating Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Humidity	10% to 90% non-condensing
Manufacturer	Planet Technology Corporation
Date First Available	August 2, 2023

## 9. WARRANTY AND SUPPORT

---

**Warranty Information:** This product comes with a standard manufacturer's warranty. Please refer to the warranty card included in your package or visit the official Planet website for detailed warranty terms and conditions. Keep your purchase receipt as proof of purchase for warranty claims.

**Technical Support:** For technical assistance, product inquiries, or troubleshooting beyond the scope of this manual, please contact your internet service provider or Planet technical support. You can typically find support contact information on the Planet official website or in your product documentation.

**Online Resources:** Visit the [Planet Technology website](#) for the latest product information, drivers, and FAQs.