

**8-Port GPON OLT with 4-Port Gigabit TP/SFP Combo  
+ 4-Port 100/1000X SFP + 4-Port 10G SFP+**

**GPL-8000**

**Quick Installation Guide**

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## 1. Package Contents

Thank you for purchasing PLANET GPL-8000 8-Port GPON OLT. Unless specified, "**GPON OLT**" mentioned in this Quick Installation Guide refers to the GPL-8000.

Open the box of the **GPON OLT** and carefully unpack it. The box should contain the following items:

- The GPON OLT x 1
- Quick Installation Guide x 1
- RJ45-to-DB9 Console Cable x 1
- Power Cord x 1
- Rubber Feet x 4
- Two Rack-mounting Brackets with Attachment Screws x 6
- SFP Dust Cap x 20 (installed on the machine)

If any item is found missing or damaged, please contact your local reseller for replacement.

## 2. Requirements

- Workstations running Windows XP/2003/Vista/2008/7/8/10, MAC OS X or later, Linux, UNIX, or other platforms are compatible with TCP/IP protocols.
- Workstations are installed with Ethernet NIC (Network Interface Card)
- **Serial Port Connection (Terminal)**
  - The above Workstations come with **COM Port (DB9)** or **USB-to-RS232** converter.
  - The above Workstations have been installed with terminal emulator, such as Tera Term or PuTTY.
  - Serial cable -- one end is attached to the RS232 serial port, while the other end to the console port of the GPON OLT.
- **Management Port Connection**
  - Network cables -- Use standard network (UTP) cables with RJ45 connectors.
  - The above PC is installed with Web browser



It is recommended to use Internet Explorer 8.0 or above to access the GPON OLT. If the Web interface of the GPON OLT is not accessible, please turn off the anti-virus software or firewall and then try it again.

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## 3. Switch Management

To set up the GPON OLT, the user needs to configure the GPON OLT for network management. The GPON OLT provides two management options: **Out-of-Band Management and In-Band Management**.

### ■ Out-of-Band Management

Out-of-band management is the management through console interface. **Generally, the user will use out-of-band management for the initial switch configuration**, or when in-band management is not available.

### ■ In-Band Management

In-band management refers to the management by logging in to the GPON OLT using Telnet or HTTP, or using SNMP management software to configure the GPON OLT. In-band management enables the management of the GPON OLT to attach some devices to the Switch. The following procedures are required to enable in-band management:

1. Logging on to console
2. Assigning/Configuring IP address
3. Creating a remote login account
4. Enable HTTP or Telnet server on the GPON OLT

In case in-band management fails due to GPON OLT configuration changes, out-of-band management can be used for configuring and managing the GPON OLT.



The GPON OLT is shipped with a default **Management Port** IP address: **192.168.1.1/24**. User can assign another IP address to the GPON OLT via the console interface to be able to remotely access the GPON OLT through Telnet or HTTP.

## 4. Terminal Setup

To configure the system, connect a serial cable to a **COM port** on a PC or notebook computer and to serial (console) port of the GPON OLT. The console port of the GPON OLT is DCE already, so that you can connect the console port directly through PC without the need of Null Modem.

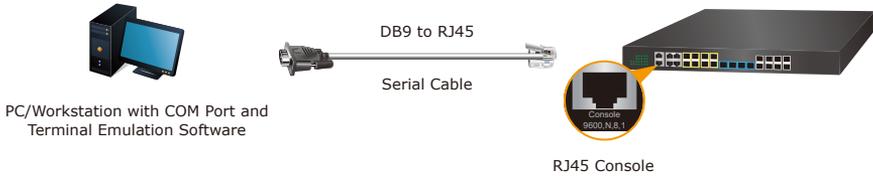


Figure 4-1 GPON OLT Console Connectivity

A terminal program is required to make the software connection to the GPON OLT. Tera Term program may be a good choice. The Tera Term can be accessed from the **Start** menu.

1. Click **START** menu, then **Programs**, and then **Tera Term**.
2. When the following screen appears, make sure that the COM port should be configured as:

- Baud: 9600
- Parity: None
- Data bits: 8
- Stop bits: 1
- Flow control: None

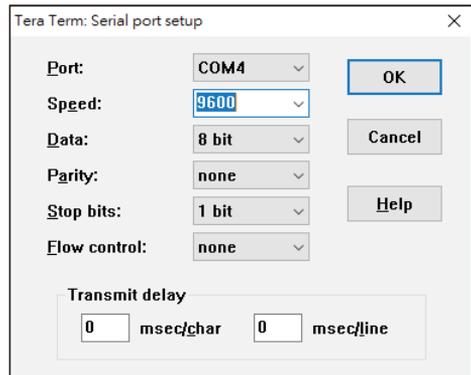


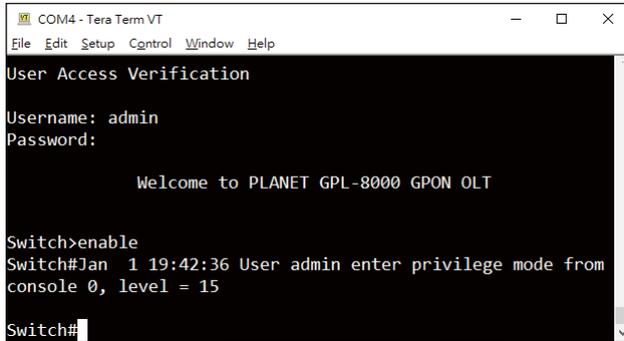
Figure 4-2 Tera Term COM Port Configuration

### 4.1 Logging on to the Console

Once the terminal is connected to the device, power on the GPON OLT, and the terminal will display **“running testing procedures”**.

Then, the following message asks for the login user name and password. The factory default user name and password are as follows as the login screen in Figure 4-3 appears.

Username: **admin**  
Password: **admin**



```
COM4 - Tera Term VT
File Edit Setup Control Window Help
User Access Verification
Username: admin
Password:
Welcome to PLANET GPL-8000 GPON OLT
Switch>enable
Switch#Jan 1 19:42:36 User admin enter privilege mode from
console 0, level = 15
Switch#
```

Figure 4-3 GPON OLT Console Login Screen

The user can now enter commands to manage the GPON OLT. For a detailed description of the commands, please refer to the following chapters.



Note

1. For security reason, please **change and memorize the new password after this first setup**.
2. Accept command in lowercase or uppercase letter under console interface.

## 4.2 Configuring IP Address

### ■ Management Port

The IP address configuration commands for **Management Port** are listed below. Before using in-band management, the GPON OLT must be configured with an IP address by out-of-band management (i.e. console mode).



Note

The GPON OLT is shipped with a default **Management Port** IP address: **192.168.1.1/24**.

The configuration commands are as follows:

```
Switch# config  
Switch_config# interface gigaEthernet 0/0  
Switch_config_g0/0)# ip address 192.168.1.254 255.255.255.0
```

The previous command would apply the following settings for the GPON OLT.

**IPv4 Address: 192.168.1.254**  
**Subnet Mask: 255.255.255.0**



```
COM4 - Tera Term VT  
File Edit Setup Control Window Help  
Switch#  
Switch#conf  
Switch_config#interface gigaEthernet 0/0  
Switch_config_g0/0#ip address 192.168.1.254 255.255.255.0  
Switch_config_g0/0#  
Switch_config_g0/0#
```

Figure 4-4 Configuring IPv4 Address of Management port Screen

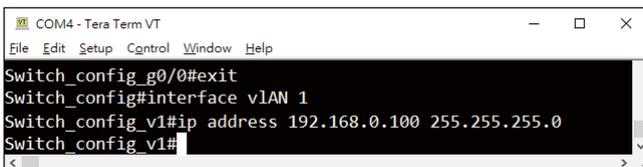
## ■ Interface VLAN 1

The configuration commands are as follows:

```
Switch# config  
Switch_config# interface vlan 1  
Switch_config_g0/0)# ip address 192.168.0.100 255.255.255.0
```

The previous command would apply the following settings for the GPON OLT.

**IPv4 Address: 192.168.0.100**  
**Subnet Mask: 255.255.255.0**



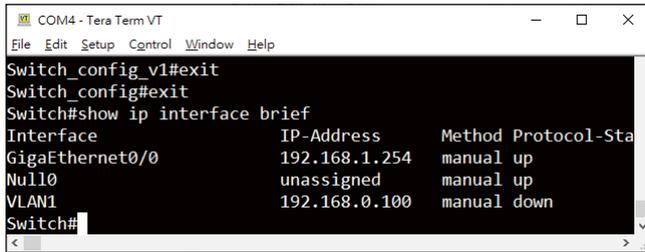
```
COM4 - Tera Term VT  
File Edit Setup Control Window Help  
Switch_config_g0/0#exit  
Switch_config#interface vLAN 1  
Switch_config_v1#ip address 192.168.0.100 255.255.255.0  
Switch_config_v1#
```

Figure 4-5 Configuring IPv4 Address of Interface VLAN 1 Screen

To check the current IP address or modify a new IP address for the GPON OLT, please use the procedures as follows:

### ■ Showing the Current IP Address

1. On "**Switch#**" prompt, enter "**show ip interface brief**".
2. The screen displays the current IP address, subnet mask and gateway as shown in Figure 4-6.



```
COM4 - Tera Term VT
File Edit Setup Control Window Help
Switch_config_v1#exit
Switch_config#exit
Switch#show ip interface brief
Interface                IP-Address      Method Protocol-Sta
GigaEthernet0/0         192.168.1.254   manual up
Null0                   unassigned      manual up
VLAN1                   192.168.0.100  manual down
Switch#
```

Figure 4-6 Showing IP Information Screen

If the IP is successfully configured, the GPON OLT will apply the new IP address setting immediately. You can access the Web interface of GPON OLT through the new IP address.



Note

If you are not familiar with console command or the related parameter, enter "**help**" or "**?**" anytime in console to get the help description.

## 4.3 Setting 1000BASE-X for 10G SFP+ Port

The GPON OLT supports both **1000BASE-X** and **10GBASE-X SFP** transceivers by manual setting and the default SFP+ port speed is set to 10Gbps. For example, to establish the fiber connection with 1000BASE-X SFP transceiver in the **tgigaethernet 0/1**, the following command configuration is required:

```
Switch#config
Switch_config#interface tgigaethernet 0/1
Switch_config_tg1/1#speed 1000
Switch_config_tg1/1#exit
```

```
Switch_config#interface range tgigaethernet 0/2-4  
Switch_config_if_range#speed 1000  
Switch_config_if_range#
```

## 4.4 Changing Password

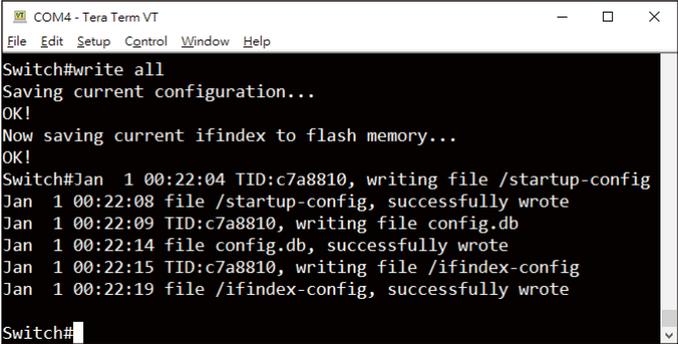
The default password of the switch is "admin". For security reason, it is recommended to change password and the following command configuration is required:

```
Switch #config  
Switch_config#username admin password planet2020  
Switch_config#
```

## 4.5 Saving the Configuration

In GPON OLT, the running configuration file stores in the RAM. In the current version, the running configuration sequence running-config can be saved from the RAM to FLASH by **write** command, so that the running configuration sequence becomes the start-up configuration file, which is called configuration save.

```
Switch# write all
```

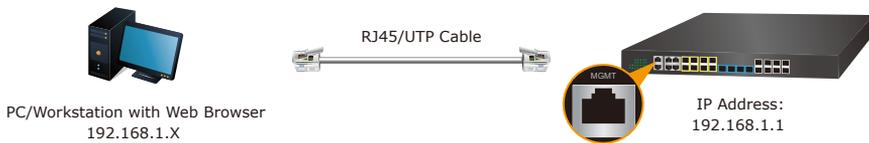


```
COM4 - Tera Term VT  
File Edit Setup Control Window Help  
Switch#write all  
Saving current configuration..  
OK!  
Now saving current ifindex to flash memory..  
OK!  
Switch#Jan 1 00:22:04 TID:c7a8810, writing file /startup-config  
Jan 1 00:22:08 file /startup-config, successfully wrote  
Jan 1 00:22:09 TID:c7a8810, writing file config.db  
Jan 1 00:22:14 file config.db, successfully wrote  
Jan 1 00:22:15 TID:c7a8810, writing file /ifindex-config  
Jan 1 00:22:19 file /ifindex-config, successfully wrote  
Switch#
```

Figure 4-7 Write Screen

## 5. Starting Web Management

The GPON OLT provides a built-in browser interface. You can manage it remotely by having a remote host with Web browser, such as Microsoft Internet Explorer, Mozilla Firefox, Google Chrome or Apple Safari.



**Figure 5-1** IP Management Diagram

The following shows how to start up the **Web Management** of the GPON OLT. Please note the GPON OLT is configured through an Ethernet connection. Please make sure the manager PC must be set to the same **IP subnet address**.

For example, the IP address of the GPON OLT is configured with **192.168.1.1** on **Management Port**, then the manager PC should be set to **192.168.1.x** (where x is a number between 2 and 253, except 1 or 254), and the default subnet mask is 255.255.255.0.

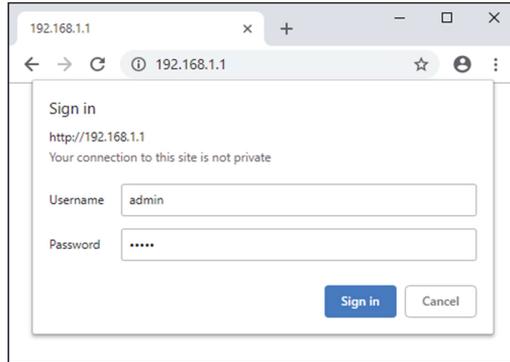
The factory default user name and password are as follows:

Default IP of Management Port: **192.168.1.1**  
Username: **admin**  
Password: **admin**

### 5.1 Logging in to the GPON OLT from Management Port

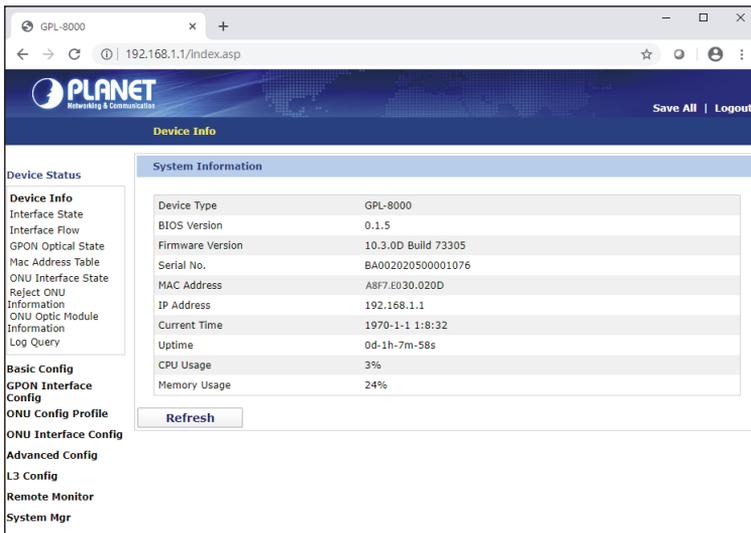
1. Use Internet Explorer 8.0 or above Web browser and enter IP address **http://192.168.1.1** (that you have just set in console) to access the Web interface.

- When the following dialog box appears, please enter the configured username **"admin"** and password **"admin"** (or the username/password you have changed via console). The login screen in Figure 5-2 appears.



**Figure 5-2** Login Screen

- After entering the password, the main screen appears as shown in Figure 5-3.



**Figure 5-3** Web Main Screen of GPON OLT

4. The Switch Menu on the left of the Web page lets you access all the commands and statistics the Switch provides.

Now, you can use the Web management interface to continue the Switch management or manage the GPON OLT by console interface. Please refer to the user manual for more.

## 5.2 Saving Configuration via the Web

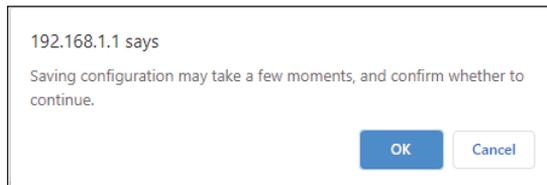
To save all applied changes and set the current configuration as a startup configuration, the startup-configuration file will be loaded automatically across a system reboot.

Click **"Save All"** on the top control bar. **"Save All"** function is equivalent to the execution of the **write all** command.



**Figure 5-4** Save Configuration

Press the **"OK"** button to save current running-configuration to start up configuration.

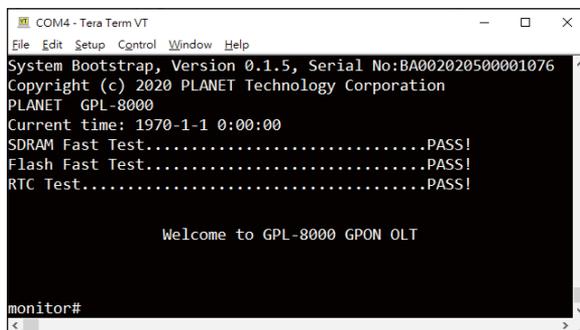


## 6. Recovering Back to Default Configuration

To reset the IP address to the default **Management Port** IP address "**192.168.1.1**" or reset the login password to default value, follow the instructions below.

After the device has been rebooted, you can log in the management Web interface within the same subnet of 192.168.1.xx.

1. **Reboot** the GPON OLT
2. When it powers on, press the button "**ctrl**" + "**p**" or "**ctrl**" + "**break**"
3. Log in in the monitor mode like the one shown below:



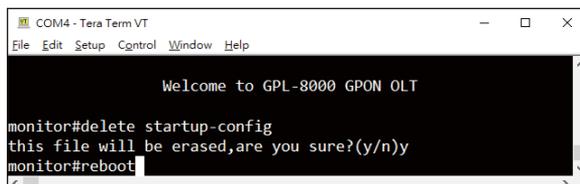
```
COM4 - Tera Term VT
File Edit Setup Control Window Help
System Bootstrap, Version 0.1.5, Serial No:BA002020500001076
Copyright (c) 2020 PLANET Technology Corporation
PLANET GPL-8000
Current time: 1970-1-1 0:00:00
SDRAM Fast Test.....PASS!
Flash Fast Test.....PASS!
RTC Test.....PASS!

Welcome to GPL-8000 GPON OLT

monitor#
```

Figure 6-1 Log in in Monitor Mode

4. Delete "**startup-config**" file to make the GPON OLT load with default-config after reboot.



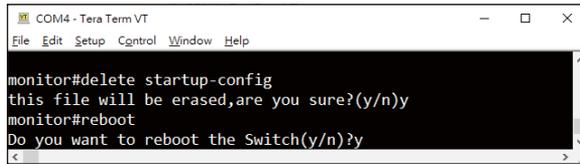
```
COM4 - Tera Term VT
File Edit Setup Control Window Help

Welcome to GPL-8000 GPON OLT

monitor#delete startup-config
this file will be erased,are you sure?(y/n)y
monitor#reboot
```

Figure 6-2 Delete Startup-config File

## 5. Reboot the GPON OLT



```
COM4 - Tera Term VT
File Edit Setup Control Window Help
monitor#delete startup-config
this file will be erased,are you sure?(y/n)y
monitor#reboot
Do you want to reboot the Switch(y/n)?y
```

**Figure 6-3** Rebooting GPON OLT

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## 7. Customer Support

Thank you for purchasing PLANET products. You can browse our online FAQ resource at the PLANET Web site first to check if it could solve your issue. If you need more support information, please contact PLANET support team.

PLANET online FAQs:

<http://www.planet.com.tw/en/support/faq.php?type=1>

Support team mail address:

[support@planet.com.tw](mailto:support@planet.com.tw)

GPL-8000 User's Manual

<http://www.planet.com.tw/en/support/download.php?view=3&key=GPL-8000#list>



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