

24-Port Gigabit with 4 Optional 10G Slots

Layer 3 Managed Stackable Switch

XGS3-24042 / XGS3-24242

Quick Installation Guide

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1. Package Content

Thank you for purchasing PLANET Layer 3 IPv6/IPv4 Managed Switch, XGS3-24042 / XGS3-24242. Terms of "**Managed Switch**" means the Switch mentioned titled in the cover page of this quick installation guide.

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

- The XGS3 Managed Switch x 1
- This Quick Installation Guide x 1
- User's Manual CD x 1
- RJ-45-to-DB9 Console Cable x 1
- Power Cord x 1
- Rubber Feet x 4
- Two Rack-mounting Brackets with Attachment Screws x 1
- SFP Dust Caps x 4 (for XGS3-24042)
- SFP Dust Caps x 24 (for XGS3-24242)

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

2. Switch Management

To setup the Managed Switch, the user needs to configure the Managed Switch for network management. The XGS3 Managed Switch 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.

IMPORTANT!	The Managed Switch is shipped without IP address assigned by default. User must assign an IP address to the Managed Switch via the Console interface to be able to remote access the Managed Switch through Telnet or HTTP.
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■ In-Band Management

In-band management refers to the management by login to the Managed Switch using Telnet, HTTP, or using SNMP management software to configure the Managed Switch. In-band management enables management of the Managed Switch for some devices attached to the Switch. Following procedures are required to enable In-band management:

1. Logon Console
2. Assign / Configure IP Address
3. Create a remote login account
4. Enable HTTP or Telnet server on the Managed Switch

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

3. Requirements

The Managed Switch provide remote login interface for manage; the following equipments are necessary for further management.

- **Workstation** running Windows XP/2003/Vista/Windows 7, MAC OS X, Linux, Fedora, Ubuntu or other platform.
- **Serial Port connect** (Terminal)
 - ◆ Above Workstation with COM Port (DB9) or USB-to-RS-232 converter.
 - ◆ Above Workstation has installed with terminal emulator, such as Hyper Terminal included in Windows XP/2003/Windows Vista.
 - ◆ Serial cable: One end attach to the RS-232 serial port, the other end to the Console port of the Managed Switch.
- **Ethernet Port connect**
 - ◆ Above Workstation with running OS compatible with TCP/IP protocols.
 - ◆ Above Workstation installed with Ethernet NIC (Network Card).
 - ◆ Network cables - Use standard network (UTP) cables with RJ-45 connectors.
 - ◆ Above Workstation has installed with WEB Browser and JAVA runtime environment Plug-in.



Note

It is recommended to use Internet Explore 7.0 or above to access the Managed Switch. If the Web interface of the Managed Switch is not accessible, please turn off the anti-virus software or firewall then try again.

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 XGS3 Managed Switch. The console port of the Managed Switch is DCE already, so that you can connect the console port directly through PC without the need of Null Modem.

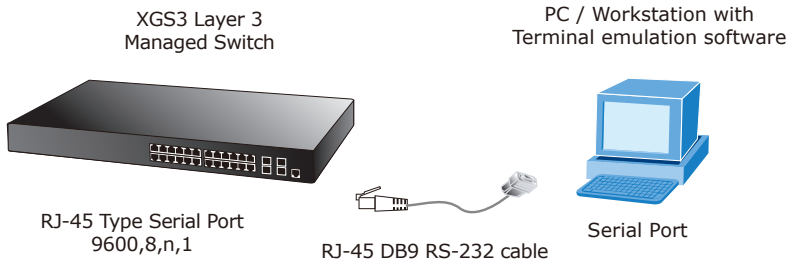


Figure 4-1 XGS3 Managed Switch Console connection

A terminal program is required to make the software connection to the XGS3 Managed Switch. Windows' **Hyper Terminal** program may be a good choice. The Hyper Terminal can be accessed from the **Start** menu.

1. Click **START** menu, then **Programs, Accessories** and then **Hyper Terminal**.
2. Type a name for opening Hyper Terminal, such as "COM1_9600".
3. 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

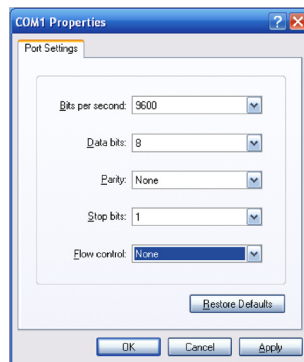


Figure 4-2 Hyper Terminal COM port configuration

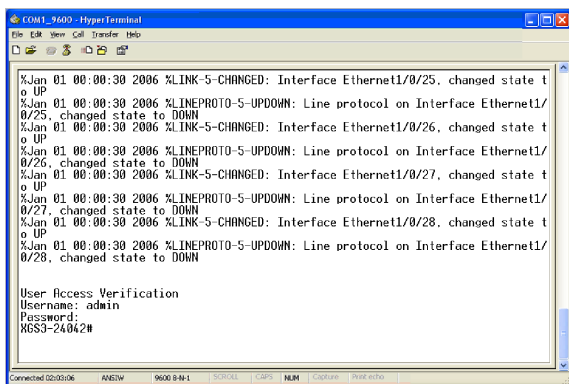
5. Logon on the Console

Once the terminal has connected to the device, power on the XGS3 Managed Switch, the terminal will display that it is running testing procedures.

Then, the following message asks the login user name and password. The factory default user name and password as following and the login screen in Figure 5-1 appears.

Username: **admin**

Password: **admin**



```
COM1_9600 - HyperTerminal
File Edit View Call Transfer Help
[Icons]
%Jan 01 00:00:30 2006 %LINK-5-CHANGED: Interface Ethernet1/0/25, changed state t
o UP
%Jan 01 00:00:30 2006 %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet1/
0/25, changed state to DOWN
%Jan 01 00:00:30 2006 %LINK-5-CHANGED: Interface Ethernet1/0/26, changed state t
o UP
%Jan 01 00:00:30 2006 %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet1/
0/26, changed state to DOWN
%Jan 01 00:00:30 2006 %LINK-5-CHANGED: Interface Ethernet1/0/27, changed state t
o UP
%Jan 01 00:00:30 2006 %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet1/
0/27, changed state to DOWN
%Jan 01 00:00:30 2006 %LINK-5-CHANGED: Interface Ethernet1/0/28, changed state t
o UP
%Jan 01 00:00:30 2006 %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet1/
0/28, changed state to DOWN

User Access Verification
Username: admin
Password:
HG33-24042#
```

Figure 5-1 XGS3 Managed Switch Console Login screen

The user can now enter commands to manage the Switch. For a detailed description for the commands, please refer to the following chapters.



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

6. Configure IP Address

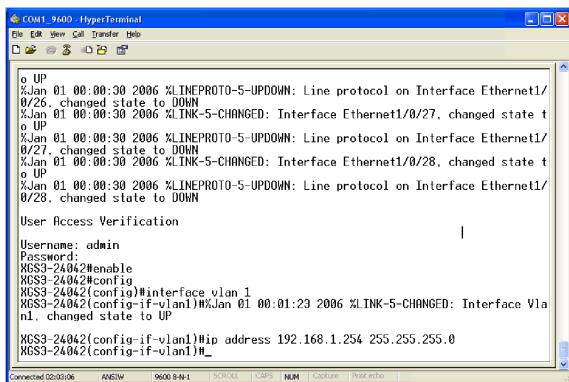
The IP address configuration commands for VLAN1 interface are listed below. Before in-band management, the Managed Switch must be configured with an IP address by out-of-band management (i.e. Console mode), the configuration commands are as follows (All switch configuration prompts are assumed to be "XGS3-24042" hereafter if not otherwise specified):

```
XGS3-24042>
XGS3-24042> enable
XGS3-24042# config
XGS3-24042 (config)# interface vlan 1
XGS3-24042 (Config-if-Vlan1)# ip address 192.168.1.254 255.255.255.0
```

The previous command would apply the follow settings for the Managed Switch.

IPv4 Address: 192.168.1.254

Subnet Mask: 255.255.255.0



```
COM1_9600 - HyperTerminal
File Edit View Call Transfer Help
o UP
%Jan 01 00:00:30 2006 %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet1/
0/26, changed state to DOWN
%Jan 01 00:00:30 2006 %LINK-5-CHANGED: Interface Ethernet1/0/27, changed state t
o UP
%Jan 01 00:00:30 2006 %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet1/
0/27, changed state to DOWN
%Jan 01 00:00:30 2006 %LINK-5-CHANGED: Interface Ethernet1/0/28, changed state t
o UP
%Jan 01 00:00:30 2006 %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet1/
0/28, changed state to DOWN

User Access Verification

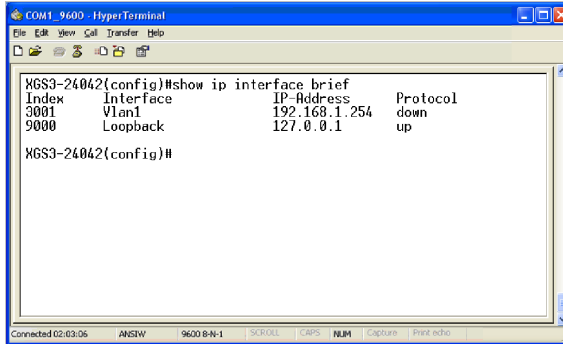
Username: admin
Password:
XGS3-24042#enable
XGS3-24042#config
XGS3-24042(config)#interface vlan 1
XGS3-24042(config-if-vlan1)#%Jan 01 00:01:23 2006 %LINK-5-CHANGED: Interface Vla
n1, changed state to UP
XGS3-24042(config-if-vlan1)#ip address 192.168.1.254 255.255.255.0
XGS3-24042(config-if-vlan1)#_
```

Figure 6-1 Configure IPv4 address screen

To check the current IP address or modify a new IP address for the Switch, please use the procedures as follow:

■ Show the current IP address

1. On "XGS3-24042#" prompt, enter "show ip interface brief".
2. The screen displays the current IP address, Subnet Mask and Gateway. As show in Figure 6-2.



```
COM1_9600 - HyperTerminal
File Edit View Call Transfer Help
XGS3-24042(config)#show ip interface brief
Index      Interface      IP-Address      Protocol
3001      Vlan1          192.168.1.254    down
9000      Loopback       127.0.0.1        up
XGS3-24042(config)#
```

Figure 6-2 Show IP information screen

If the IP is successfully configured, the Managed Switch will apply the new IP address setting immediately. You can access the Web interface of XGS3 Managed Switch through the new IP address.



Note

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

7. Telnet Management

Login to the Telnet configuration interface. Valid login name and password are required, otherwise the Managed Switch will reject Telnet access. This is a method to protect the Managed Switch from unauthorized access. As a result, when Telnet is enabled for configuring and managing the Managed Switch, username and password for authorized Telnet users must be configured with the following command:

```
username <username> privilege <privilege> [password (0|7)  
<password>]
```

Privilege option must exist and just is 15. Assume an authorized user in the Managed Switch has a username of "admin", and password of "admin", the configuration procedure should like the following:

```
XGS3-24042> enable  
XGS3-24042# config  
XGS3-24042 (config)# username admin privilege 15 password 0 admin
```

Enter valid login name and password in the Telnet configuration interface, Telnet user will be able to enter the Managed Switch's CLI configuration interface. The commands used in the Telnet CLI interface after login is the same as that in the Console interface.

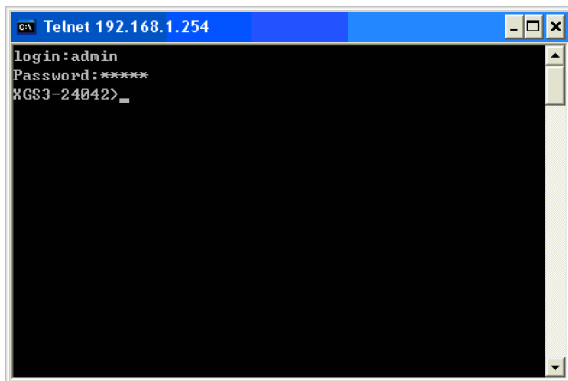


Figure 7-1 Telnet Configuration Interface

8. Start Web Management

For configuring the IP address on the Managed Switch through out-of-band management, see the telnet management chapter.

To enable the Web configuration, users should type the CLI command `IP http server` in the global mode as below:

```
XGS3-24042> enable
XGS3-24042# config
XGS3-24042 (config)# ip http server
```

The Managed Switch 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.

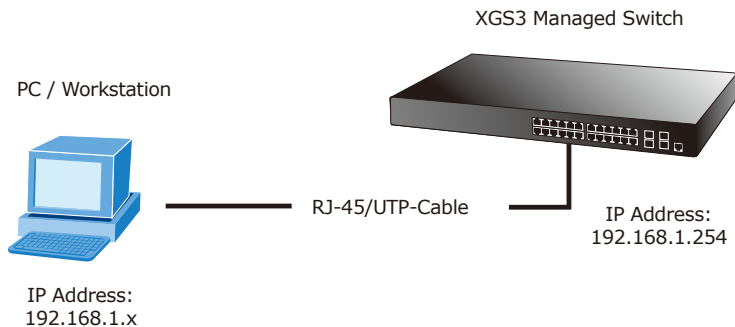


Figure 8-1 IP Management diagram



Note

Please refer to **Chapter 5 – CONFIGURE IP ADDRESS** for the IPv4 IP address setting on the XGS3 Managed Switch.

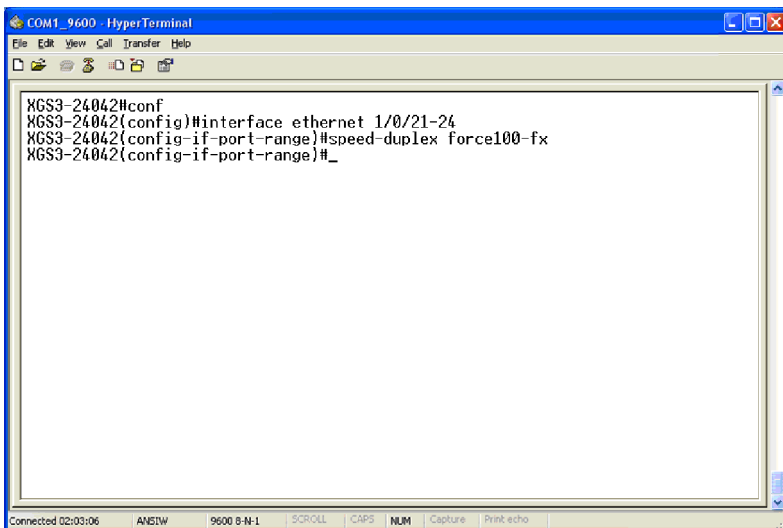
The following shows how to start up the **Web Management** of the Managed Switch, please note the Managed Switch is configured through an Ethernet connection, please make sure the manager PC must be set on the same **IP subnet address**.

For example, the IP address of the Managed Switch is configured with **192.168.1.254**, then the manager PC should be set at **192.168.1.x** (where x is a number between 1 and 253, except 254), and the default subnet mask is 255.255.255.0.

9. Set 100Base-FX for SFP Port

The XGS3 Managed Switch supports both 1000Base-X and 100Base-FX SFP transceiver by manual setting and the default SFP port speed is set to 1000Mbps. To establish the fiber connection with 100Base-FX SFP transceiver, the following command configuration is required:

```
XGS3-24042#confi
XGS3-24042(config)#interface ethernet 1/0/21-24
XGS3-24042(config-if-port-range)#speed-duplex force100-fx
```



The image shows a HyperTerminal window titled "COM1_9600 - HyperTerminal". The window contains the following text:

```
XGS3-24042#confi
XGS3-24042(config)#interface ethernet 1/0/21-24
XGS3-24042(config-if-port-range)#speed-duplex force100-fx
XGS3-24042(config-if-port-range)#_
```

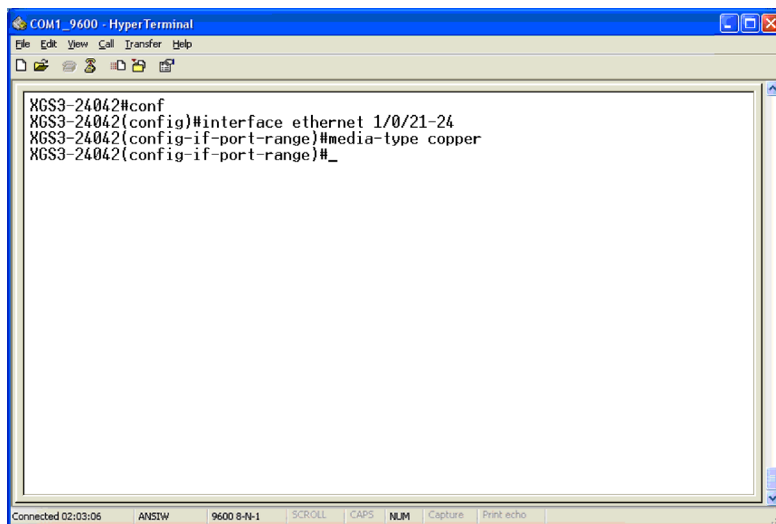
The status bar at the bottom of the window displays: "Connected 02:03:06 ANS1W 9600 8-N-1 SCROLL CAPS NUM Capture Print echo".

Figure 9-1 Set 100Base-FX screen

10. Use Copper Interface on Combo Port

The XGS3 Managed Switch's combo port has SFP and copper interface and the default combo port type is SFP port only. To establish the combo port connection with copper interface, the following command configuration is required:

```
XGS3-24042#conf  
XGS3-24042(config)#interface ethernet 1/0/21-24  
XGS3-24042(config-if-port-range)#media-type copper
```



The image shows a HyperTerminal window titled "COM1_9600 - HyperTerminal". The window contains the following text:

```
XGS3-24042#conf  
XGS3-24042(config)#interface ethernet 1/0/21-24  
XGS3-24042(config-if-port-range)#media-type copper  
XGS3-24042(config-if-port-range)#_
```

The status bar at the bottom of the window displays: "Connected 02:03:06", "ANSIW", "9600 8-N-1", "SCROLL", "CAPS", "NUM", "Capture", and "Print echo".

Figure 10-1 Use copper interface screen

11. Save the Configuration

In switch, 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 or **copy running-config startup-config** command, so that the running configuration sequence becomes the start up configuration file, which is called configuration save.

```
XGS3-24042> enable
```

```
XGS3-24042# copy running-config startup-config
```

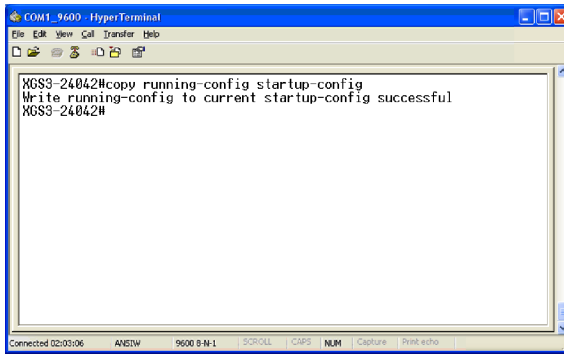


Figure 11-1 Copy running-config startup-config screen

12. Login the Managed Switch

1. Use Internet Explorer 7.0 or above Web browser, enter IP address **http://192.168.1.254** (that you have just set in console) to access the Web interface.
2. When the following dialog box appears, please enter the configured user name "admin" and password "admin" (or the username / password you have changed via console). The login screen in Figure 12-1 appears.



Figure 12-1 Login screen

3. After entering the password, the main screen appears as Figure 10-2.

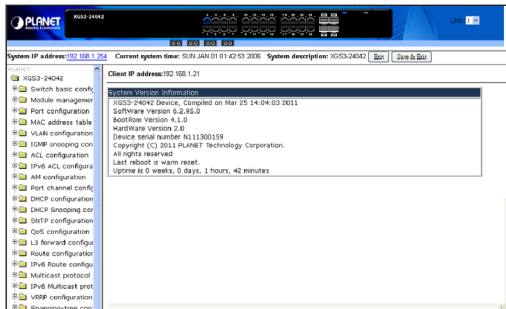


Figure 12-2 Web Main Screen of XGS3 Managed Switch

4. The Switch Menu on the left of the Web page let 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 Managed Switch by console interface. Please refer to the user manual for more.

13. Customer Support

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

PLANET online FAQ :

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

Switch support team mail address :

support_switch@planet.com.tw

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