Layer 3 Multi-port 10G/25G
+ 2-/4-Port 100G QSFP28 Managed Ethernet Switch

XGS-6350-24X2C/XGS-6350-16X8Y4C

Quick Installation Guide

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1. Package Contents

Thank you for purchasing PLANET Layer 3 Multi-port 10G/25G +2-/4-Port 100G QSFP28 Managed Switch, XGS-6350-24X2C/XGS-6350-16X8Y4C.

Unless specified, **"Managed Switch"** mentioned in this Quick Installation Guide refers to the XGS-6350-24X2C/XGS-6350-16X8Y4C.

Model	Description
XGS-6350-24X2C	Layer 3 24-Port 10G SFP+ + 2-Port 100G QSFP28 Managed Ethernet Switch
XGS-6350-16X8Y4C.	Layer 3 16-Port 10G SFP+ + 8-Port 25G SFP28 + 4-Port 100G QSFP28 Managed Ethernet Switch

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

	XGS-6350-24X2C	XGS-6350-16X8Y4C
QR Code Sheet	■	■
RS232 to RJ45 Console Cable	■	■
Rack Mount Accessory Kit	■	■
AC Power Cord	1	1
Rubber Feet	4	4
SFP Dust Cap	26	28

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

2. Switch Management

To set up the Managed Switch, the user needs to configure the Managed Switch for network management. The 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.

■ In-Band Management

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

1. Log on to console

2. Assign/Configure IP address

3. Create a remote login account

4. Enable HTTPs or Telnet server on the Managed Switch

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

⚠ Important	The XGS-6350-24X2C, XGS-6350-16X8Y4C Managed Switches are shipped with Management **Port** IP address **192.168.1.1/24** assigned and **VLAN1 interface** IP address **192.168.0.254/24** assigned by default. User can assign another IP address to the Managed Switch via the console interface to be able to remotely access the Managed Switch through Telnet or HTTPs.

3. Requirements

- **Workstations** running Windows 10/11, MAC OS 10.16 or later, Linux, UNIX, or other platforms that 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 Managed Switch.

- **Management Port Connection**

  ➢ Network cables -- Use standard network (UTP) cables with RJ45 connectors.

  ➢ The above PC is installed with Web browser.

Note	It is recommended to use Google Chrome 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 and then try it 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 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.
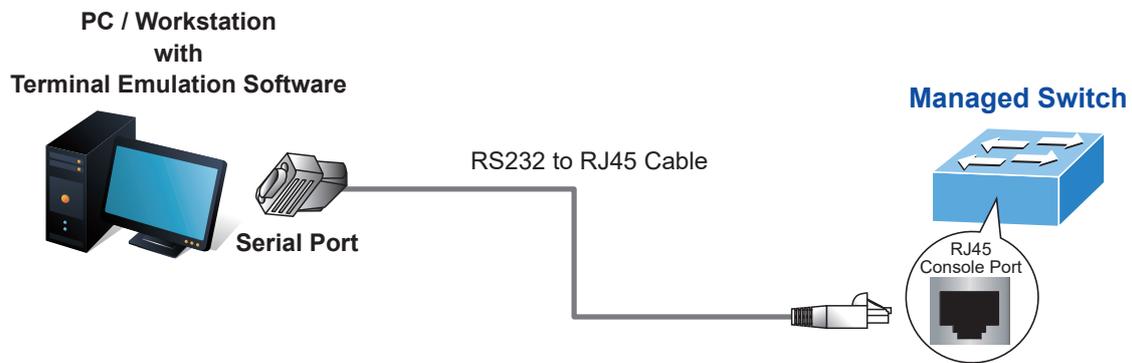

Figure 4-1: Managed Switch Console Connectivity

A terminal program is required to make the software connection to the Managed Switch. 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

    (For XGS-6350-24X2C)

    ◆ Baud: 115200

    (For XGS-6350-16X8Y4C

    ◆ Parity: None

    ◆ Data bits: 8
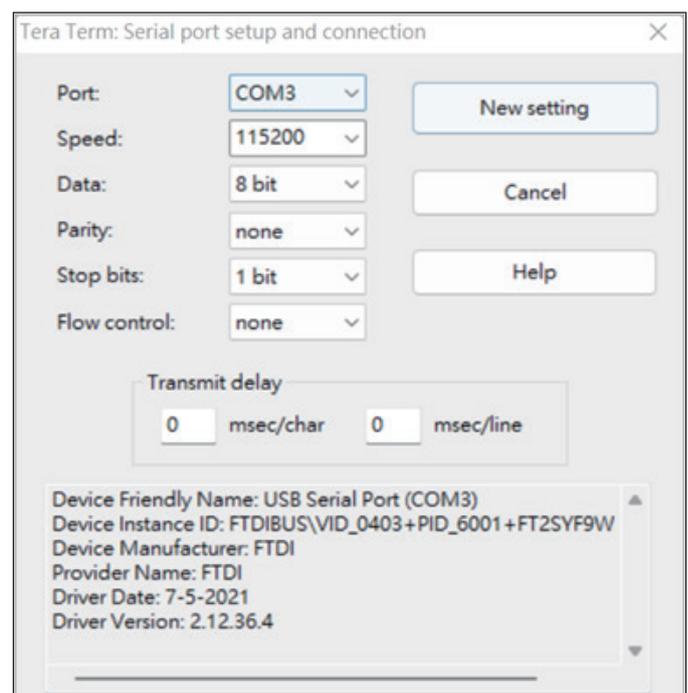
    ◆ Stop bits: 1

    ◆ 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 Managed Switch, 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: **SW + the last 6 characters of the MAC ID in lowercase**

Find the MAC ID on your device label. The default password is "sw" followed by the last six lowercase characters of the MAC ID.
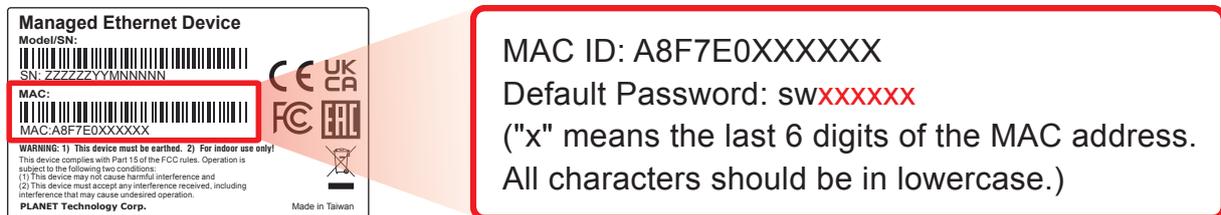

Figure 4-3: MAC ID Label

Enter the default username and password, then set a new password according to the rule-based prompt and confirm it.

Figure 4-4: Managed Switch Console Login Screen

The user can now enter commands to manage the Switch. 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

The IP address configuration commands for **VLAN1 interface** are listed below. Before using 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:

```
Switch#config
Switch_config#interface vlan1
Switch_config_v1)#ip address 192.168.1.254 255.255.255.0
```

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

IPv4 Address: 192.168.1.254
Subnet Mask: 255.255.255.0

```
Switch#config
Switch_config#interface vlan1
Switch_config_v1#ip address 192.168.1.254 255.255.255.0
Switch_config_v1#
Switch_config_v1#
Switch_config_v1#
```

Figure 4-5: Configuring IPv4 Address Screen

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

■ **Show 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.

```
Switch#config
Switch_config#interface vlan1
Switch_config_v1#ip address 192.168.1.254 255.255.255.0
Switch_config_v1#
Switch_config_v1#
Switch_config_v1#
Switch_config_v1#exit
Switch_config#show ip interface brief
Interface              IP-Address     Method Protocol-Status
Null0                  unassigned     manual up
VLAN1                  192.168.1.254 manual up
Switch_config#
```

Figure 4-6: Showing 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 Managed Switch through the new IP address.

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

The Managed Switch 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 **tg0/0/1**, the following command configuration is required:

```
Switch#config
Switch(config)#interface tg0/0/1
Switch(config-tg0/0/1)#speed 1000
Switch(config-tg0/0/1)#duplex full
Switch(config-tg0/0/1)#
```

Figure 4-7: Setting 1000BASE-X Screen

4.4 Setting 40GBASE-X for 100G QSFP28 Port

The managed switch supports both 40GBASE-X and 100GBASE-X QSFP28 transceivers through manual configuration. By default, the QSFP28 port speed is set to **100Gbps**.

For example, to establish a fiber connection using a 40GBASE-X QSFP28 transceiver on interface **cg0/0/1**, the following configuration commands are required:

```
Switch#config
Switch(config)#interface cg0/0/1
Switch(config-cg0/0/1)#speed 40000
Switch(config-cg0/0/1)#exit
Switch(config)#show interface brief
Port          Description          Status    Vlan      Duplex    Speed      Type
tg0/0/1                            down      1         full      10000Mb    10Giga-FX
tg0/0/2                            up        1         full      1000Mb     10Giga-FX
tg0/0/3                            down      1         full      10000Mb    10Giga-FX
cg0/0/1                            down      1         full      40000Mb    100Giga-FX
cg0/0/2                            down      1         full      100000Mb   100Giga-FX
cg0/0/3                            down      1         full      100000Mb   100Giga-FX
cg0/0/4                            down      1         full      100000Mb   100Giga-FX
g0/0/0                             down
vlan1                              up
Switch(config)#
```

Figure 4-8: Setting and check 40GBASE-X Screen

4.5 Setting 10G for a 40G QSFP+ Port

The managed switch supports both 40GBASE-X QSFP+ transceivers and 40G QSFP+ to 4 × 10G SFP+ direct attach copper (DAC) cables through manual configuration. By default, the QSFP+ port speed is set to 100Gbps.

For example, to establish a fiber connection using a 40G QSFP+ to 4 × 10G SFP+ breakout cable on interface cg0/0/1, the following configuration commands are required:

```
Switch#config
Switch(config)#interface cg0/0/1
Switch(config-cg0/0/1)#switchport flex-portmode seperate speed 10g
Switch(config-cg0/0/1)#quit
Switch(config)#quit
Switch#write vos-config
Switch#reboot
```

Figure 4-9: Setting 40G to 10GBASE-X Screen

```
Switch#show interface brief
Port          Description       Status    Vlan      Duplex    Speed      Type
tg0/0/1                         down      1         full      10000Mb    10Giga-FX
tg0/0/2                         up        1         full      1000Mb     10Giga-FX
tg0/0/3                         down      1         full      10000Mb    10Giga-FX

cg0/0/1:1                       down      1         full      10000Mb    10Giga-FX
cg0/0/1:2                       down      1         full      10000Mb    10Giga-FX
cg0/0/1:3                       down      1         full      10000Mb    10Giga-FX
cg0/0/1:4                       down      1         full      10000Mb    10Giga-FX
cg0/0/2                         down      1         full      100000Mb   100Giga-FX
cg0/0/3                         down      1         full      100000Mb   100Giga-FX
cg0/0/4                         down      1         full      100000Mb   100Giga-FX
g0/0/0                          down
vlan1                           up
Switch#
```

Figure 4-10: Check 40G to 10GBASE-X Screen

To disable the 40G to 4 × 10G breakout mode, use the following configuration:

```
Switch#dir
Directory of flash:/
  3407        Jan 2  14:50 startup-config*
  44          Jan 2  14:12 vos-config
free space Avail
1.8G
Switch#delete vos-config
this file will be erased,are you sure?(y/n)y

Switch#reboot
Do you want to reboot the switch(y/n)?y
```

Figure 4-11: Disable 40G to 4 × 10G breakout mode

4.6 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 planet2026**
Switch_config#

```
Switch#config
Switch_config#username admin password planet2026
Switch_config#
```

Figure 4-12: Changing Password Interface Screen

4.7 Saving the Configuration

In Managed 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, so that the running configuration sequence becomes the start-up configuration file, which is called configuration save.

Switch#**write**

```
Switch#write
Saving current configuration…
OK!
Switch#Jan 5 00:45:12 /startup-config is wrote. TID:87172682
Switch#
```

Figure 4-13: Write Screen

5. Starting Web Management

The Managed Switch provides a built-in browser interface. You can manage it remotely by having a remote host with Web browser, such as Mozilla Firefox, Google Chrome or Apple Safai.
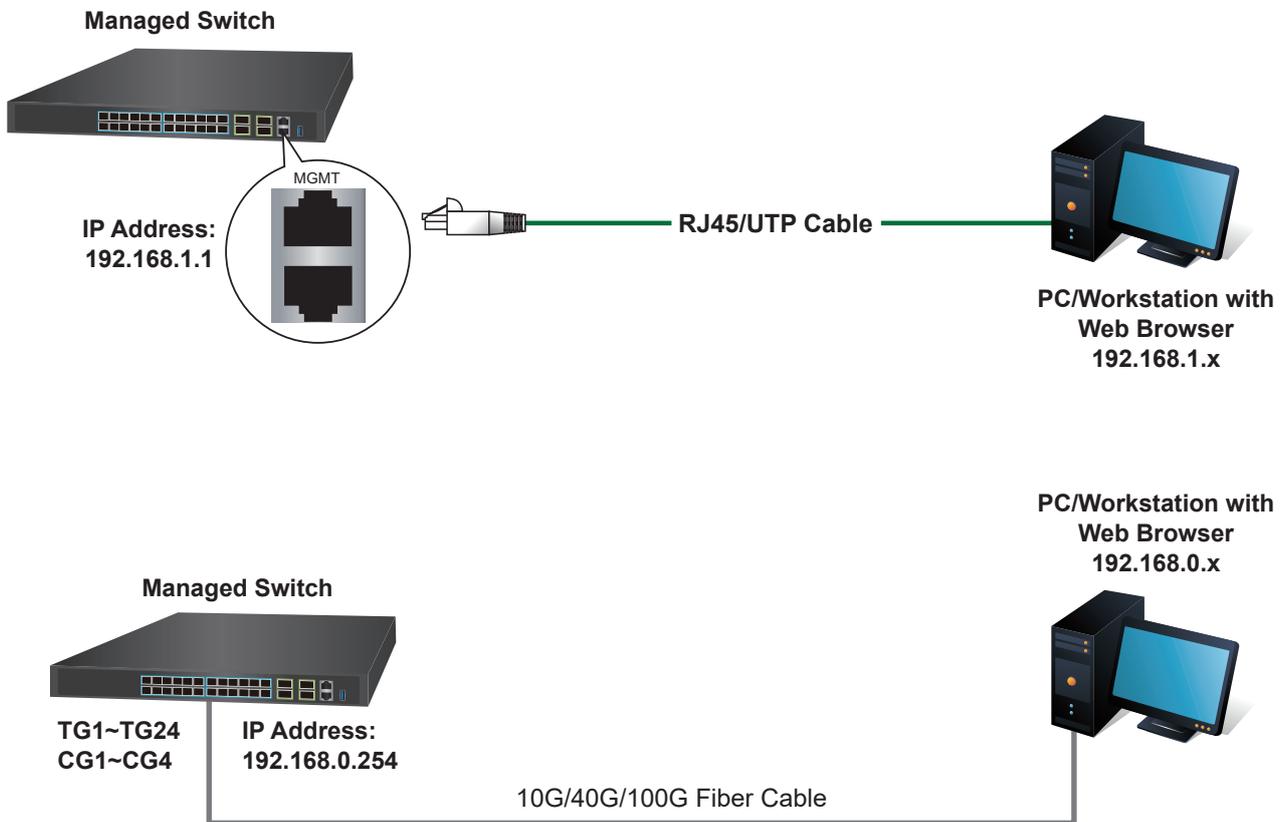

Figure 5-1: IP Management Diagram

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 to the same **IP subnet address**.

5.1 Logging in to the Managed Switch from Management Port

1. Use Google Chrome or above Web browser and enter IP address **_https://192.168.0.254_** (that you have just set in console) to access the Web interface.

⚠️ **Important**	The XGS-6350-24X2C, XGS-6350-16X8Y4C Managed Switches are shipped with Management **Port** IP address **192.168.1.1/24** assigned and **VLAN1 interface** IP address **192.168.0.254/24** assigned by default. User can assign another IP address to the Managed Switch via the console interface to be able to remotely access the Managed Switch through Telnet or HTTPs.

2. When the following dialog box appears, please enter the default user name and password. Refer to **Section 4.1** to determine your initial login password.

Default IP Address: **192.168.0.254**
Default Username: **admin**
Default Password: **sw + the last 6 characters of the MAC ID in lowercase**

Figure 5-2: Login Screen

After logging in, you will be prompted to change the initial password to a permanent one.

Figure 5-3: Create a New Password

3. After entering the password, the main screen appears as shown below.
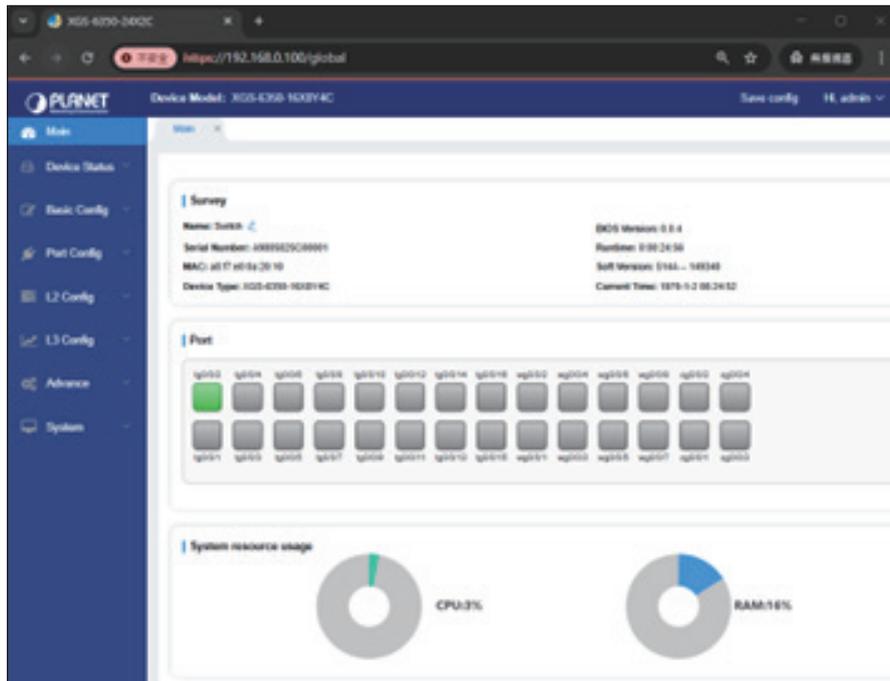

Figure 5-4: Web Main Screen of Managed Switch

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 Managed Switch by console interface. Please refer to the user manual for more.

5.2 Saving Configuration via the Web

The configuration area is to show the content that is selected in the navigation area. The configuration area always contains one or more buttons, such as "Refresh", "Apply" and "Confirm".

The **"Apply"** button indicates applying the modified configuration to the device. The application of the configuration does not mean that the configuration is saved in the configuration file.

To save the configuration, you have to click **"Save config"** on the top control bar. **"Save config"** function is equivalent to the execution of the **write** command.
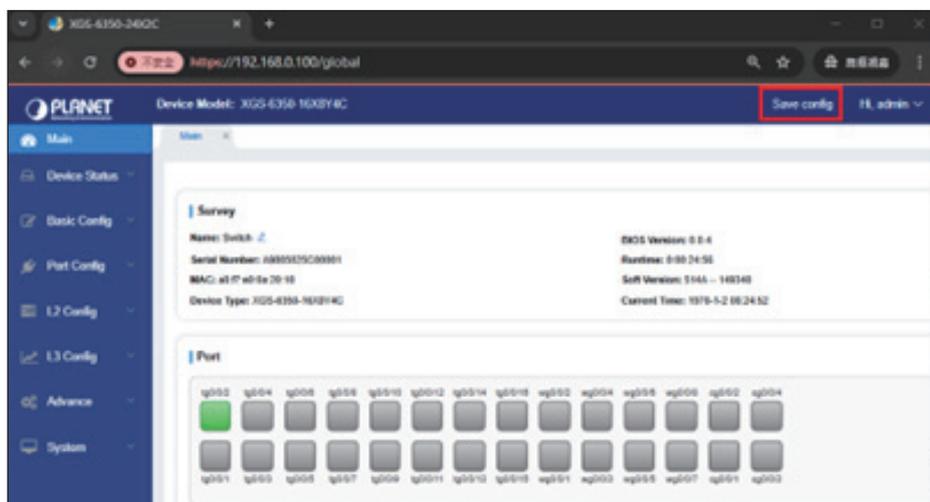

Figure 5-5: Save Cconfiguration

5.3 Recovering to the Default Configuration

When you forget the login password, use the following procedure to reset the device to the default configuration and restore the password.

■ **Use a console cable to access the CLI**

Use a console cable to connect to the switch and reboot it.

At the **beginning of the boot-up**, press **"Ctrl+P"** to enter Monitor mode.

Enter the command **"format flash"** to restore the switch to factory default settings.

Then, follow the procedure described in **Section 4.1** to reset the password.

Figure 5-6: Restore to factory default settings

6. 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:
https://www.planet.com.tw/en/support/faq.php?type=1

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

XGS-6350-24X2C/XGS-6350-16X8Y4C User's Manual
https://www.planet.com.tw/en/support/download.php?view=3&key=XGS-6350-16X8Y4C#list

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