

## 5/8 Ports Gigabit Ethernet Smart-Lite (PoE) Switch

### User Manual

GS-7608, 8-Port PoE Gigabit Ethernet Smart-Lite Switch

GS-7605, 5-Port PoE Gigabit Ethernet Smart-Lite Switch

GS-7408, 8-Port Gigabit Ethernet Smart-Lite Switch

GS-7405, 5-Port Gigabit Ethernet Smart-Lite Switch

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# Safety and Regulatory

## Audience

This guide is for the networking professional managing the standalone GS-7000 switch series. It is recommended that only professionals with experience working with Comtrend networking devices and who are familiar with the Ethernet and local area networking terminology, should service the equipment.

## Conventions

The following conventions are used in this manual to convey instructions and information:

Command descriptions use these conventions:

- Commands and keywords are in boldface text.
- Arguments for which you supply values are in italic.
- Square brackets ( [ ] ) mean optional elements.
- Braces ( { } ) group required choices, and vertical bars ( | ) separate the alternative elements.
- Braces and vertical bars within square brackets ( [ { | } ] ) mean a required choice within an optional element.

Interactive examples use these conventions:

- Nonprinting characters, such as passwords or tabs, are in angle brackets ( < > ).

Notes and cautions use the following conventions and symbols:



Means additional information. Notes contain additional useful information or references to material available outside of this document.



Indicates that the reader must be careful. In a situation where a Caution is listed, a user may cause equipment damage or loss of data.

# 1. Introduction

Thank you for purchasing a Comtrend Gigabit Ethernet Smart-Lite switch device. The Series includes both PoE and non-PoE models powered by Comtrend's Web Smart PoE and Web Smart interface, respectively.

This document is intended to provide hardware installation instructions as well as an overview of the interface and management functions of the Web Smart web-based software.

## 1.1. Overview

The Comtrend Gigabit Ethernet Smart-Lite Switch Desktop Series includes the following models: GS-7608, GS-7605, GS-7408, and GS-7405. The GS-7600 and GS-7400 models are fanless smart-lite switches supporting 5 to 8 Gigabit Ethernet ports. The Giga Ethernet PoE Switch provides a seamless network connection with integrated 1000Mbps Gigabit Ethernet, 100Mbps Fast Ethernet and 10Mbps Ethernet network capabilities.

## 1.2. Package contents

Before using the product, check that the items listed below are included and in good condition. If any item does not accord with the table, please contact your dealer immediately.

- One of the following: Comtrend GS-7608, GS-7605, GS-7408, or GS-7405
- AC to DC External PSU with Power Cord (GS-7605 only)
- AC Power Cord or External Power Adapter (check your model to confirm)
- Power Cord
- Rack Mount Kit (GS-7608 only)
- Quick Installation Guide
- Manual CD
- Foot Pads

## 1.3. Features

- Supports up to 8 10/100/1000Mbps Gigabit Ethernet ports
- IEEE 802.3af/at PoE compliant to simplify deployment and installation
- Supports PoE up to 30W per port with 130W (GS-7608 only), 65W (GS-7605 only), total power budget
- Automatically detects powered devices (PD) and power consumption levels
- IEEE 802.1Q VLAN allows network segmentation to enhance performance and security
- IEEE 802.1p QoS with 4 priority queues

- Supports access control list (ACL)
- Switch capacity: GS-7608 & GS-7408: 16Gbps; GS-7605 & GS-7405: 10Gbps, forwarding rate: 11.9Mbps
- Supports IGMP Snooping v1 / v2 / v3
- 4K MAC address table (2K for GS-7405) and 9K jumbo frames

## 1.4. Product Components

### 1.4.1. Switch Views

The following views apply to GS-7608.

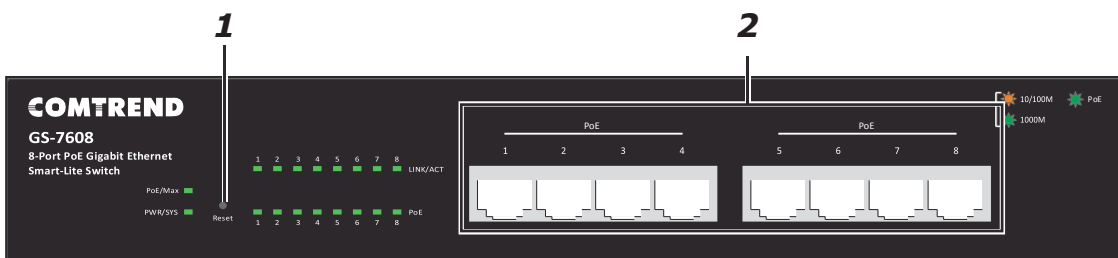


Figure 1 - GS-7608 Front View

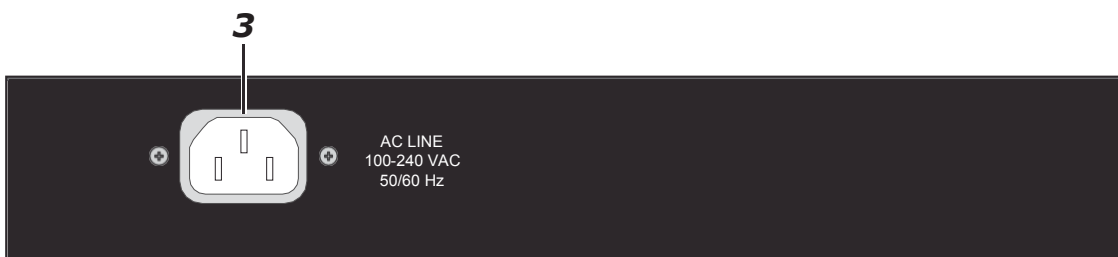


Figure 2 - GS-7608 Rear View

No.	Name	Description
1	Reset button	Press (10 sec.) to restore factory default parameters.
2	Ethernet (LAN) ports	Designed to connect to network devices with a bandwidth of 10Mbps, 100Mbps or 1000Mbps. Each has a corresponding 10/100/1000Mbps LED. PoE on eight ports (ports 1 through 8), compatible with IEEE 802.3af, with 150W dedicated internal power.
3	AC power in	Supports AC 100 – 240V, 50-60Hz.

The following views apply to GS-7605.

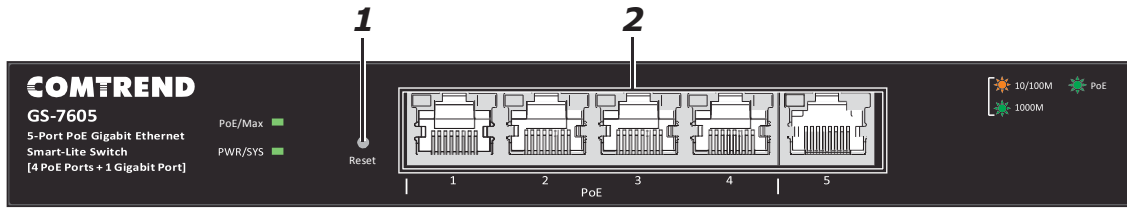


Figure 3 - GS-7605 Front View

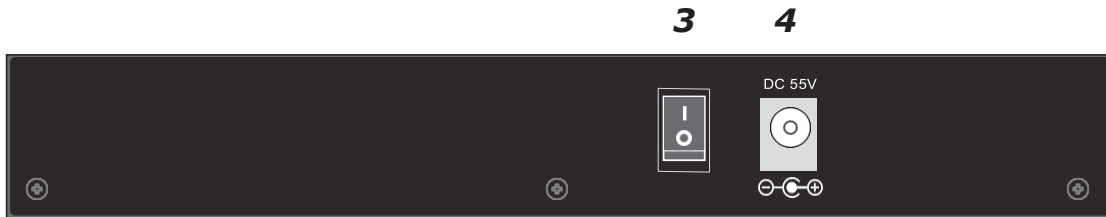


Figure 4 - GS-7605 Rear View

No.	Name	Description
1	Reset button	Press (10 sec.) to restore factory default parameters.
2	Ethernet (LAN) ports	Designed to connect to network devices with a bandwidth of 10Mbps, 100Mbps or 1000Mbps. Each has a corresponding 10/100/1000Mbps LED. PoE on four ports (ports 1 through 4), compatible with IEEE 802.3af, with 150W dedicated internal power.
3	Power button	Press to power on or off the device.
4	DC power in	Supports 100 – 240V AC, 50/60 Hz.

The following view applies to GS-7408.

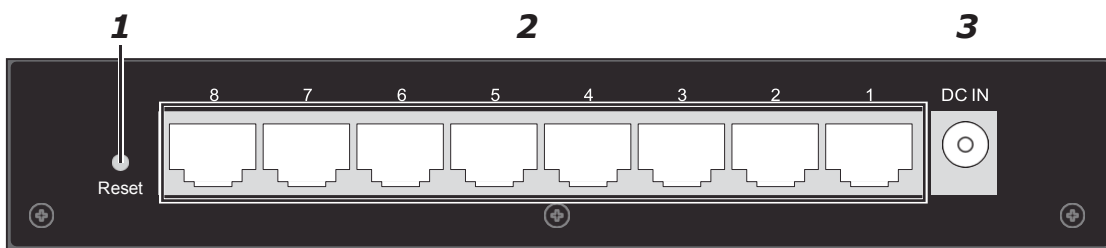


Figure 5 - GS-7408 Rear View

No.	Name	Description
1	Reset button	Press (10 sec.) to restore factory default parameters.
2	Ethernet (LAN) ports	Designed to connect to network devices with a bandwidth of 10Mbps, 100Mbps or 1000Mbps. Each has a corresponding 10/100/1000Mbps LED.
3	DC power in	Supports 5V DC/1A.



The following view applies to GS-7405.

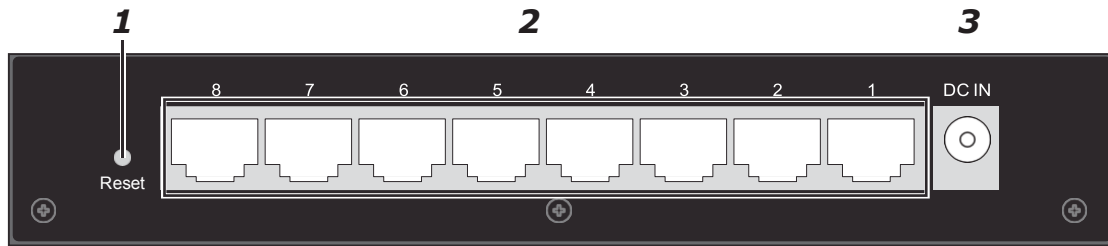


Figure 6 - GS-7405 Rear View

No.	Name	Description
1	Reset button	Press (10 sec.) to restore factory default parameters.
2	Ethernet (LAN) ports	Designed to connect to network devices with a bandwidth of 10Mbps, 100Mbps or 1000Mbps. Each has a corresponding 10/100/1000Mbps LED.
3	DC power in	Supports 5V DC/1A.

## 1.4.2. LED Indicators

The following view applies to GS-7608.

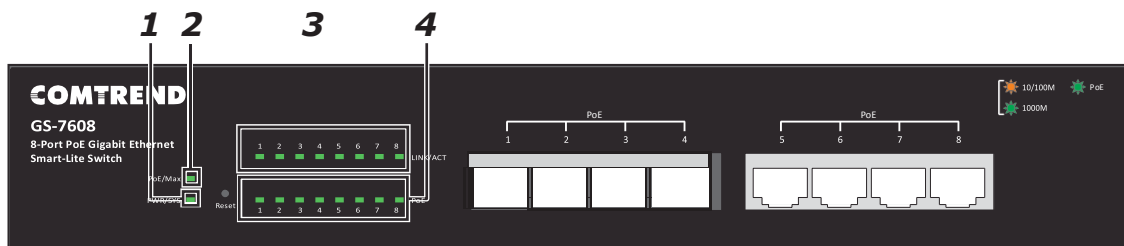


Figure 7 - GS-7608 LED Indicators

No.	Name	Description
1	Power/System	<ul style="list-style-type: none"> <li>Off: power off</li> <li>On: power on, system ready</li> <li>Blinking: system boot-up</li> </ul>
2	PoE Max	Green LED <ul style="list-style-type: none"> <li>Off: PoE power output under 120W PoE power budget</li> <li>PoE power output over 120W PoE power budget</li> </ul>

No.	Name	Description
3	Port LED	LINK/ACT bi-color LED: <ul style="list-style-type: none"> <li>Off: port disconnected or link fail</li> <li>Green on: 1000M connected</li> <li>Amber on: 10/100M connected</li> <li>Blinking: sending or receiving data</li> </ul>
4	PoE LED	Green LED: <ul style="list-style-type: none"> <li>Off: PoE power output off</li> <li>On: PoE power output on</li> </ul>

The following view applies to GS-7605.

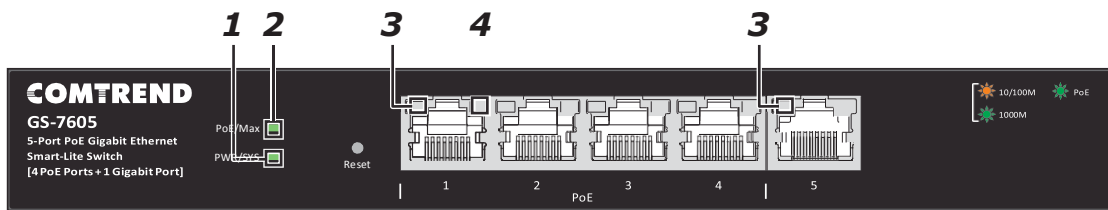


Figure 8 - GS-7605 LED Indicators

No.	Name	Description
1	Power/System	Green LED: <ul style="list-style-type: none"> <li>Off: power off or fail</li> <li>On: power on</li> <li>Blinking: system boot-up</li> </ul>
2	PoE Max	Green LED <ul style="list-style-type: none"> <li>Off: PoE power output under 55W PoE power budget</li> <li>On: PoE power output over 55W PoE power budget</li> </ul>
3	Port LED	LINK/ACT bi-color LED: <ul style="list-style-type: none"> <li>Off: port disconnected or link fail</li> <li>Green on: 1000M connected, PoE power output on</li> <li>Amber on: 10/100M connected</li> <li>Blinking: sending or receiving data</li> </ul>
4	PoE LED	Green LED: <ul style="list-style-type: none"> <li>Off: PoE power output off</li> <li>On: PoE power output on</li> </ul>

The following view applies to GS-7408.

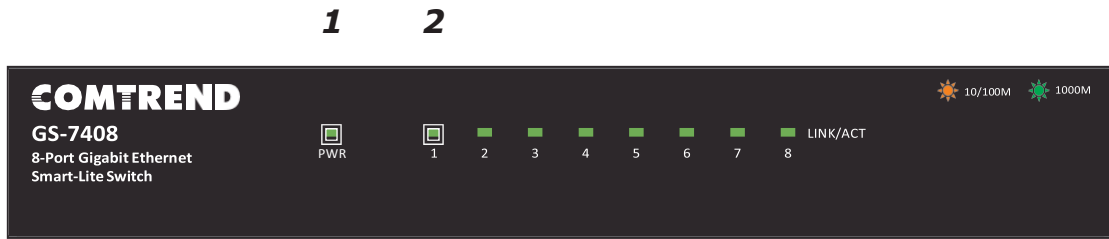


Figure 9 - GS-7408 LED Indicators

No.	Name	Description
1	Power	Green LED: <ul style="list-style-type: none"> <li>Off: power off or fail</li> <li>On: power on</li> <li>Blinking: system boot-up</li> </ul>
2	Port LED	LINK/ACT bi-color LED: <ul style="list-style-type: none"> <li>Off: port disconnected or link fail</li> <li>Green on: 1000M connected, PoE power output on</li> <li>Amber on: 10/100M connected</li> <li>Blinking: sending or receiving data</li> </ul>

The following view applies to GS-7405.

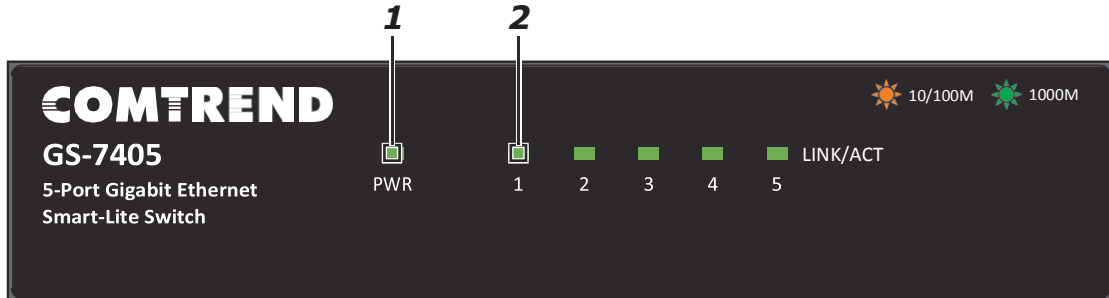


Figure 10 - GS-7405 LED Indicators

No.	Name	Description
1	Power	Green LED: <ul style="list-style-type: none"> <li>Off: power off or fail</li> <li>On: power on</li> <li>Blinking: system boot-up</li> </ul>
2	Port LED	LINK/ACT bi-color LED: <ul style="list-style-type: none"> <li>Off: port disconnected or link fail</li> <li>Green on: 1000M connected, PoE power output on</li> <li>Amber on: 10/100M connected</li> <li>Blinking: sending or receiving data</li> </ul>

## 2. Installation

This chapter describes how to install and connect your Comtrend Switch. Read the following topics and perform the procedures in the correct order. Incorrect installation may cause damage to the product.

All models are designed for desktop use, however, the GS-7608 is available with a rackmount kit.

### 2.1. Placement Tips

- Ambient Temperature—To prevent the switch from overheating, do not operate it in an area that exceeds an ambient temperature of 122°F (50°C).
- Air Flow—Be sure that there is adequate air flow around the switch.
- Mechanical Loading—Be sure that the switch is level and stable to avoid any hazardous conditions.
- Circuit Overloading—Adding the switch to the power outlet must not overload that circuit.

### 2.2. Desktop Installation

To place the switch on a desktop:

1. Install the four rubber feet (included) on the bottom of the switch.
2. Place the switch on a flat surface.

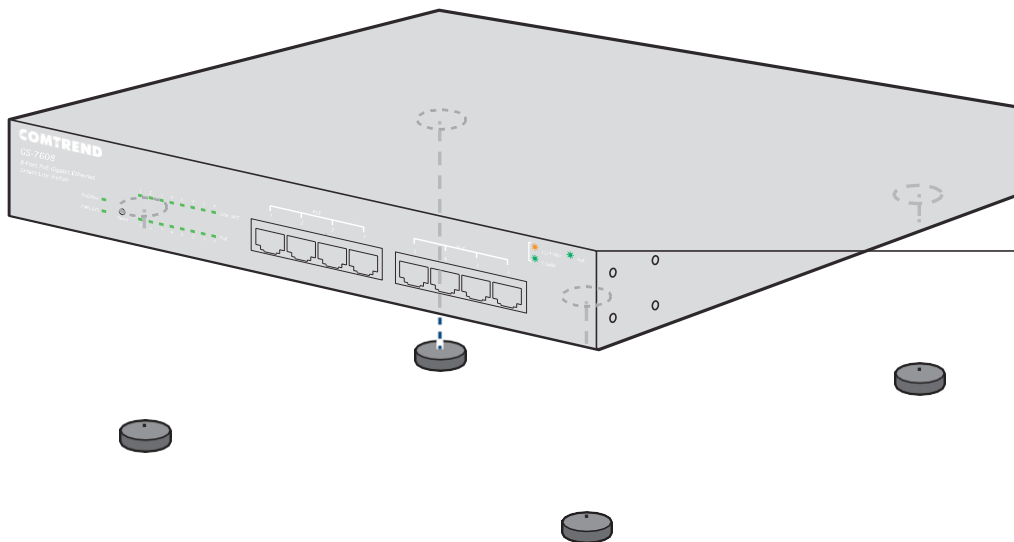


Figure 11 - Desktop Installation

## 23. Rackmount Installation

Only the following device is designed for a rack mount installation: GS-6708.

You can mount the switch in any standard size, 19-inch (about 48 cm) wide rack. The switch requires 1 rack unit (RU) of space, which is 1.75 inches (44.45 mm) high.

To place the switch on a standard rack (1 rack unit high):



For stability, load the rack from the bottom to the top, with the heaviest devices on the bottom. A top-heavy rack is likely to be unstable and may tip over.

When mounting smaller switch products into a standard 19-inch rack, a pair of extension brackets (sometimes referred to as ears) are needed to adapt the switch to the rack size.

These extension brackets are mounted on the switch using the screws provided in the kit, and have two holes that are used to then screw the switch into the rack.

An example of one type of these extension brackets is shown in the following figure.

A common problem that occurs during rack mounting is the distance between the screw holes on the rack. Some racks are made with a uniform distance between all of the holes, and others have the holes organized into groups (see photo on the next page for an example).

When organized into groups, the switch must be placed in the rack so that the holes in the extension brackets line up correctly.

1. Align the mounting brackets with the mounting holes on the switch's side panels and secure the brackets with the screws provided.

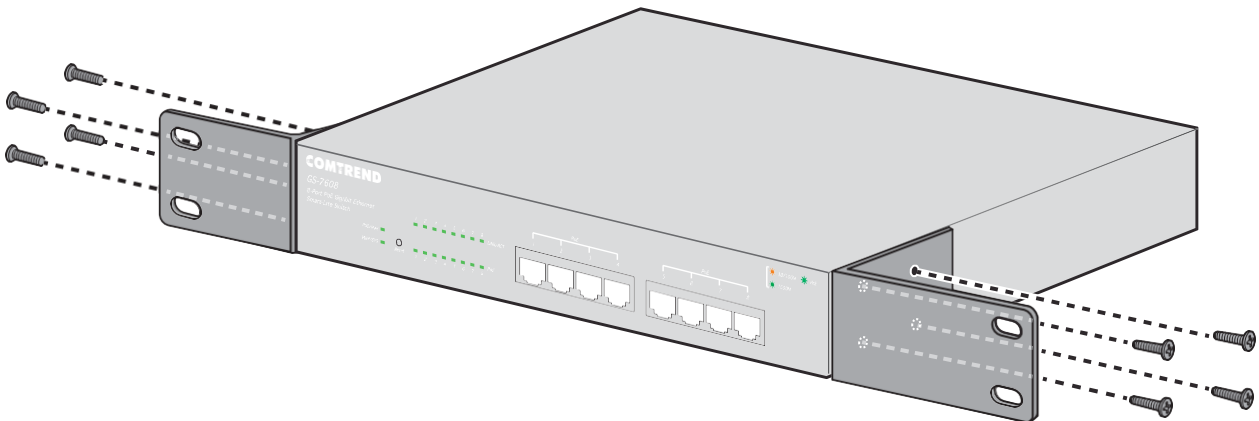


Figure 12 - GS-6708 Bracket Installation

- Secure the switch on the equipment rack with the screws provided.

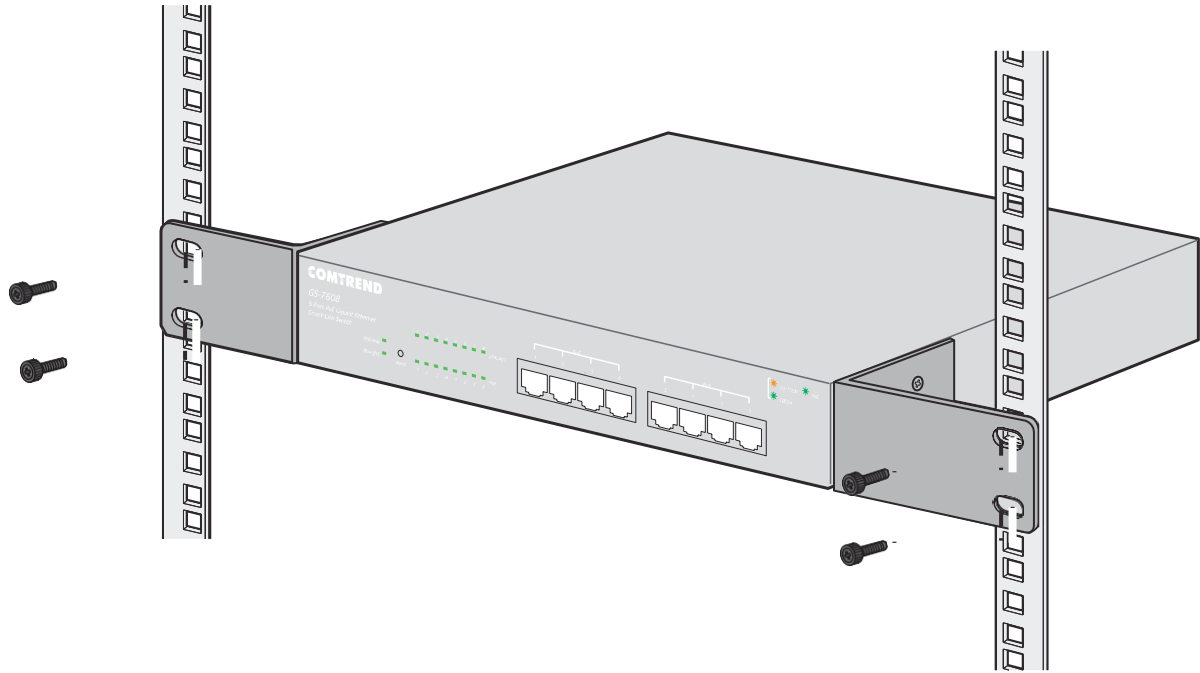


Figure 13 - Switch on a Rack Installation

## 3. Getting Started

This section provides an introduction to the web-based configuration utility, and covers the following topics:

- Powering on the device
- Connecting to the network
- Power over Ethernet (PoE) considerations
- Starting the web-based configuration utility

### 3.1. Power

#### 3.1.1. Installing Power



Power down and disconnect the power cord before servicing or wiring a switch.



Do not disconnect modules or cabling unless the power is first switched off. The device only supports the voltage outlined in the type plate. Do not use any other power components except those specifically designated for the switch.



Disconnect the power cord before installation or cable wiring.

The Gigabit Ethernet Smart-Lite switches are available with different power options from an internal (72W) PSU to an external (150W) option and power adapters (5V DC/1A). It is recommended to connect the switch with a single-phase three-wire power source with a neutral outlet, or a multifunctional computer professional source.

Connect the AC power connector on the back panel of the switch to the external power source with the included power cord, and check the power LED is on. The following figure illustrates the power socket location on the rear side of a GS-7608 switch. See “1.4.1. Switch Views” on page 3 for power socket location on your model.



Figure 14 - GS-7608 Rear View, AC Power Socket

### 3.1.2. Connecting to the Network

To connect your switch to the network:

1. Connect an Ethernet cable to the Ethernet port of a computer, printer, network storage, or other network devices.
2. Connect the other end of the Ethernet cable to one of the numbered Ethernet ports of the switch. The LED of the port lights if the device connected is active.
3. Repeat Step 1 and Step 2 for each device that you want to connect to the switch.



We strongly recommend using CAT-5E or better cable to connect network devices. When you connect your network devices, do not exceed the maximum cabling distance of 100 meters (328 feet). It can take up to one minute for attached devices or the LAN to be operational after it is connected. This is normal behavior.

Switch ports will automatically adjust to the characteristics (MDI/MDI-X, speed, duplex) of the device to which the switch is connected.

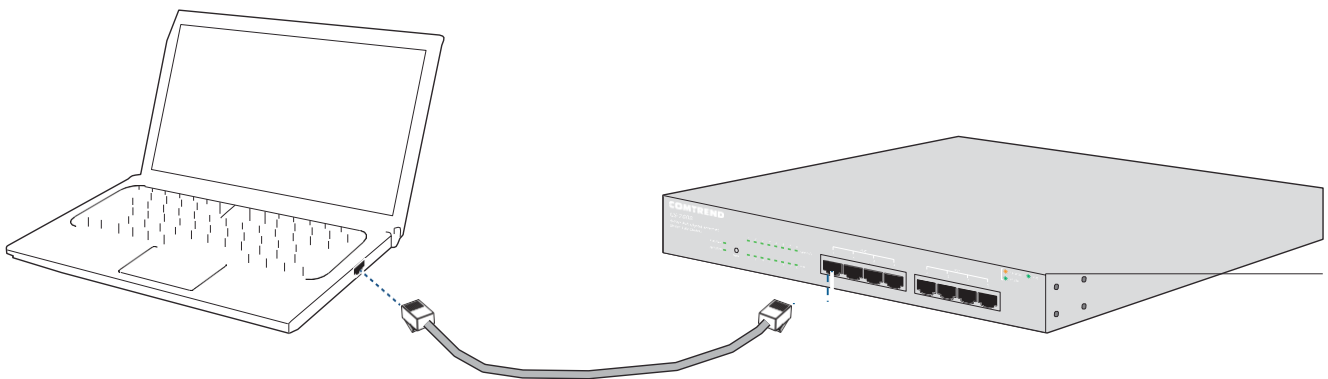


Figure 15 - PC Connect

### 3.1.3. Power over Ethernet (PoE) Considerations

For PoE switch models, consider the following information:

Devices considered a Power Sourcing Equipment (PSE), can deliver a maximum of 30 Watts per PoE port.

Model	Power Dedicated to PoE	PoE Ports	PoE Standard Supported
GS-7605	65W	1 to 5	IEEE802.3at/af
GS-7608	130W	1 to 8	IEEE802.3at/af





When connecting switches capable of supplying PoE, consider the following information:

- Switch models with PoE function are PSEs. These models are capable of supplying DC power to attached PDs, such as VoIP phones, IP cameras, and wireless access points (APs). PoE switches. Additionally, PoE switches are capable of detecting and supplying power to pre-standard legacy PoE Power Devices. Due to the support for legacy PoE, there is a possibility that PoE switches acting as a PSE may inadvertently detect and supply power an attached PSE, including other PoE switches. This false detection may result in a PoE switch operating improperly and unable to supply power to attached PDs.
- The prevention of a false detection can be easily remedied by disabling PoE on the ports that are used to connect PSEs. Another simple practice to prevent a false detection is to first power up a PSE device before connecting it to a PoE switch.
- When a device is falsely detected as a PD, disconnect the device from the PoE port and power recycle the device with AC power before reconnecting it to the PoE port.

## 3.2 Starting the Web-based Configuration Utility

This section describes how to navigate the web-based switch configuration utility. If you are using a pop-up blocker, make sure it is disabled.

### 3.2.1. Browser Restrictions

- If you are using older versions of Internet Explorer, you cannot directly use an IPv6 address to access the device. You can, however, use the DNS (Domain Name System) server to create a domain name that contains the IPv6 address, and then use that domain name in the address bar in place of the IPv6 address.
- If you have multiple IPv6 interfaces on your management station, use the IPv6 global address instead of the IPv6 link local address to access the device from your browser.

### 3.2.2. Launching the Configuration Utility

To open the web-based configuration utility:

1. Open a Web browser.
2. Enter the IP address of the device you are configuring in the address bar on the browser (the factory default IP address is 192.168.169.1) and then press Enter.



When the device is using the factory default IP address of 192.168.169.1, its power LED flashes continuously. When the device is using a DHCP assigned IP address or an administrator-configured static IP address, the power LED is on solid. Your computer's IP address must be in the same subnet as the switch. For the default IP address this is any IP address in the range 192.168.169.x (x = 2 – 254). You can modify the IP address of your computer if you need.

The login window displays.

The screenshot shows a login window with a light gray background. It contains two input fields: 'User Name:' with the text 'admin' and 'Password:' with five black dots. Below the password field is a yellow 'Confirm' button.

Figure 16 - Login Window

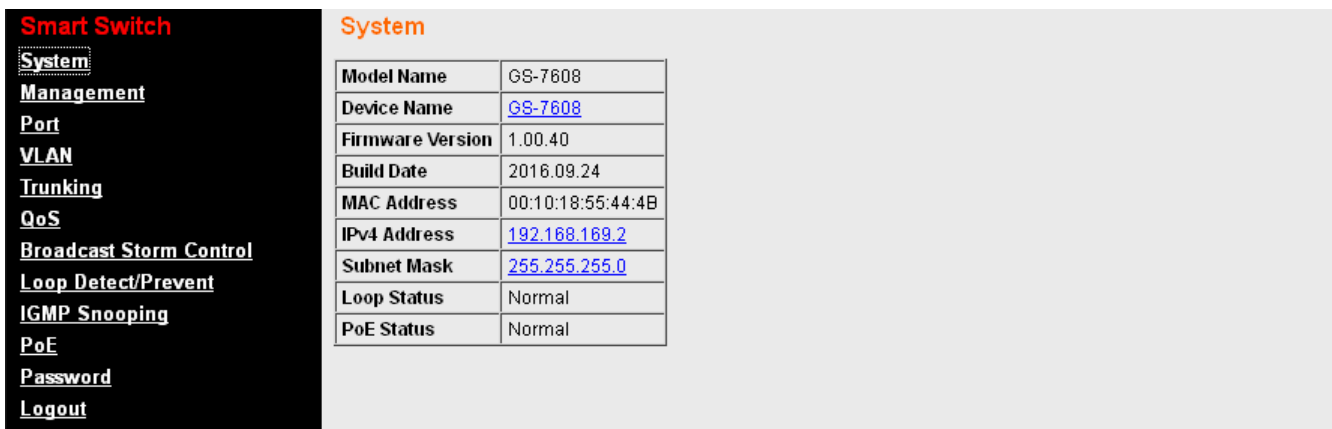
### 3.2.3. Logging In

The default username is admin and the default password is admin. The first time that you log in with the default username and password, you are required to enter a new password.

To log in to the device configuration utility:

- 1 Enter the default user ID (admin) and the default password (admin).
- 2 If this is the first time that you logged on with the default user ID (admin) and the default password (admin) it is recommended that you change your password immediately. See "4.2.1. Password" on page 33 for additional information.

When the login attempt is successful, the **System Status** window displays.



System	
Model Name	GS-7608
Device Name	<a href="#">GS-7608</a>
Firmware Version	1.00.40
Build Date	2016.09.24
MAC Address	00:10:18:55:44:4B
IPv4 Address	<a href="#">192.168.169.2</a>
Subnet Mask	<a href="#">255.255.255.0</a>
Loop Status	Normal
PoE Status	Normal

Figure 17 - System Status

If you entered an incorrect username or password, an error message appears and the Login page remains displayed on the window. If you are having problems logging in, please see the Launching the Configuration Utility section in the Administration Guide for additional information.

### 3.2.4. Logging Out

By default, the application logs out after ten minutes of inactivity.

To logout, click Logout in the top right corner of any page. The system logs out of the device.

When a timeout occurs or you intentionally log out of the system, a message appears and the Login page appears, with a message indicating the logged-out state. After you log in, the application returns to the initial page.

## 4. Web-based Switch Configuration

The PoE Smart-Lite switch software provides rich Layer 2 functionality for switches in your networks. This chapter describes how to use the web-based management interface (Web UI) to configure the switch's features.

For the purposes of this manual, the user interface is separated into two sections, as shown in the following figure:

2

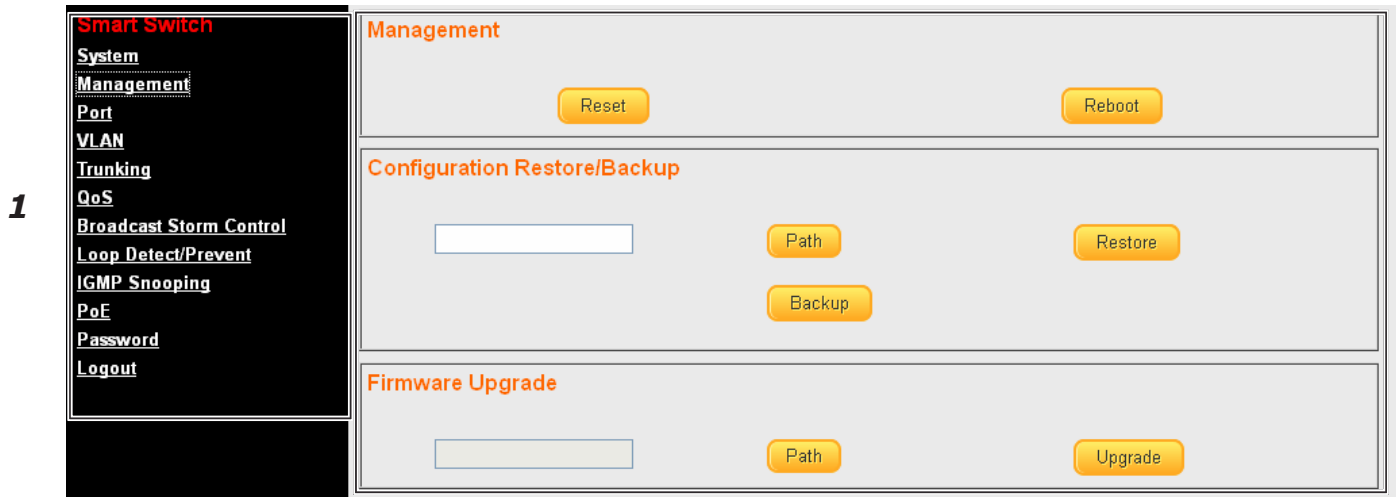


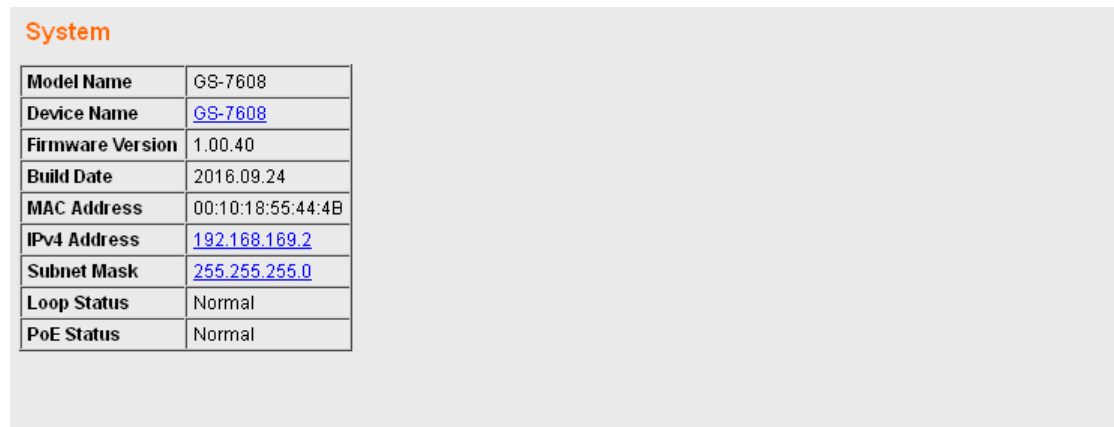
Figure 18 - User Interface

No.	Name	Description
1	Configuration menu	Navigate to locate specific switch functions.
2	Configuration settings	Edit specific function settings.

## 4.1. System

Use this page to view status information such as Device Name, MAC address, IP Address and PoE status.

To view the System menu, navigate to System.



The screenshot shows a web interface with a header 'System' in orange. Below it is a table with the following data:

Item	Value
Model Name	GS-7608
Device Name	<a href="#">GS-7608</a>
Firmware Version	1.00.40
Build Date	2016.09.24
MAC Address	00:10:18:55:44:4B
IPv4 Address	<a href="#">192.168.169.2</a>
Subnet Mask	<a href="#">255.255.255.0</a>
Loop Status	Normal
PoE Status	Normal

Figure 19 - System

Item	Description
Model Name	Switch model name.
Device Name	System name of the switch, configurable according to user preference.
Firmware Version	Current firmware version of the device.
Build Date	Device production date.
MAC Address	A unicast MAC address for which the switch has forwarding and/or filtering information. The format is a six-byte MAC address, with each byte separated by colons.
IPv4 Address	Switch IPv4 address on the network.
Subnet Mask	A 32-bit number that masks an IP address.
Loop Status	Displays whether or not loops exist in the network.
PoE Status	Displays the Power over Ethernet (PoE) status.

## 4.1.1. Management

Use this page to reset the switch to original factory default settings, reboot the switch, backup and restore switch settings, and upgrade firmware.

To view the Management menu, navigate to Management.

The screenshot displays a web-based management interface with three distinct sections. The top section, titled 'Management', contains two yellow buttons: 'Reset' on the left and 'Reboot' on the right. The middle section, titled 'Configuration Restore/Backup', features a white text input field on the left, followed by a yellow 'Path' button, a yellow 'Backup' button below it, and a yellow 'Restore' button on the right. The bottom section, titled 'Firmware Upgrade', includes a light green text input field on the left, a yellow 'Path' button below it, and a yellow 'Upgrade' button on the right.

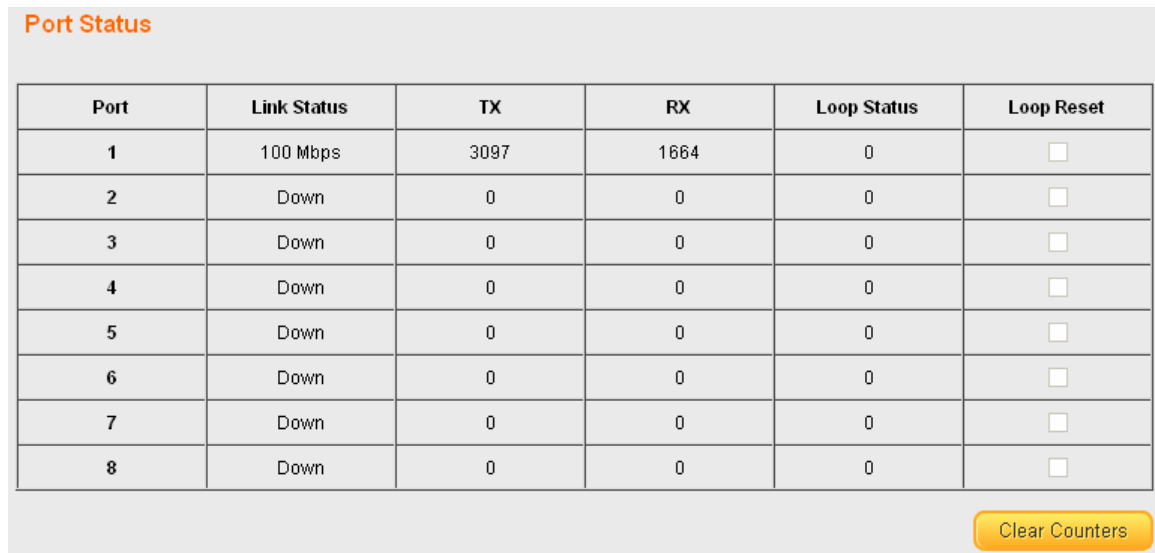
Figure 20 - Management

Item	Description
<b>Management</b>	
Reset	Restore switch to original factory default settings.
Reboot	Reboot switch.
<b>Configuration Restore/Backup</b>	
Path	Click to browse a remote TFTP server or on local storage, to locate a file with a previously saved switch setting configuration.
Restore	Install selected switch setting configuration file.
Backup	Save current switch setting configuration as a backup file.
<b>Firmware Upgrade</b>	
Path	Click to browse a remote TFTP server or on local storage, to locate a firmware file.
Upgrade	Install selected firmware file.

## 4.1.2. Port

Use this page to view traffic information such as Link Status, TX, RX, Loop Status and Loop Reset, on each port. The tracking data on each port can also be reset.

To view the Port menu, navigate to Port.



The screenshot shows a web interface titled "Port Status". It contains a table with 6 columns: Port, Link Status, TX, RX, Loop Status, and Loop Reset. The first row shows Port 1 with a Link Status of 100 Mbps, TX of 3097, RX of 1664, Loop Status of 0, and a Loop Reset checkbox. Ports 2 through 8 all have a Link Status of Down, TX and RX of 0, Loop Status of 0, and Loop Reset checkboxes. A yellow "Clear Counters" button is located at the bottom right of the table area.

Port	Link Status	TX	RX	Loop Status	Loop Reset
1	100 Mbps	3097	1664	0	<input type="checkbox"/>
2	Down	0	0	0	<input type="checkbox"/>
3	Down	0	0	0	<input type="checkbox"/>
4	Down	0	0	0	<input type="checkbox"/>
5	Down	0	0	0	<input type="checkbox"/>
6	Down	0	0	0	<input type="checkbox"/>
7	Down	0	0	0	<input type="checkbox"/>
8	Down	0	0	0	<input type="checkbox"/>

Clear Counters

Figure 21 - Port

Item	Description
Port	Designated port number.
Link Status	Displays whether or not port is in use, and link speed if it is in use.
TX	The total number of packets transmitted by the port.
RX	The total number of packets received by the port.
Loop Status	Displays whether or not loops are detected.
Loop Reset	Click to reset loop status.
Clear Counters	Click to reset tracking data.

### 4.1.3. VLAN

Use this section to create and modify VLANs.

#### IEEE 802.1Q VLAN

To view the IEEE 802.1Q VLAN menu, navigate to VLAN > IEEE 802.1Q VLAN.

IEEE 802.1Q VLAN  Port-Based VLAN

PVID Apply

Port	01	02	03	04	05	06	07	08
PVID	1	1	1	1	1	1	1	1

Maximum number of IEEE 802.1Q VLAN : 8 Create New VLAN

VLAN ID	Non-Member		Tag Egress Member		Untag Egress Member				Modify	Delete
	01	02	03	04	05	06	07	08		
1									Modify	Delete

Click on button to change member state or remove vlan.

Figure 22 - VLAN > IEEE 802.1Q VLAN

Item	Description
IEEE 802.1Q VLAN	Click to enter IEEE 802.1Q VLAN settings.
Port-Based VLAN	Click to enter port-based VLAN settings.
Apply	Click <b>Apply</b> to save the values and update the screen.
Port	Designated port number.
PVID	Enter a VLAN ID for each port.
Create New VLAN	Click <b>Create New VLAN</b> to enter new VLAN settings.
VLAN ID	Virtual LAN ID.
Non-Member	Port is not a member of a VLAN.
Tag Egress Member	Tag outgoing packets of a port which is a member of the VLAN.
Untag Egress Member	Untag outgoing packets of a port which is a member of the VLAN.
Modify	Modify port settings of a specific VLAN.
Delete	Delete a specific VLAN.



## Port-Based VLAN

To view the Port-Based VLAN menu, navigate to VLAN > Port-Based VLAN.

IEEE 802.1Q VLAN     Port-Based VLAN

Maximum number of Port-Based VLAN: 4

Group ID	Member Port								Delete
	01	02	03	04	05	06	07	08	
1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="button" value="Delete"/>

Click on checkbox to change group member.  
A port can belong to only one group !

Figure 23 - VLAN > Port-Based VLAN

Item	Description
Add VLAN	Click <b>Add VLAN</b> to enter new VLAN settings.
Apply	Click <b>Apply</b> to save the values and update the screen.
Member Port	Click to assign specific ports as members of a VLAN.
Group ID	Identifier of the group of ports in a VLAN.
Delete	Delete a specific VLAN.

## 4.1.4. Trunking

Use this option to aggregate multiple Ethernet ports together to form a logical port. This feature supports static allocation and Link Aggregation Control Protocol (LACP). To view the Trunking menu, navigate to Trunking.

**LACP** Apply

<b>LACP Global State</b>	Disable <span style="float: right;">▼</span>	
<b>Link Aggregation Algorithm</b>	MAC SA & DA <span style="float: right;">▼</span>	
<b>Link Group Activity</b>	Passive <span style="float: right;">▼</span>	
<b>Link Group Member</b>	Port 7	Port 8
	<input type="checkbox"/>	<input type="checkbox"/>

If Trunking enable,Please verify VLAN configurations in trunk port.

Figure 24 - Trunking

Item	Description
Apply	Click <b>Apply</b> to save the values and update the screen.
LACP Global State	Enable/disable LCAP.
Link Aggregation Algorithm	Select a link aggregation algorithm: <ul style="list-style-type: none"> <li>MAC SA &amp; DA</li> <li>MAC DA</li> <li>MAC SA</li> </ul>
Link Group Activity	Select link group activity status: <ul style="list-style-type: none"> <li>Passive</li> <li>Active</li> </ul>
Link Group Members	The ports that are members of a port channel.

## 4.1.5. Mirror

Port mirroring selects the network traffic for analysis by a network analyzer. This is done for specific ports of the switch. As such, many switch ports are configured as source ports and one switch port is configured as a destination port. At the time of printing, this feature is only available for GS-7405 and GS-7408.

To view the Mirror menu, navigate to Mirror.

**Mirror Setting**

Enable Mirror

Mirror Direction	Monitor Port	Mirrored Port List
Ingress	Port 8	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8

Apply

Figure 25 - Mirror

Item	Description
Enable Mirror	Enable/disable port mirroring.
Mirror Direction	Select the mirror direction: <ul style="list-style-type: none"><li>• Ingress</li><li>• Egress</li></ul>
Monitor Port	Select the mirror destination port.
Mirrored Port List	The ports or configured to mirror traffic to the destination. Multiple source ports can be configured.
Apply	Click <b>Apply</b> to save the values and update the screen.

## 4.1.6. QoS

Use this section to configure Quality of Service (QoS) settings.

### Disable QoS

To view the Disable QoS menu, navigate to QoS > Disable QoS.

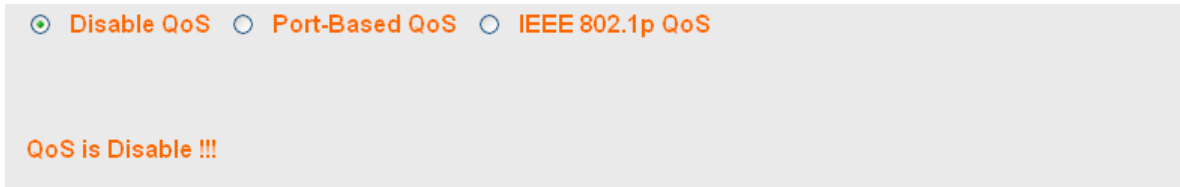


Figure 26 - QoS > Disable QoS

Item	Description
Disable QoS	Enable/disable QoS.
Port-Based QoS	Click to select port-based QoS settings.
IEEE 802.1p QoS	Click to enter IEEE 802.1Q QoS settings.

### Port-Based QoS

To view the Port-Based QoS menu, navigate to QoS > Port-Based QoS



Figure 27 - QoS > Port-Based QoS

Item	Description
Disable QoS	Enable/disable QoS.
Port-Based QoS	Click to select port-based QoS settings.
IEEE 802.1p QoS	Click to enter IEEE 802.1Q QoS settings.

Item	Description
Port	Designated port number.
Weight	Queue priority value. More packets are sent from a queue with a higher weight value.
Queue 0-3	Queues used to store traffic until it can be processed or serialized.

## IEEE 802.1p QoS

To view the IEEE 802.1p QoS menu, navigate to QoS > IEEE 802.1p QoS.



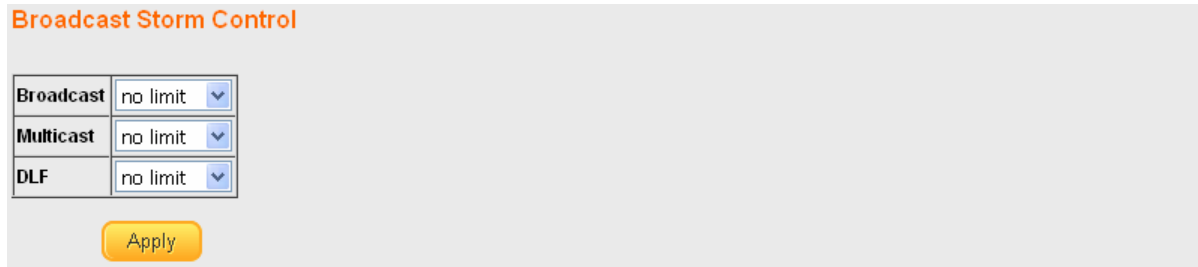
Figure 28 - QoS > IEEE 802.1p QoS

Item	Description
Disable QoS	Enable/disable QoS.
Port-Based QoS	Click to select port-based QoS settings.
IEEE 802.1p QoS	Click to enter IEEE 802.1Q QoS settings.
Port	Designated port number.
Weight	Queue priority value. More packets are sent from a queue with a higher weight value.
Queue 0-3	Queues used to store traffic until it can be processed or serialized.

## 4.1.7. Broadcast Storm Control

This page allows you to set ingress port monitoring. At the time of writing, multicast and DLF storm control features are only available for GS-7408.

To view the Broadcast Storm Control menu, navigate to Broadcast Storm Control.



Broadcast Storm Control

Broadcast	no limit
Multicast	no limit
DLF	no limit

Apply

Figure 29 - Broadcast Storm Control

Item	Description
Broadcast	Set Broadcast storm control limit: <ul style="list-style-type: none"><li>• no limit</li><li>• 512K/s to 512M/s</li></ul>
Multicast	Set Multicast storm control limit: <ul style="list-style-type: none"><li>• no limit</li><li>• 512K/s to 512M/s</li></ul>
DLF	Set DLF storm control limit: <ul style="list-style-type: none"><li>• no limit</li><li>• 512K/s to 512M/s</li></ul>
Apply	Click <b>Apply</b> to save the values and update the screen.

## 4.1.8. Rate Limiting

This page allows you to display and configure ingress and egress port monitoring settings. At the time of writing this feature was only available for GS-7408.

### *Rate Limiting*

This page displays ingress and egress port limits.

To view the Rate Limiting menu, navigate to Rate Limiting.



**Rate Limiting**

Port	Ingress rate	Egress rate
<a href="#">1</a>	no limit	no limit
<a href="#">2</a>	no limit	no limit
<a href="#">3</a>	no limit	no limit
<a href="#">4</a>	no limit	no limit
<a href="#">5</a>	no limit	no limit
<a href="#">6</a>	no limit	no limit
<a href="#">7</a>	no limit	no limit
<a href="#">8</a>	no limit	no limit

Figure 30 - Rate Limiting

Item	Description
Port	Designated port number. Click individual port numbers to enter rate limit configuration menu for each port.
Ingress rate	The upper limit on how much traffic can enter a port.
Egress rate	The upper limit on how much traffic can exit a port.

## Change Rate Limit

Use this page to configure ingress and egress rate limit settings.

To view the Change Rate Limit menu, navigate to Rate Limiting > port number.

Change Rate Limit

Apply

Port	Ingress rate	Egress rate
1	no limit ▼	no limit ▼
2	no limit ▼	no limit ▼
3	no limit ▼	no limit ▼
4	no limit ▼	no limit ▼
5	no limit ▼	no limit ▼
6	no limit ▼	no limit ▼
7	no limit ▼	no limit ▼
8	no limit ▼	no limit ▼

Figure 31 - Rate Limiting > port number

Item	Description
Apply	Click <b>Apply</b> to save the values and update the screen.
Port	Designated port number.
Ingress rate	Select to configure the upper limit on how much traffic can enter a port: <ul style="list-style-type: none"><li>• no limit</li><li>• 512K/s to 512M/s</li></ul>
Egress rate	Select to configure the upper limit on how much traffic can exit a port: <ul style="list-style-type: none"><li>• no limit</li><li>• 512K/s to 512M/s</li></ul>



## 4.1.9. Loop Detect/Prevent

Use this section to enable/disable and configure network routing loop detection. Select settings from the drop down menu. At the time of writing this feature was only available for GS-7608, GS-7408 and GS-7405.

To view the Loop Detection/Prevention menu, navigate to Loop Detection/Prevention.

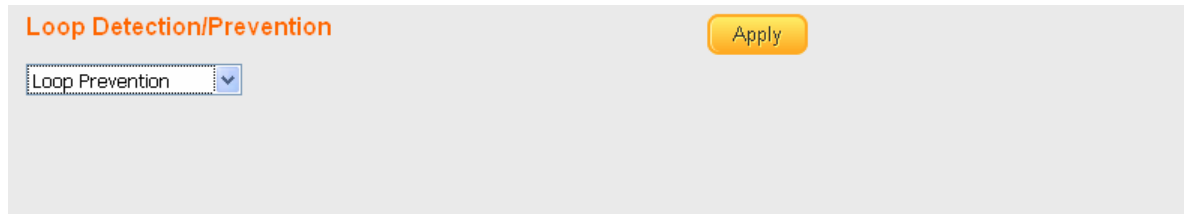


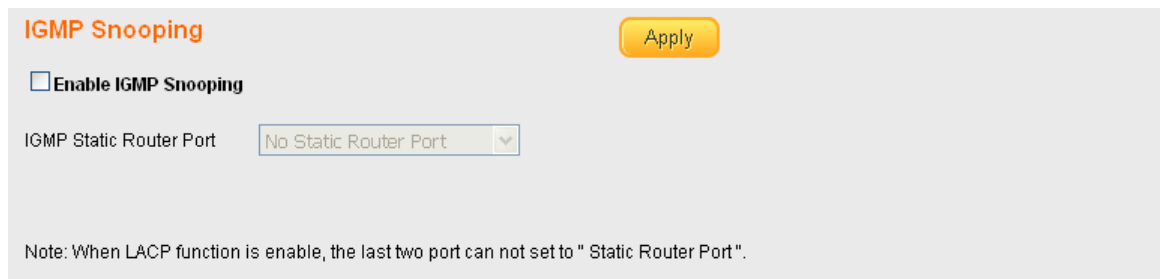
Figure 32 - Network > Loop Detection

Item	Description
Off	Disable loop detection and prevention.
Loop Detection	Enable loop detection.
Loop Prevention	Enable loop prevention
Apply	Click <b>Apply</b> to save the values and update the screen.

## 4.1.10. IGMP Snooping

Use this section to create an IGMP Snooping Profile. Internet Group Management Protocol (IGMP) Snooping is a feature that allows a switch to forward multicast traffic intelligently on the switch. Multicast IP traffic is traffic that is destined to a host group. Host groups are identified by class D IP addresses, which range from 224.0.0.0 to 239.255.255.255. Based on the IGMP query and report messages, the switch forwards traffic only to the ports that request the multicast traffic. This prevents the switch from broadcasting the traffic to all ports and possibly affecting network performance.

To view the IGMP Snooping menu, navigate to IGMP Snooping.



IGMP Snooping Apply

Enable IGMP Snooping

IGMP Static Router Port No Static Router Port

Note: When LACP function is enable, the last two port can not set to "Static Router Port".

Figure 33 - IGMP Snooping

Item	Description
Enable IGMP Snooping	Enable/disable IGMP snooping.
IGMP Static Router Port	Select a static port on which to snoop, either <b>No Static Router Port</b> , or one of ports 1-8.
Apply	Click <b>Apply</b> to save the values and update the screen.

## 4.2 PoE

Use this section to configure PoE settings for the switch and its ports. This feature is only available for GS-7605 and GS-7608.

### PoE Global Settings and PoE Status

To view the PoE Global Settings and PoE Status menu, navigate to PoE.

**POE Global Settings**

PSE Total Power	PSE1: 65 W	PSE2: 65 W	total: 130W
PSE MAX LED Power	92W		
PSE IC MAX Temperature	156°C		
PSE IC Real Temperature	55°C		
PSE vmain voltage low setting	40V		
PSE vmain voltage	52V		
PSE vport voltage	53V		

[Apply](#)

PSE1: Port1~Port4 PSE2: Port5~Port8

**POE Status**

Port	Power Status	Real Power(W)
<a href="#">1</a>	Turned on	0
<a href="#">2</a>	Turned on	0
<a href="#">3</a>	Turned on	0
<a href="#">4</a>	Turned on	0
<a href="#">5</a>	Turned on	0
<a href="#">6</a>	Turned on	0
<a href="#">7</a>	Turned on	0
<a href="#">8</a>	Turned on	0

Turned on:8 Total Power:0 W

Figure 34 - PoE Menu

Item	Description
<b>PoE Global Settings</b>	
PSE Total Power	Enter values for PSE1 and PSE2, for a total PSE power which must not exceed 130W.
PoE MAX LED Power	Displays the maximum power supplied to LEDs.
PSE IC Max Temperature	Displays upper IC temperature limit which will trigger temperature protection activity.
PSE IC Real Temperature	Displays the actual IC temperature.

Item	Description
PSE vmain voltage low setting	Displays the lower limit for the PSE main voltage.
PSE vmain voltage	Displays the real PSE main voltage.
PSE vport voltage	Displays voltage supplied to ports.
Apply	Click <b>Apply</b> to save the values and update the screen.
<b>PoE Status</b>	
Port	Designated port number. Click individual port numbers to enter PoE port configuration menu for each port.
Power Status	Displays current port power status, on or off.
Real Power (W)	Displays power drawn by the port, in Watts.

### PoE Port Configuration

To view the PoE Port Configuration menu, navigate to PoE > PoE Status and click on an individual port number.

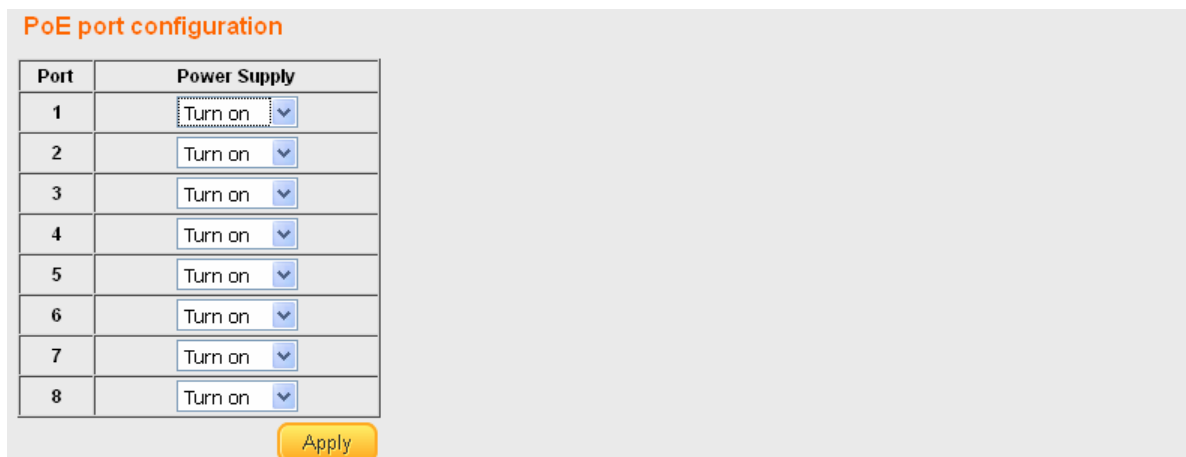


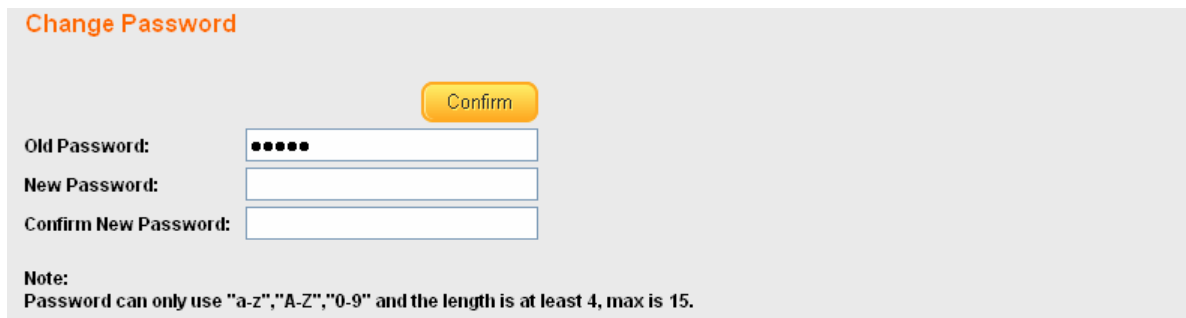
Figure 35 - PoE > PoE Status > Port Number

Item	Description
Port	Designated port number.
Power Supply	Use the drop down menu to select port power supply options: <ul style="list-style-type: none"> <li>• Turn on</li> <li>• Turn off</li> </ul>
Apply	Click <b>Apply</b> to save the values and update the screen.

## 4.2.1. Password

Use these settings to change an account password.

To view the Password menu, navigate to Password.



**Change Password**

Confirm

Old Password:

New Password:

Confirm New Password:

**Note:**  
Password can only use "a-z","A-Z","0-9" and the length is at least 4, max is 15.

Figure 36 - Password

Item	Description
Confirm	Click <b>Confirm</b> to save the values and update the screen.
Old Password	Enter current password.
New Password	Enter new password.
Confirm New Password	Enter new password again to confirm.

## 4.2.2. Logout

Click **Logout** to leave the switch management menu and close the web management session.

## **5. Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1.** Reorient or relocate the receiving antenna.
- 2.** Increase the separation between the equipment and receiver.
- 3.** Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4.** Consult the dealer or an experienced radio technician for help.

### **Safety**

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

### **FCC Caution**

This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. 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. Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

### **FCC Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

## R&TTE Compliance Statement

This equipment complies with all the requirements of DIRECTIVE 1999/5/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of March 9, 1999 on radio equipment and telecommunication terminal equipment and the mutual recognition of their conformity (R&TTE). The R&TTE Directive repeals and replaces in the directive 98/13/EEC (Telecommunications Terminal Equipment and Satellite Earth Station Equipment) As of April 8, 2000.

## EU Countries Intended for Use

The ETSI version of this device is intended for home and office use in Austria, Belgium, Bulgaria, Cyprus, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Turkey, and United Kingdom. The ETSI version of this device is also authorized for use in EFTA member states: Iceland, Liechtenstein, Norway, and Switzerland.

## EU Countries Not Intended for Use

None

## Protect Our Environment



When the equipment has reached the end of its useful life, it must be taken to a recycling center and processed separate from domestic waste.

The cardboard box, the plastic contained in the packaging, and the parts that make up this switch can be recycled in accordance with regionally established regulations. Never dispose of this electronic equipment along with your household waste; you may be subject to penalties or sanctions under the law.