

## GS-5208PLG

# User Manual

11-2020 / v1.1

---

### **Edimax Technology Co., Ltd.**

No. 278, Xinhua 1st Rd., Neihu Dist., Taipei City, Taiwan

Email: [support@edimax.com.tw](mailto:support@edimax.com.tw)

---

### **Edimax Technology Europe B.V.**

Fijenhof 2, 5652 AE Eindhoven, The Netherlands

Email: [support@edimax.nl](mailto:support@edimax.nl)

---

### **Edimax Computer Company**

3444 De La Cruz Blvd., Santa Clara, CA 95054, USA

Live Tech Support: 1(800) 652-6776

Email: [support@edimax.com](mailto:support@edimax.com)

# CONTENTS

---

<b>Chapter 1</b>	<b>Product Information .....</b>	<b>3</b>
1-1	Product Overview .....	3
1-2	Features .....	3
1-3	External Component Description .....	4
1-3-1	Front Panel .....	4
1-3-2	Rear Panel .....	5
1-4	Package Contents .....	5
1-5	Rack-mountable Installation .....	6
<b>Chapter 2</b>	<b>Connect &amp; Login .....</b>	<b>7</b>
2-1	Switch to End Node .....	7
2-2	Login .....	8
<b>Chapter 3</b>	<b>Switch Configuration .....</b>	<b>10</b>
3-1	System .....	11
3-1-1	Device Name Setup .....	12
3-2	Management .....	13
3-3	Port .....	15
3-4	VLAN .....	16
3-4-1	IEEE 802.1Q VLAN .....	16
3-5	Trunking .....	18
3-6	QoS .....	20
3-7	Broadcast Storm Control .....	22
3-8	Rate Limiting .....	23
3-9	Loop Detect/Prevent .....	24
3-10	IGMP Snooping .....	25
3-11	POE .....	26
3-12	Password .....	28
3-13	Logout .....	29

# Chapter 1 Product Information

---

## 1-1 Product Overview

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 Features

- IEEE 802.3af/at PoE compliant.
- Eight Gigabit Ethernet ports.
- Up to 30W per port (total power budget: 160W) for powering PoE-enabled devices.
- Auto-detection of powered devices (PD) and power consumption levels.
- Auto fault-detection on over/under current & voltage.
- Access Control List (ACL) support.
- Switch capacity:20Gbps & Forwarding rate:14.88Mpps.
- IEEE 802.1Q-based VLAN for network segmentation to improve performance and security.
- IEEE 802.1p QoS with 4 priority queues
- IGMP Snooping V1 / V2 / V3 support.
- 4K MAC address table and jumbo frame support up to 9KB.
- 19-inch 1U rack-mount brackets included.

## 1-3 External Component Description

### 1-3-1 Front Panel

The front panel of the Switch consists of 8 x 10/100/1000Mbps RJ-45 + 2 x SFP ports, and a series of LED indicators as shown as below:

#### Front Panel



#### 10/100/1000Mbps RJ-45 ports (1-8):

It is designed to connect to the devices of bandwidth of 10Mbps, 100Mbps or 1000Mbps. Each bandwidth has a corresponding 10/100/1000Mbps LED.

#### LED indicators:

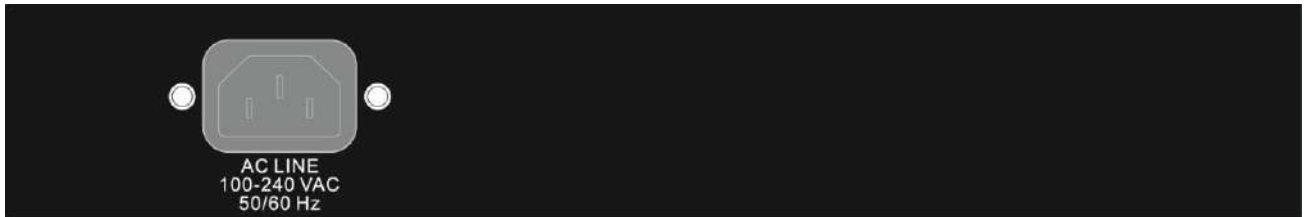
The LED Indicators will allow you to monitor, diagnose and troubleshoot any potential problem with the Switch, the connection(s) or other attached devices.

	Color	Status	Description
PWR/SYS	Green	Off	Power off or fail
		On	Power on
		Blinking	System boot-up
PoE Alert	Green	On	PoE power output over 90% PoE power
		Off	PoE power output under 90% PoE power
Link/ACT	Green	On	1000Mbps connected
		Blinking	Data transmitting
	Amber	On	10/100Mbps connected
		Blinking	Data transmitting
	Off		Disconnected or fail
SFP	Green	Green On	1000FX connected
		Blinking	Data transmitting
		Off	Disconnected or fail
PoE	Green	On	PoE power output on
		Off	PoE power output off

## 1-3-2 Rear Panel

The rear panel of the Switch houses an AC power connector as shown below:

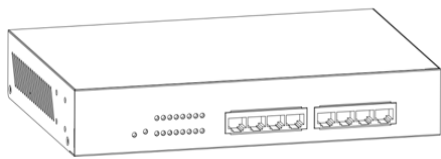
### Rear Panel



### AC Power Connector:

Power is supplied through an AC power cable. It supports AC 100 - 240V, 50 - 60Hz.

## 1-4 Package Contents



**1**



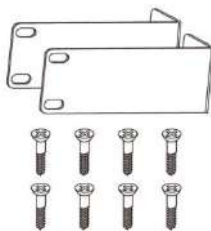
**2**



**3**



**4**



**5**

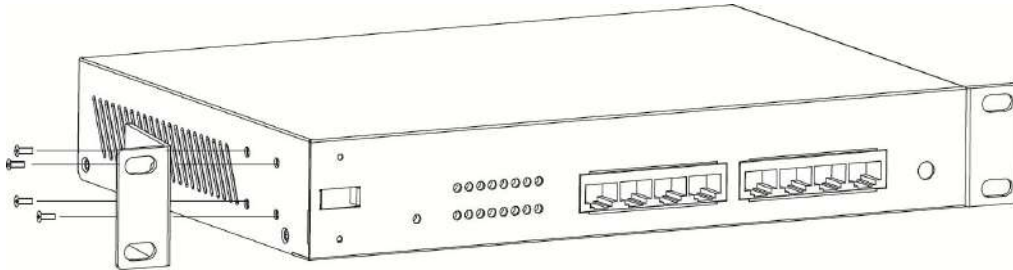
1. GS-5208PLG Switch
2. Quick Installation Guide
3. CD

4. Power Cord
5. Rack-Mount Kit & Screws

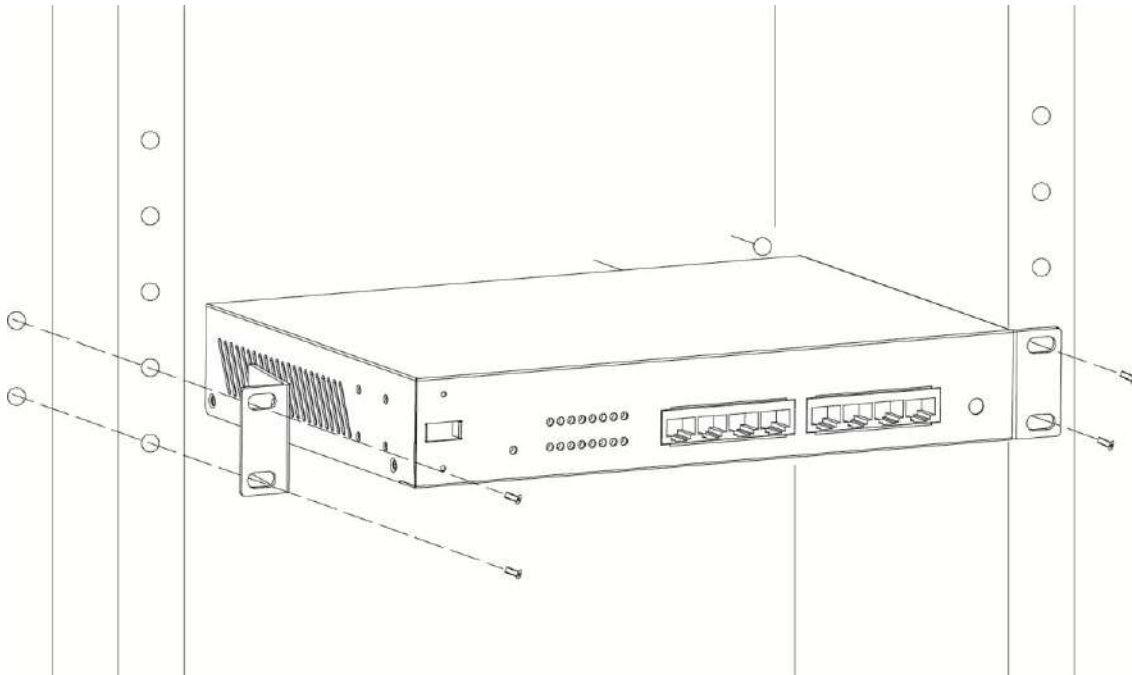
## 1-5 Rack-mountable Installation

This part describes how to install your Gigabit Ethernet Switch. Please read the following topics and perform the procedures in the order being presented.

- a. Attach the mounting brackets on the Switch's side panels (one on each side) and secure them with the screws provided.



- b. Mount the switch on the equipment rack using the screws provided and tighten them.

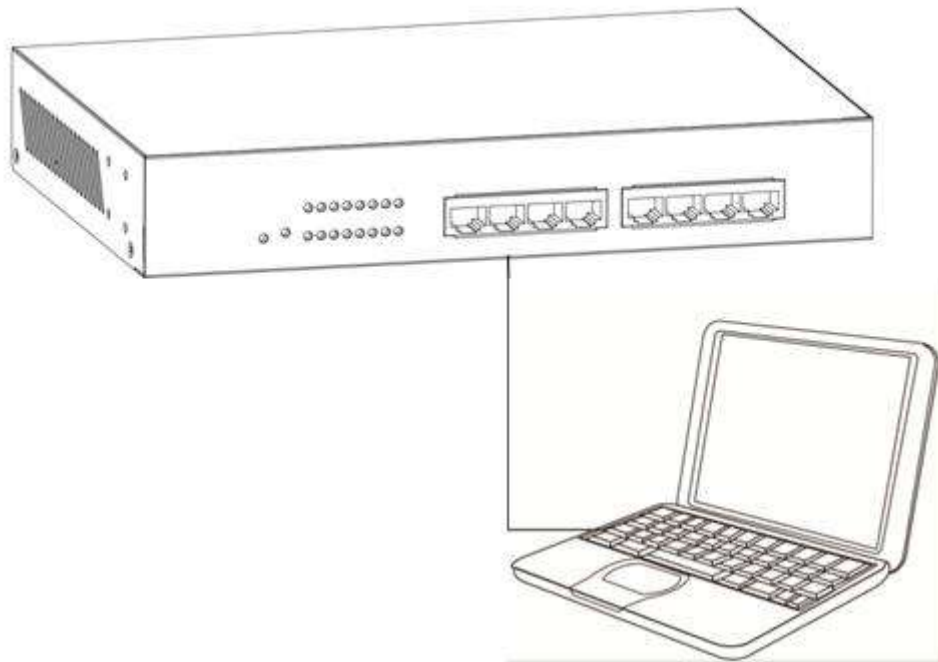


## Chapter 2 Connect & Login

---

### 2-1 Switch to End Node

Use a standard Cat.5/5e Ethernet cable (UTP/STP) to connect the Switch to end nodes as shown below. Switch ports will automatically adjust to the characteristics (MDI/MDI-X, speed, duplex) of the device to which it is connected to.



Please refer to the [LED Indicator Specification](#) in **1-3-1 Front Panel**. The LINK/ACT/Speed LEDs for each port turns on when the link is available.

## 2-2 Login

Open a web browser and go to the switch's IP address. The default IP address is **192.168.2.2**. 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 **192.168.2.x (x = 3 – 254)**. You can modify the IP address of your computer if you need.

Parameter	Default Value
Default IP address	192.168.2.1
Default user name	admin
Default password	1234

1. Enter the switch's IP address (**192.168.2.1**) in the URL bar of a web browser. IE 7 or above is recommended.
2. At the following screen login with the default username "**admin**" and password "**1234**".



The image shows the login interface for an EDIMAX Pro switch. At the top, the EDIMAX Pro logo is displayed. Below the logo, the model name "GS-5208PLG" is shown. There are two input fields: "User Name" with a person icon and "Password" with a lock icon. A "Login" button is located at the bottom of the form.

3. You will arrive at the switch configuration window as shown below:

The screenshot displays the EDIMAX Pro web interface. At the top left is the EDIMAX Pro logo. At the top right, the model name 'GS-5208PLG' and the description '8-Port Gigabit PoE+ with 2 SFP Slots Web Smart Switch' are shown. On the left side, there is a navigation menu with the following items: System, Management, Port, VLAN, Trunking, Mirror, QoS, Broadcast Storm Control, Rate Limiting, Loop Detect/Prevent, IGMP Snooping, PoE, Password, and Logout. The main content area is titled 'System' and contains a table with the following data:

System	
Model Name	GS-5208PLG
Device Name	Smart Switch
Firmware Version	1.00.20
Build Date	2017.07.28
MAC Address	00:23:79:00:23:79
IPv4 Address	192.168.2.1
Subnet Mask	255.255.255.0
Gateway	192.168.2.254
Loop Status	Normal
PoE Status	Normal

## Chapter 3 Switch Configuration

---

System
Management
Port
VLAN
Trunking
Mirror
QoS
Broadcast Storm Control
Rate Limiting
Loop Detect/Prevent
IGMP Snooping
PoE
Password
Logout

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

System	This link displays device information and allows you to configure device name and IP.
Management	This link allows you to perform functions such as firmware or configuration file maintenance, and system reset or reboot.
Port	This link allows you to check Link Status, TX/RX counter, Loop Status and Loop Reset.
VLAN	This link allows you to configure port-based or 802.1Q VLAN.
Trunking	This link allows you to logically aggregate physical links to form one logical, higher-bandwidth link.
QoS	This link allows you to enable Port-Based QoS or IEEE 802.1p QoS
Broadcast Storm Control	This link allows you to set up broadcast rate limit on every port.
Loop Detect/Prevent	This link allows you to check Loop Detection and Loop Prevention
IGMP Snooping	This link allows you to configure IGMP Snooping.
PoE	This link allows you to can configure PoE.
Password	This link allows you to change the system login password.
Logout	Logout system.

### 3-1 System

View device information and status such as firmware version number, Device Name, MAC address, IP Address, Loop Status, PoE Status, etc. Use this screen to configure device name and IPv4 address.

System	
Model Name	GS-5208PLG
Device Name	<a href="#">Smart Switch</a>
Firmware Version	1.00.20
Build Date	2017.07.28
MAC Address	00:23:79:00:23:79
IPv4 Address	192.168.2.1
Subnet Mask	255.255.255.0
Gateway	192.168.2.254
Loop Status	Normal
PoE Status	Normal

LABEL	DESCRIPTION
Model Name	This field displays the model of the Switch.
Device Name	This field displays the descriptive name of the Switch for identification purposes.
Firmware Version	This field displays the version number of the Switch's current firmware.
Build Date	This field displays the date the current firmware was created.
MAC Address	This field refers to the Ethernet MAC (Media Access Control) address of the Switch.
IPv4 Address	This field displays the current IP of the Switch.
Subnet Mask	This field displays the current subnet mask of the Switch.
Loop Status	Normal indicates that no loop occurs on any port; Loop is displayed otherwise.
PoE Status	Normal indicates that PoE devices are normal; Error is displayed otherwise.

### 3-1-1 Device Name Setup

Go to **System > Device Name**

Click the Device Name to change the name as shown below:

System	
Model Name	GS-5208PLG
Device Name	Smart Switch

Device Name:	<input type="text"/>
<input type="button" value="Apply"/>	<input type="button" value="Clear"/>

Choose a descriptive name for identification purposes. The name should be consisted of up to 20 characters; "a-z", "A-Z", "0-9" and hyphen and underscore are allowed.

## 3-2 Management

Use this page to manage firmware and your configuration files. Click **Management** in the navigation panel to open the following screen.

The screenshot shows a web interface for managing a switch. It is divided into four main sections:

- DHCP:** A dropdown menu is set to "Disable". Below it are input fields for "IP Address" (192.168.2.1), "Subnet Mask" (255.255.255.0), and "Gateway" (192.168.2.254). An "Apply" button is at the bottom left.
- Management:** Contains two buttons: "Reset" and "Reboot".
- Configuration Restore/Backup:** Features a "Choose File" button, the text "No file chosen", and "Restore" and "Backup" buttons.
- Firmware Upgrade:** Contains an "Upgrade" button.

The Switch needs an IP address for it to be managed over the network. The factory default in-band IP address is 192.168.2.1. The subnet mask specifies the network number portion of an IP address. The factory default subnet mask is 255.255.255.0.

LABEL	DESCRIPTION
IP Address	Enter the IP address of your Switch in dotted decimal notation for example 192.168.2.1.
Subnet Mask	Enter the IP subnet mask of your Switch in dotted decimal notation for example 255.255.255.0.
Gateway	Enter the IP address of your Switch in dotted decimal notation for example 192.168.2.1.
BUTTON	DESCRIPTION
Reset	Click <b>Reset</b> to reset the Switch to its factory default setting.
Reboot	Click <b>Reboot</b> to restart the Switch. This will take up to five seconds and will not affect current configuration.
Backup	Back up your current Switch configuration to a computer. <ol style="list-style-type: none"><li>1. Click <b>Backup</b>, and the Save As screen will be displayed.</li><li>2. Choose a location to save the file.</li></ol>

Restore	<p>Restore the Switch to a previously saved configuration from your computer. Use the <b>Configuration Restore/Backup</b> screen.</p> <ol style="list-style-type: none"><li>1. Click <b>Path</b> to locate the configuration file you wish to restore</li><li>2. Select the file and click <b>Restore</b>.</li></ol>
Upgrade	<p>To upgrade your Switch's firmware version.</p> <p>Please make sure you have downloaded (and unzipped) the correct model firmware and firmware version before upgrading.</p> <ol style="list-style-type: none"><li>1. Click <b>Path</b> to locate the firmware file you wish to upload to the Switch</li><li>2. Select the file and click <b>Upgrade</b>.</li><li>3. After firmware upgrade, go to the <b>System</b> screen to verify current firmware version.</li></ol>

### 3-3 Port

To view port statistics, click **Port** in the web configuration menu.

Port Status			
Port	Link Status	TX	RX
1	Down	0	0
2	Down	0	0
3	Down	0	0
4	Down	0	0
5	Down	0	0
6	Down	0	0
7	Down	0	0
8	1000 Mbps	881	1503
9	Down	0	0
10	Down	0	0

[Clear Counters](#)

LABEL	DESCRIPTION
Port	This identifies the Ethernet port.
Link Status	This field displays the speed (either 10Mbps, 100Mbps or 1000Mbps). “Down” is displayed if the port is not connected to any device.
TX	This field shows the number of transmitted bytes on this port.
RX	This field shows the number of received bytes on this port.
Loop Status	“Loop” is displayed if the port is loop.
Loop Reset	Select the loop port checkbox. Click <b>Apply</b> to make port link up on this port.
Clear Counters	Click <b>Clear Counters</b> to clear statistics for all ports.
Apply	If a port is loop, the <b>Apply</b> button is shown. Click <b>Apply</b> to clear loop status on this port.

### 3-4 VLAN

#### 3-4-1 IEEE 802.1Q VLAN

Go to **VLAN > IEEE 802.1Q VLAN**

IEEE 802.1Q is a protocol for Ethernet frame carrying VLAN tag. The traffic is encapsulated so that a number of logically separate VLANs can be carried by the same physical LAN.

The VLAN ID associates a frame with specific VLAN and provides the information that switches need to process the frame across the network. A tagged frame is four bytes longer than an untagged frame and contains two bytes for the TPID (Tag protocol Identifier, residing within the type/length field of the Ethernet frame) and two bytes for the TCI (Tag Control Information, starting after the source address field of the Ethernet frame).

The CFI (Canonical Format Indicator) is a single-bit flag, always set to zero for Ethernet switches. If a frame received at an Ethernet port has a CFI set to 1, then that frame should not be forwarded as it is to an untagged port. The remaining twelve bits defining the VLAN ID are independent of each other. A frame with VID (VLAN Identifier) of null (0) is called a priority frame, meaning that only the priority level is significant and the default VID of the ingress priority frames and the value 4095 (FFF) is reserved, so the maximum possible number of VLAN configurations is 4094.

TPID	User Priority	CFI	VLAN ID
2 Bytes	3 Bits	1 Bit	12 bits

Once the VLAN table is configured and maintained in GS-5208PLG, frames will be handled by all operations of VLAN configuration. These operations include the stripping or adding of the IEEE 802.1Q tag.

**PVID**

Port	01	02	03	04	05	06	07	08	09	10
PVID	1	1	1	1	1	1	1	1	1	1

Maximum number of IEEE 802.1Q VLAN : 10

VLAN ID	Member State										Modify	Delete
	1	2	3	4	5	6	7	8	9	10		
1											<input type="button" value="Modify"/>	<input type="button" value="Delete"/>

[Click on button to change member state or remove vlan.](#)

LABEL	DESCRIPTION
Port	This identifies the Ethernet port.
PVID	This is the VLAN ID assigned to untagged frames that this port received.
Apply	Click <b>Apply</b> to save PVID changes to the non-volatile memory
Maximum number of IEEE 802.1Q VLAN	The maximum number of <b>IEEE 802.1Q VLAN</b> that can be created.
VLAN ID	This is the VLAN identification number that was configured in the <b>IEEE 802.1Q VLAN</b> screen.
Port Member	This column displays the members that are participating in a VLAN. A Non-Member is marked as Gray, a tagged Egress Member is marked as <b>Yellow</b> , and an Untagged Egress Member is marked as <b>Green</b> .
Create New VLAN	Click this to go to the VLAN add screen as shown below.
Modify	Click this to modify VLAN settings of a particular VLAN ID.
Delete	Click this to delete the VLAN.

Click on “Create New VLAN” to go to the VLAN add screen as shown below:

### IEEE 802.1Q VLAN

VLAN ID	Non-Member		Tag Egress Member		Untag Egress Member					
	01	02	03	04	05	06	07	08	09	10
<input style="width: 50px;" type="text" value="0"/>										

Click on box to change member state.  
 If Trunking enable, Please verify VLAN configurations in trunk port.

LABEL	DESCRIPTION
VLAN ID	This is the VLAN identification number that was configured in the <b>IEEE 802.1Q VLAN</b> screen. Valid VID ranges from 1-4096.
Port Member	Each box displays the participating status in the VLAN. A Non-Member is marked as Gray, a tagged Egress Member is marked as <b>Yellow</b> , and an Untagged Egress Member is marked as <b>Green</b> . Click on the box to change its participating status.
Apply	Click <b>Apply</b> to save your changes.

### 3-5 Trunking

Go to **Trunking > LACP**

Link aggregation (trunking) is the grouping of physical ports into one logical higher-capacity link. You may want to trunk ports if, for example, it is cheaper to use multiple lower-speed links than to under-utilize a high-speed, but more costly, single-port link.

The Switch supports the link aggregation IEEE802.3ad standard. This standard describes the Link Aggregation Control Protocol (LACP), which is a protocol that dynamically creates and manages trunk groups.

When you enable LACP link aggregation on a port, the port can automatically negotiate with the ports at the remote end of a link to establish trunk groups. LACP also allows port redundancy, that is, if an operational port fails, then one of the “standby” ports become operational without user intervention. Please note that:

- You must connect all ports point-to-point to the same Ethernet switch and configure the ports for LACP trunking.
- LACP only works on full-duplex links.
- All ports in the same trunk group must have the same media type, speed, duplex mode and flow control settings.
- Configure trunk groups or LACP before you connect the Ethernet switch to avoid causing network topology loops.

LACP				
LACP Global State	Enable ▼		Disable ▼	
Link Aggregation Algorithm	MAC SA & DA ▼			
Link Group Activity	Active ▼		Passive ▼	
Link Group Member	Port 7	Port 8	Port 9	Port 10
	Link Disconnected	Link Disconnected	Link Disconnected	Link Disconnected
<input type="button" value="Apply"/>				
If Trunking enable,Please verify VLAN configurations in trunk port.				

LABEL	DESCRIPTION
LACP Global State	Select <b>Enable</b> or <b>Disable</b> to enable or disable Link Aggregation Control Protocol
Link Aggregation Algorithm	<p>Select the outgoing traffic distribution type. Packets from the same source and/or to the same destination are sent over the same link within the trunk. By default, the Switch uses the <b>MAC SA &amp; DA</b> distribution type.</p> <p>Select <b>MAC SA</b> to distribute traffic based on the packet's source MAC address.</p> <p>Select <b>MAC DA</b> to distribute traffic based on the packet's destination MAC address.</p> <p>Select <b>MAC SA &amp; DA</b> to distribute traffic based on a combination of the packet's source and destination MAC addresses.</p>
Link Group Activity	Switch TX LACP control packet Active or Passive.
Link Group Member	The check box of ports would be checked after the port is added into the Link Group successfully.
Apply	Click <b>Apply</b> to save your changes.

### 3-6 QoS

GS-5208PLG provide Quality of Service (QoS) feature. Two kinds of QoS mechanism are provided for traffic forwarding: port-based QoS and 802.1p QoS. Users can switch to either of them on the Web page.

When Quality of Service (QoS) feature is enabled, traffic will be forwarded according to the predefined setting of port-based QoS or 802.1p QoS.

If QoS type is set as port-based, the priority is based on the incoming port of the traffic. The current queue for each port is configured as below.

Port	Queue
1	0
2	0
3	1
4	1
5	2
6	2
7	3
8	3

Click "Port-Based QoS" to go to the page shown below:

Disable QoS  Port-Based QoS  IEEE 802.1p QoS

Scheduler Method

Port	1	2	3	4	5	6	7	8	9	10	weight
Queue0	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	1 ▼
Queue1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2 ▼
Queue2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4 ▼
Queue3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8 ▼

Queue0 Low Priority  
Queue1 Normal Priority  
Queue2 Medium Priority  
Queue3 High Priority

If QoS type is set to 802.1p, the priority is based on the incoming PCP field of the traffic. The current queue for each PCP is configured as below.

PCP	Queue
0	0
1	0
2	1
3	1
4	2
5	2
6	3
7	3

Click “IEEE 802.1p QoS” to go to the page shown below:

**Disable QoS**  
  **Port-Based QoS**  
  **IEEE 802.1p QoS**

Scheduler Method WFQ ▼

Priority	0(low)	1	2	3	4	5	6	7(height)	weight
Queue0	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1 ▼
Queue1	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2 ▼
Queue2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	4 ▼
Queue3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	8 ▼

Queue0 Low Priority  
 Queue1 Normal Priority  
 Queue2 Medium Priority  
 Queue3 High Priority

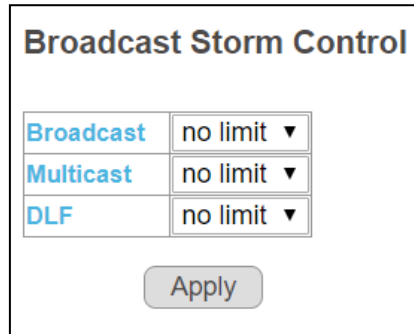
To disable QoS, click on “Disable QoS”.

**Disable QoS**  
  **Port-Based QoS**  
  **IEEE 802.1p QoS**

**QoS is Disable !!!**

### 3-7 Broadcast Storm Control

A traffic storm occurs when packets flood the network ports, creating traffic and impacting network performance in a negative way. The broadcast storm control feature prevents network ports from being disrupted by a broadcast, multicast, or DLF traffic storm.

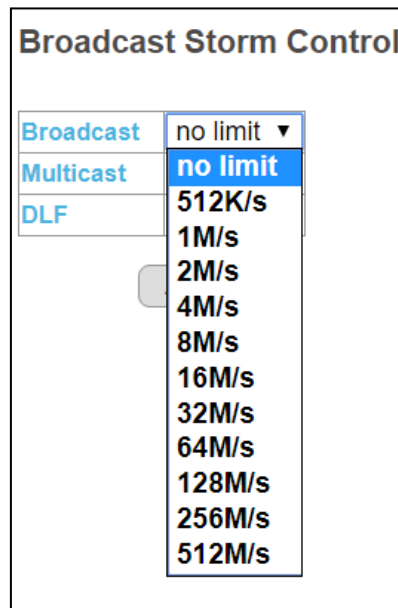


**Broadcast Storm Control**

Broadcast	no limit ▼
Multicast	no limit ▼
DLF	no limit ▼

Apply

Select a limit in the drop down menus behind the storm control features and click “Apply” to apply the settings.



**Broadcast Storm Control**

Broadcast	no limit ▼
Multicast	no limit ▼
DLF	

- no limit
- 512K/s
- 1M/s
- 2M/s
- 4M/s
- 8M/s
- 16M/s
- 32M/s
- 64M/s
- 128M/s
- 256M/s
- 512M/s

### 3-8 Rate Limiting

GS-5208PLG provides a Rate Control feature. When the Rate Control feature is enabled, GS-5208PLG provides Ingress/Egress traffic Rate Control per port for broadcast traffic type. Enable this feature to reduce broadcast packets in your network.

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
<a href="#">9</a>	no limit	no limit
<a href="#">10</a>	no limit	no limit

Click on a port number to enter the configuration page as shown below:

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>	512K/s	no limit ▼
<a href="#">4</a>	1M/s	no limit ▼
<a href="#">5</a>	2M/s	no limit ▼
<a href="#">6</a>	4M/s	no limit ▼
<a href="#">7</a>	8M/s	no limit ▼
<a href="#">8</a>	16M/s	no limit ▼
<a href="#">9</a>	32M/s	no limit ▼
<a href="#">10</a>	64M/s	no limit ▼
	128M/s	no limit ▼
	256M/s	no limit ▼
	512M/s	no limit ▼
	no limit ▼	no limit ▼
	no limit ▼	no limit ▼

Apply

Click the drop down menus to change the Ingress/Egress rate, and click “Apply” to apply the setting.

### 3-9 Loop Detect/Prevent

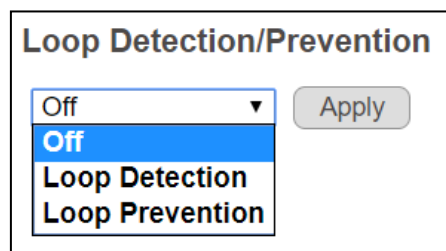
GS-5208PLG provides a Loop Protection feature for unmanaged environments. Two kinds of mechanism are available in the GS-5208PLG, which are Loop Detection and Loop Prevention. Users can choose to enable Loop Detection or Loop Prevention.

The Loop Discovery frame uses the system MAC as source address. When the port receives the discovery frame and found that the source MAC is the same as system MAC, loop is determined.

When the Loop Detection feature is enabled and activated, the switch generates Broadcom proprietary tag frames (Loop Discovery Frames) at a programmed interval, and when it detects a loop, it gives a loop detected warning with a down port LED indication, and the system LED will be blinking. This feature does not repair the loop, but only issues a warning.

The GS-5208PLG also includes a Loop Prevention feature which can be enabled. When Loop Prevention is enabled and loop is detected, this feature will disable loop ports and dim the port LED, and the system LED will be blinking.

On the Loop Detect/Prevent page, select either "Off", "Loop Detection" or "Loop Prevention" and click "Apply" to apply the settings.



The screenshot shows a configuration window titled "Loop Detection/Prevention". It contains a dropdown menu with three options: "Off", "Loop Detection", and "Loop Prevention". The "Off" option is currently selected and highlighted in blue. To the right of the dropdown menu is a grey "Apply" button.

### 3-10 IGMP Snooping

When the IGMP Snooping is enabled, the GS-5208PLG will process IGMP control packets for multicast traffic forwarding. The switch will record information of IGMP v2 packets and maintain database for multicast traffic. Multicast traffic will then be forwarded according to the database.

When IGMP Snooping feature is enabled, switch will record information of IGMP v3 packets and maintain database for multicast traffic. Then multicast traffic will be forwarded according to the database. In IGMP v3, multiple multicast group and source IP information can be recorded in one IGMP v3 packet, GS-5208PLG will record each multicast group address and ignore source IP information.

When the IGMP Snooping feature is enabled and IGMP Static Router Port is set, only this port can be used as a router port, other ports will be as member ports only. In this case, member ports receive query packets will drop the query packets.

#### IGMP Snooping

Blocking Unknown Multicast

Enable IGMP Snooping

IGMP Static Router Port No Static Router Port ▾

Multicast Group	Port	Vid
-----------------	------	-----

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

When "Enable IGMP Snooping" is selected, IGMP Static Router Port can be selected using the drop down menu.

Click "Apply" to apply the settings.

### 3-11 POE

The GS-5208PLG provides a Power over Ethernet (PoE) manager feature. The IC of the PoE module is Microsemi PD69104B.

The PoE module manager enables network devices to share power and data over a single cable. The PoE module is employed by both Ethernet switches and Midspans.

The PoE module is a 4 port, mixed-single, high-voltage PoE Manager and supports Semi Auto mode. The PoE module executes all real time functions as specified in the IEEE 802.3af-2003 ("AF") and IEEE 802.3at High Power ("AT") standards.

The PoE module supports detect legacy/pre-standard PD devices. It also provides PD real-time protection through the following mechanisms: overload, under-load, over-voltage, over-temperature, and short-circuit. The PD69104B can supply voltages between 44V and 57V without additional power supply and has a built-in thermal protection.

POE Global Settings	
PSE Total Power	130W
PSE MAX LED Power	120W
PSE IC MAX Temperature	150°C
PSE voltage	53.4V

POE Status			
Port	Power Status	Real Current(W)	Real Temperature(°C)
<u>1</u>	Turned on	0	46
<u>2</u>	Turned on	0	46
<u>3</u>	Turned on	0	48
<u>4</u>	Turned on	0	51
<u>5</u>	Turned on	0	47
<u>6</u>	Turned on	0	46
<u>7</u>	Turned on	0	46
<u>8</u>	Turned on	0	46

Turned on:8 Total Power:0 W

Click on a port number and the options are shown below:

PoE port configuration	
Port	Power Supply
1	Turn on ▼
2	Turn on ▼
3	Turn on ▼
4	Turn on ▼
5	Turn on ▼
6	Turn on ▼
7	Turn on ▼
8	Turn on ▼

Click the drop down menu to select whether to turn on or off PoE function.  
Click "Apply" to apply the settings.

### 3-12 Password

Click "Password" to go to the "Change Password" page.

Enter the relevant information as shown below and click "Confirm" to confirm the changes.

#### Change Password

**New User Name:**

**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 20.

### 3-13 Logout

If you want to logout of the system, click **Logout**.

System
Management
Port
VLAN
Trunking
Mirror
QoS
Broadcast Storm Control
Rate Limiting
Loop Detect/Prevent
IGMP Snooping
PoE
Password
<b>Logout</b>

## **COPYRIGHT**

Copyright © Edimax Technology Co., Ltd. all rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission from Edimax Technology Co., Ltd.

Edimax Technology Co., Ltd. makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties, merchantability, or fitness for any particular purpose. Any software described in this manual is sold or licensed as is. Should the programs prove defective following their purchase, the buyer (and not this company, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software. Edimax Technology Co., Ltd. reserves the right to revise this publication and to make changes from time to time in the contents hereof without the obligation to notify any person of such revision or changes.

The product you have purchased and the setup screen may appear slightly different from those shown in this QIG. The software and specifications are subject to change without notice. Please visit our website [www.edimax.com](http://www.edimax.com) for updates. All brand and product names mentioned in this manual are trademarks and/or registered trademarks of their respective holders.

## **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### **FCC Radiation Exposure Statement**

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and consider removing the no-collocation statement.

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.

### **Caution!**

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **R&TTE Compliance Statement**

This equipment complies with all the requirements of DIRECTIVE 2014/30/EU 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.

### **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.

### **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

## EU Declaration of Conformity

- English:** This equipment is in compliance with the essential requirements and other relevant provisions of Directive 2014/30/EU.
- Français:** Cet équipement est conforme aux exigences essentielles et autres dispositions de la directive 2014/30/EU.
- Čeština:** Toto zařízení je v souladu se základními požadavky a ostatními příslušnými ustanoveními směrnic 2014/30/EU.
- Polski:** Urządzenie jest zgodne z ogólnymi wymaganiami oraz szczególnymi warunkami określonymi Dyrektywą UE 2014/30/EU.
- Română:** Acest echipament este în conformitate cu cerințele esențiale și alte prevederi relevante ale Directivei 2014/30/EU.
- Русский:** Это оборудование соответствует основным требованиям и положениям Директивы 2014/30/EU.
- Magyar:** Ez a berendezés megfelel az alapvető követelményeknek és más vonatkozó irányelveknek (2014/30/EU).
- Türkçe:** Bu cihaz 2014/30/EU. direktifleri zorunlu istekler ve diğer hükümlerle ile uyumludur.
- Українська:** Обладнання відповідає вимогам і умовам директиви 2014/30/EU.
- Slovenčina:** Toto zariadenie spĺňa základné požiadavky a ďalšie príslušné ustanovenia smerníc 2014/30/EU.
- Deutsch:** Dieses Gerät erfüllt die Voraussetzungen gemäß den Richtlinien 2014/30/EU.
- Español:** El presente equipo cumple los requisitos esenciales de la Directiva 2014/30/EU.
- Italiano:** Questo apparecchio è conforme ai requisiti essenziali e alle altre disposizioni applicabili della Direttiva 2014/30/EU.
- Nederlands:** Dit apparaat voldoet aan de essentiële eisen en andere van toepassing zijnde bepalingen van richtlijn 2014/30/EU.
- Português:** Este equipamento cumpre os requisitos essenciais da Directiva 2014/30/EU.
- Norsk:** Dette utstyret er i samsvar med de viktigste kravene og andre relevante regler i Direktiv 2014/30/EU.
- Svenska:** Denna utrustning är i överensstämmelse med de väsentliga kraven och övriga relevanta bestämmelser i direktiv 2014/30/EU.
- Dansk:** Dette udstyr er i overensstemmelse med de væsentligste krav og andre relevante forordninger i direktiv 2014/30/EU.
- suomen kieli:** Tämä laite täyttää direktiivien 2014/30/EU. oleelliset vaatimukset ja muut asiaankuuluvat määräykset.

FOR USE IN **AT BE CY CZ DK EE FI FR DE GR HU**  
**IE IT LV LT LU MT NL PL PT SK SI ES SE**  
**GB IS LI NO CH BG RO RU TR UA**



---

### WEEE Directive & Product Disposal



At the end of its serviceable life, this product should not be treated as household or general waste. It should be handed over to the applicable collection point for the recycling of electrical and electronic equipment, or returned to the supplier for disposal.

## Declaration of Conformity

We, Edimax Technology Co., Ltd., declare under our sole responsibility, that the equipment described below complies with the requirements of the European R&TTE directives.

**Equipment: PoE Web Smart Switch**  
**Model No.: GS-5208PLG**

The following European standards for essential requirements have been followed:

### Directives 2014/30/EU

EMC : EN 55032:2015 Class A  
EN 61000-3-2:2014 Class A  
EN 61000-3-3:2013  
EN 55024:2010

### Directives 2014/35/EU

Safety (LVD) : IEC 62368-1:2014 (2nd Edition) and/or EN 62368-1:2014+A11:2017

Edimax Technology Europe B.V.  
Fijenhof 2,  
5652 AE Eindhoven,  
The Netherlands

Printed Name: David Huang  
Title: Director  
Edimax Technology Europe B.V.

a company of:  
Edimax Technology Co., Ltd.  
No. 278, Xinhua 1st Rd.,  
Neihu Dist., Taipei City,  
Taiwan



Date of Signature: Nov., 2020

Signature:

A handwritten signature in black ink, appearing to read 'Albert Chang', written over a horizontal line.

Printed Name:

Albert Chang

Title:

Director

Edimax Technology Co., Ltd.

## Notice According to GNU General Public License Version 2

This product includes software that is subject to the GNU General Public License version 2. The program is free software and distributed without any warranty of the author. We offer, valid for at least three years, to give you, for a charge no more than the costs of physically performing source distribution, a complete machine-readable copy of the corresponding source code.

Das Produkt beinhaltet Software, die den Bedingungen der GNU/GPL-Version 2 unterliegt. Das Programm ist eine sog. „Free Software“, der Autor stellt das Programm ohne irgendeine Gewährleistungen zur Verfügung. Wir bieten Ihnen für einen Zeitraum von drei Jahren an, eine vollständige maschinenlesbare Kopie des Quelltextes der Programme zur Verfügung zu stellen – zu nicht höheren Kosten als denen, die durch den physikalischen Kopiervorgang anfallen.

### GNU GENERAL PUBLIC LICENSE Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA  
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

#### TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### **NO WARRANTY**

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.