



ALL-SG8210PM

8 Port Gigabit with 4 Port PoE + 2 Port SFP Gigabit

EasySmart Webmanaged Switch



User Manual

Default-IP

192.168.2.1

Username & Password:

admin

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Chapter 1 Introduction to the Web Smart PoE Switch

1.1 General Description

1.2 The Front Panel

The following figure shows the front panel of the switch.



The following table describes the port labels on the front panel.

LABEL	DESCRIPTON
4 Port PoE + 4 Port LAN + 2 Port SFP Gigabit	Connect these ports to a computer, a hub, an Ethernet switch or router

1.3 LEDs Definition

This device provides extensive LEDs to show the activities on power, system and ports.

See the following description for your reference:

LED	Status	Operation
PWR/SYS	Steady Green	Power on.
	Blinking Green	System booting up.
	Off	Power off or fail.
PoE/Alert	Steady Green	Over PoE max power budget (50W)
	Off	No over PoE max power budget (50W)
LINK/ACT	Steady Green	1000Mbps connected.
	Steady Amber	10/100Mbps connected
	Blinking	Sending or receiving data.
	Off	Port disconnected or link fail.
PoE	Steady Green	PoE power output on.
	Off	PoE power output off.
SFP	Steady Green	1000Mbps connected.

	Blinking	Sending or receiving data.
	Off	Port disconnected or link fail.

The Reset Button

Reset the switch to its factory default configuration via the RESET button. Press the RESET button for ten seconds and release. The switch automatically reboots and reloads its factory configuration file. The RESET button is on the front panel of the switch.

1.4 The Rear Panel

The following figure shows the rear panel of the switch:



Power Receptacle

To be compatible with the electric service standards around the world, the switch is designed to afford the power supply in the range from 100 to 240 VAC, 50/60 Hz. Please make sure that your outlet standard to be within this range.

To power on the switch, please plug the female end of the power cord firmly into the receptacle of the switch, the other end into an electric service outlet, and use the **POWER ON/OFF** switch to have the Switch power on or off. After the switch powered on, please check if the PWR/SYS LED is lit for a normal power status.

1.5 Installation

This switch can be placed on your desktop directly, or mounted on the wall. Please refer to the instructions for installation.

Before installing the switch, we recommend:

1. The switch is placed with appropriate ventilation environment. A minimum 25 mm space around the unit is recommended.
2. The switch and the relevant components are away from sources of electrical noise such as radios, transmitters and broadband amplifiers
3. The switch is away from environments beyond recommend moisture

Desktop Installation

1. Install the switch on a level surface that can support the weight of the unit and the relevant components.
2. Plug the switch with the power cable of adaptor and plug the power adaptor to the power outlet.

Wall-mount Installation

The switch may be standalone, or mounted on wall. Wall mounting facilitate to an orderly installation when you are going to install series of networking devices.

Procedures to Wall-mount the switch:

1. Screw the two screws provided with your Switch into the wall. Use screws with 6 mm ~ 8 mm (0.24" ~ 0.31") wide heads. Do not screw the screws all the way in to the wall; leave a small gap between the head of the screw and the wall.
2. Align the holes on the back of the Switch with the screws on the wall. Hang the Switch on the screws.

Note:

The Switch should be wall-mounted horizontally. The Switch's side panels with ventilation slots should not be facing up or down as this position is less safe.

Installing Network Cables

1. Crossover or straight-through cable: All the ports on the switch support Auto-MDI/MDI-X functionality. Both straight-through or crossover cables can be used as the media to connect the switch with PCs as well as other devices like switches, hubs or router.

Category 3, 4, 5 or 5e, 6 UTP/STP cable: To make a valid connection and obtain the optimal performance, an appropriate cable that corresponds to different transmitting/receiving speed is required. To choose a suitable cable, please refer to the following table.

Media	Speed	Wiring
10/100/1000 Mbps copper	10 Mbps	Category 3,4,5 UTP/STP
	100 Mbps	Category 5 UTP/STP
	1000 Mbps	Category 5e, 6 UTP/STP

SFP Installation

While install the SFP transceiver, make sure the SFP type of the 2 ends is the same and the transmission distance, wavelength, fiber cable can meet your request. It is suggested to purchase the SFP transceiver with the switch provider to avoid any incompatible issue.

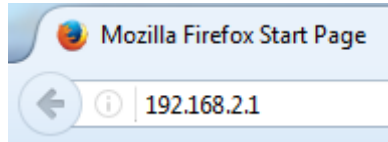
The way to connect the SFP transceiver is to Plug in SFP fiber transceiver fist. The SFP transceiver has 2 plug for fiber cable, one is TX (transmit), the other is RX (receive).

Cross-connect the transmit channel at each end to the receive channel at the opposite end.

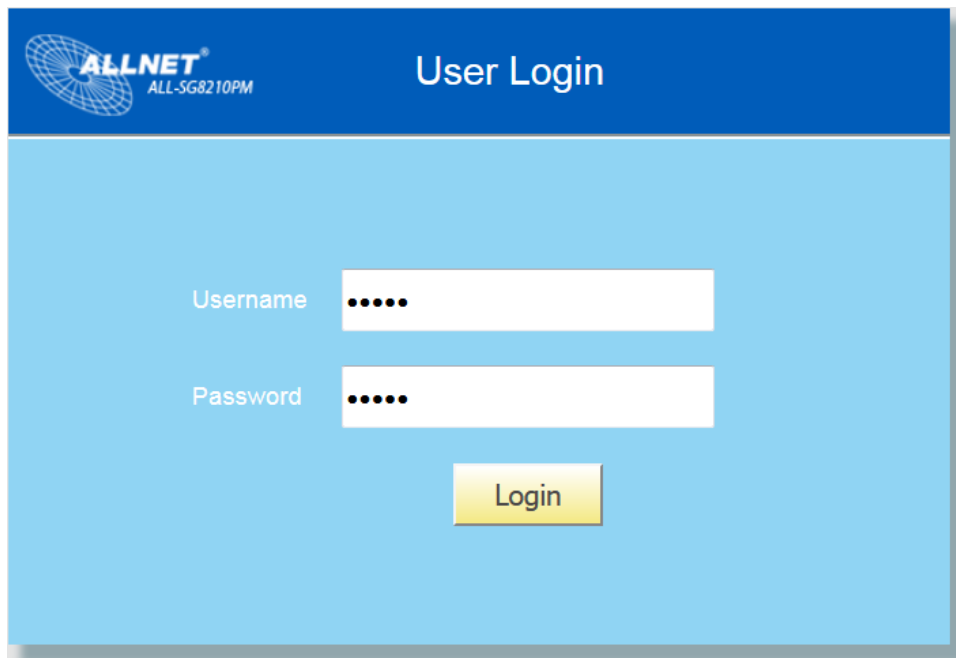
Chapter 2 Basic Web Management Information

2.1 System login

1. Start your web browser.
2. Type "http://" and the IP address of the switch (for example, the default management IP address is 192.168.2.1) in the Location or Address field. Press **[ENTER]**.



3. The login screen appears. The default username and password are "admin", so you can click **Login** and go to the web configuration screen directly.



2.2 The Graphic User Interface

After the password authorization, the System page shows up. You may click on each folder on the left column of each page to get access to each configuration page. The Graphic User Interface is as follows:

System Information	
Management	
Port	
VLAN	
Link Aggregation	
Port Mirroring	
QoS	
Storm Control	
Rate Limiting	
Loop Detect/Prevent	
IGMP Snooping	
PoE	
Password	
Logout	

System Information	
Model Name	ALL-SG8210PM
Device Name	Smart Switch
Firmware Version	1.01.05
Build Date	2017.09.21
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

A –Click the menu items to open the screen in the main window.

B –Displays system information such as MAC address and firmware version and so on.

Chapter 3 Web Management Configuration

3.1 System

System page allow user to configure and browse some system information such as Model Name, Device Name, Firmware Version, MAC address, IP address, Loop status and PoE status.

System Information	
Model Name	ALL-SG8210PM
Device Name	Smart Switch
Firmware Version	1.01.05
Build Date	2017.09.21
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

User could configure Device Name in System page.

LABEL	DESCRIPTION
Device Name	Device name of the switch.

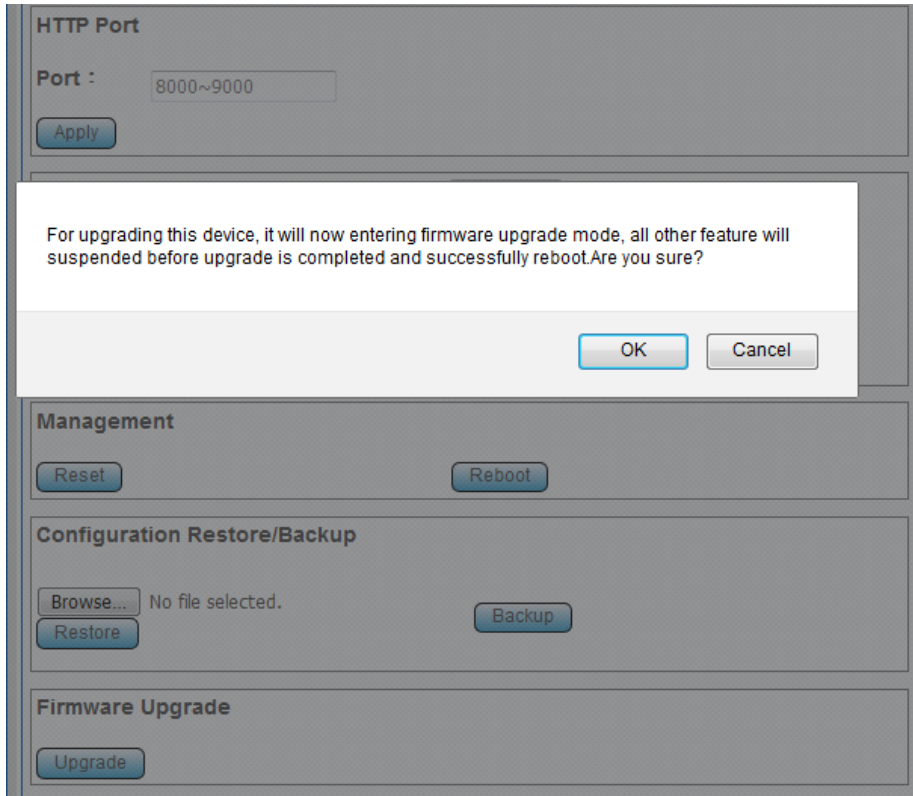
3.2 Management

In Management page, you can change the **HTTP Port**, **IP address** of the device. **“Reset”** / **“Reboot”** button can restore default and reboot system. System also can backup and restore configuration file via **“Restore”** / **“Backup”** button. Firmware can be upgraded via **“Upgrade”** button.

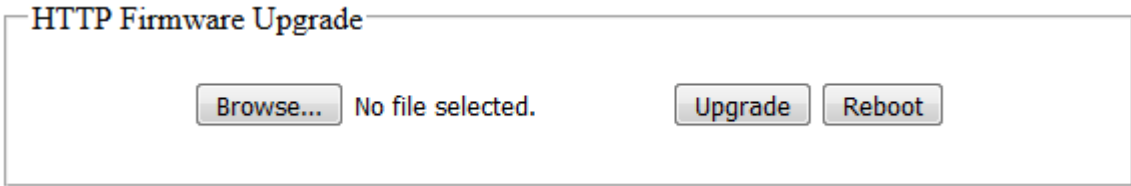
HTTP Port	
Port :	<input type="text" value="8000~9000"/>
<input type="button" value="Apply"/>	
DHCP <input type="button" value="Disable"/>	
IP Address	<input type="text" value="192.168.2.1"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
Gateway	<input type="text" value="192.168.2.254"/>
<input type="button" value="Apply"/>	
Management	
<input type="button" value="Reset"/> <input type="button" value="Reboot"/>	
Configuration Restore/Backup	
<input type="button" value="Browse..."/>	No file selected.
<input type="button" value="Restore"/>	<input type="button" value="Backup"/>
Firmware Upgrade	
<input type="button" value="Upgrade"/>	

3.2.1 Firmware Upgrade

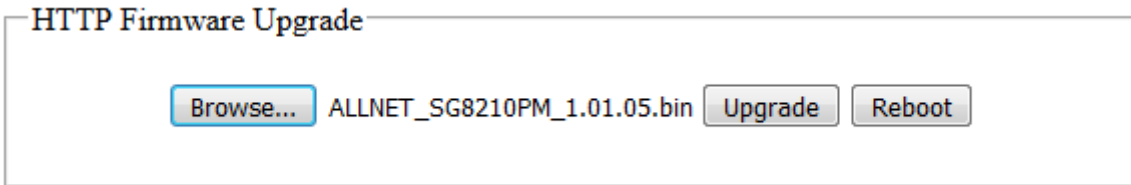
User has to enter Loader Mode to upgrade firmware. Click **“Upgrade”**, it will pop up this warning message, and then click **“OK”** to enter Loader Mode.



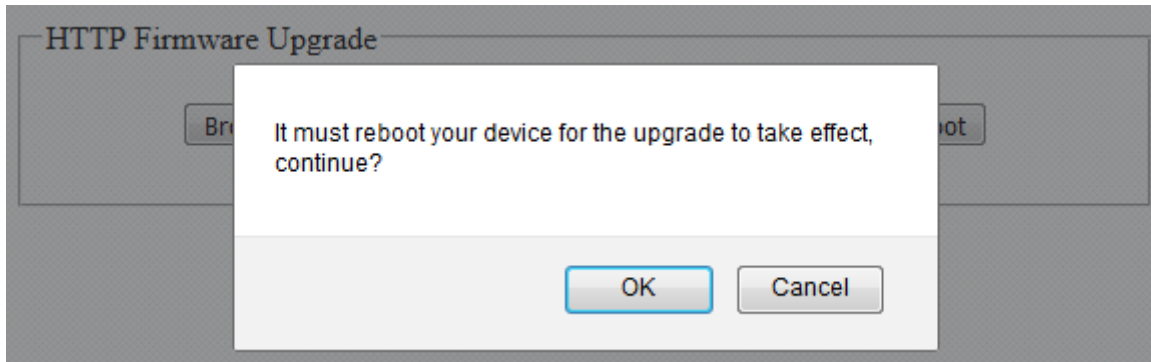
In Loader Mode, click "Browse..." and navigate to the location of the firmware upgrade file.



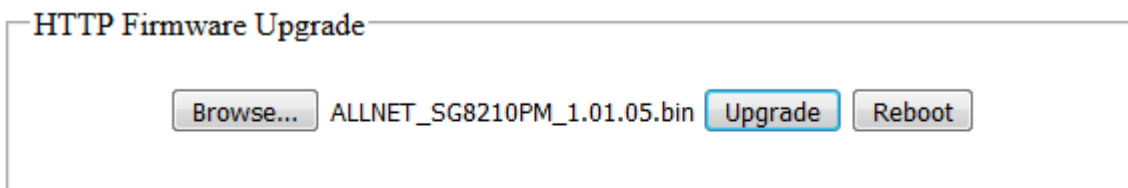
Select the firmware upgrade file. Its name will appear in the Upgrade File field. And then click the "Upgrade" button to commence the firmware upgrade.



Click OK to upgrade firmware.



Wait for 30 seconds. When the upgrading process is done, it will redirect to Login page.



Please Wait 00:28
UPGRADE MUST NOT BE INTERRUPTED!

3.3 Port Setting & Status

In Port page, you can see the Connection and TX/RX counts of all ports. You can click “Clear Counters” to reset the TX/RX counts. You also can configure the Speed for each port. Default is Auto.

Port Setting & Status				
Port	Speed	Connection	TX	RX
1	Auto	1000 Mbps	2391	140
2	Auto	100 Mbps	2501	67
3	Auto	Down	0	0
4	Auto	1000 Mbps	22461	506
5	Auto	Down	0	0
6	Auto	Down	39324	2772
7	Auto	100 Mbps	2556	35
8	Auto	1000 Mbps	3949	42453
9	N/A	Down	0	0
10	N/A	Down	0	0

[Clear Counters](#) [Apply](#)

3.4 VLAN

A virtual local area network, virtual LAN or VLAN, is a group of hosts with a common set of requirements that communicate as if they were attached to the same broadcast domain, regardless of their physical location. A VLAN has the same attributes as a physical local area network (LAN), but it allows for end stations to be grouped together even if they are not located on the same network switch. VLAN membership can be configured through software instead of physically relocating devices or connections.

3.4.1 IEEE 802.1Q VLAN

Management VLAN

The Management VLAN allows users to transfer the authority of the Switch from the default VLAN to other VLAN IDs. By default, the active management VLAN ID is 1, which allows an IP connection to be established through any port. When the management VLAN is set to a different VLAN, connectivity through the existing management VLAN is lost and an IP connection can be made only through a port that is part of the management VLAN. It is also mandatory that the port VLAN ID (PVID) of the port to be connected in that management VLAN be the same as the management VLAN ID.

Management VLAN

VLAN ID

PVID

PVID

Port	01	02	03	04	05	06	07	08	09	10
PVID	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>

Maximum number of IEEE 802.1Q VLAN : 32

VLAN ID	Non-Member			Tag Egress Member						Untag Egress Member		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.

Click **Create New VLAN** to add a VLAN tag, and it will show as below. Enter the VLAN ID and select the VLAN member.

IEEE 802.1Q VLAN

Apply

VLAN ID	Member State Legend									
	01	02	03	04	05	06	07	08	09	10
100										

Click on box to change member state.

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

3.5 Trunking

Link Aggregation Control Protocol (LACP) that allows you to bundle several physical ports together to form a single logical channel. LACP allows a switch to negotiate an automatic bundle by sending LACP packets to the peer.

Select **Enable** to enable LACP function and connect Port 7 and Port 8 or Port 9 and Port 10 to another switch that supports LACP function.

Link Aggregation Apply

LACP Global State	Disable ▾		Disable ▾	
Link Aggregation Algorithm	MAC SA & DA ▾			
Link Group Activity	Passive ▾		Passive ▾	
Link Group Member	Port 7	Port 8	Port 9	Port 10
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you wish to apply VLAN on aggregated port, make sure VLAN applied to both Port 7&8 or 9&10 the exactly same way. For details, please access VLAN page.

3.6 Mirror

The Mirror function copies all the packets that are transmitted by the source port to the destination port. It allows administrators to analyze and monitor the traffic of the monitored ports.

Port Mirroring

Port Mirroring Mode	Both ▾
Monitor Port	Port 1 ▾
Mirrored Port	01 02 03 04 05 06 07 08 09 10 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

LABEL	DESCRIPTION
Port Mirroring Mode	Select port mirroring mode: Disable, Ingress, Egress or Both.
Monitor Port	Select monitor port : Port1 ~ Port10.
Mirrored Port	Select mirrored port.
Apply	Click Apply to save your changes to the switch.

3.7 QoS

Quality of Service (QoS) features are used to prioritize the use of bandwidth in a switch. When QoS features are enabled, traffic is classified as it arrives at the switch, and processed through on the basis of configured priorities.

3.7.1 Port-Based QoS

Disable QoS
 Port-Based QoS
 IEEE 802.1p QoS

Schedule 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

LABEL	DESCRIPTION
Scheduler Method	Select WFQ(Weighted Fair Queuing) or Strict Priority
Port	Queue ID to configure for each port
Weight	If the queue type is WFQ, set the queue weight for the queue.
Apply	Click Apply to save your changes to the switch.

3.7.2 IEEE 802.1p QoS

Disable QoS
 Port-Based QoS
 IEEE 802.1p QoS

Schedule Method:

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

LABEL	DESCRIPTION
Scheduler Method	Select WFQ(Weighted Fair Queuing) or Strict Priority
Priority	Queue ID to configure
Weight	If the queue type is WFQ, set the queue weight for the queue.
Apply	Click Apply to save your changes to the switch.

3.8 Broadcast Storm Control

Broadcast storm control limits the number of broadcast frames that can be stored in the switch buffer or sent out from the switch. Broadcast frames that arrive when the buffer is full are discarded. Select the limitation to reduce broadcast traffic coming into you network.

The types of storm control include Broadcast, Multicast and Unicast.

Storm Control

Broadcast	Unlimited ▾
Multicast	Unlimited ▾
Unicast	Unlimited ▾

Apply

Limits are as follows: Unlimit, 512K/s, 1M/s, 2M/s, 4M/s, 8M/s, 16M/s, 32M/s, 64M/s, 128M/s, 256M/s and 512M/s.

Storm Control

Broadcast	Unlimited ▾
Multicast	Unlimited
Unicast	512Kbps

- 1Mbps
- 2Mbps
- 4Mbps
- 8Mbps
- 16Mbps
- 32Mbps
- 64Mbps
- 128Mbps
- 256Mbps
- 512Mbps

3.9 Rate Limit

This feature allows users to define the bandwidth settings for a specified port's Ingress Rate and Egress Rate.

Rate Limiting

Port	Ingress rate	Egress rate
1	Unlimited ▾	Unlimited ▾
2	Unlimited ▾	Unlimited ▾
3	Unlimited ▾	Unlimited ▾
4	Unlimited ▾	Unlimited ▾
5	Unlimited ▾	Unlimited ▾
6	Unlimited ▾	Unlimited ▾
7	Unlimited ▾	Unlimited ▾
8	Unlimited ▾	Unlimited ▾
9	Unlimited ▾	Unlimited ▾
10	Unlimited ▾	Unlimited ▾

Apply

Limits are as follows: Unlimit, 512K/s, 1M/s, 2M/s, 4M/s, 8M/s, 16M/s, 32M/s, 64M/s, 128M/s, 256M/s and 512M/s.

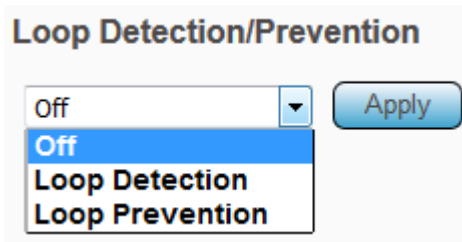
Rate Limiting

Port	Ingress rate	Egress rate
1	Unlimited ▾	Unlimited ▾
2	Unlimited	Unlimited ▾
3	512Kbps	Unlimited ▾
4	1Mbps	Unlimited ▾
5	2Mbps	Unlimited ▾
6	4Mbps	Unlimited ▾
7	8Mbps	Unlimited ▾
8	16Mbps	Unlimited ▾
9	32Mbps	Unlimited ▾
10	64Mbps	Unlimited ▾
	128Mbps	Unlimited ▾
	256Mbps	Unlimited ▾
	512Mbps	Unlimited ▾

Apply

3.10 Loop Detect / Prevent

In "Loop Detect/Prevent" page, system will detect/prevent loop automatically based on your selection.



The screenshot shows a web interface titled "Loop Detection/Prevention". It features a dropdown menu currently set to "Off", with a blue highlight on the "Off" option. Below the dropdown, the options "Loop Detection" and "Loop Prevention" are listed. To the right of the dropdown is a blue "Apply" button.

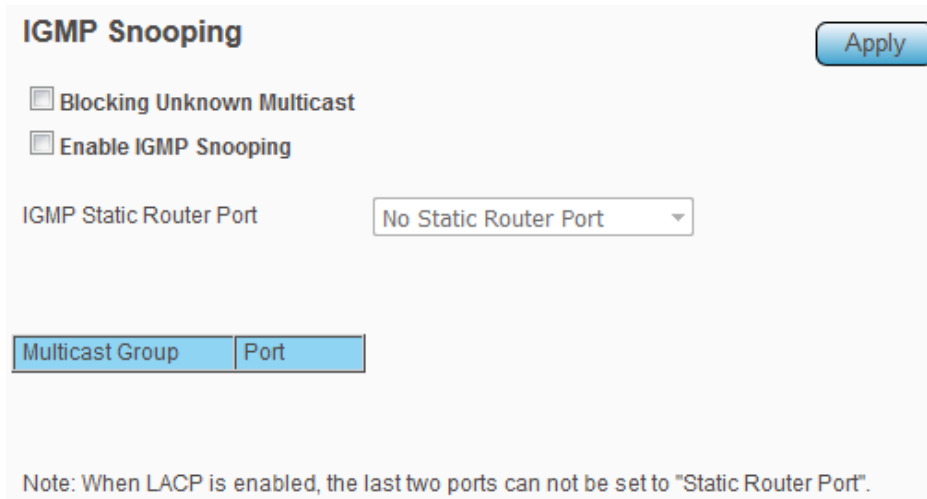
Loop Detection: the LINK/ACT LED will blink in a regular time (about 1s).

Loop Prevention: One Ethernet port will be disabled and then up again.

3.11 IGMP Snooping

IGMP snooping is the process of listening to Internet Group Management Protocol (IGMP) network traffic. The feature allows a network switch to listen in on the IGMP conversation between hosts and switch. By listening to these conversations the switch maintains a map of which links need which IP multicast streams. Multicasts may be filtered from the links which do not need them and thus controls which ports receive specific multicast traffic.

Check "**Blocking Unknown Multicast**" and "**Enable IGMP Snooping**" to avoid the Multicast flood.



The screenshot shows the configuration page for IGMP Snooping. At the top left is the title "IGMP Snooping" and at the top right is an "Apply" button. Below the title are two checkboxes: "Blocking Unknown Multicast" and "Enable IGMP Snooping", both of which are currently unchecked. Underneath these is a label "IGMP Static Router Port" followed by a dropdown menu that currently displays "No Static Router Port". At the bottom of the configuration area is a table with two columns: "Multicast Group" and "Port". Below the table, there is a note: "Note: When LACP is enabled, the last two ports can not be set to 'Static Router Port'."

3.12 PoE

In "PoE" page, PoE power budget, port status, etc. are shown below.

POE Global Settings

PSE Total Power	60W
PSE MAX LED Power	50W
PSE IC MAX Temperature	150°C
PSE voltage	55.4V

POE Status

Port	Power Status	Real Current(W)	Real Temperature(°C)
1	Turned on	0	52
2	Turned on	0	53
3	Turned on	0	52
4	Turned on	0	53

Turned on:4 Total Power:0 W

Click [port number](#) above, you can turn on/off PoE port on PoE port configuration page as below.

PoE port configuration

Port	Power Supply
1	Turn on ▼
2	Turn on Turn off
3	Turn on ▼
4	Turn on ▼

Apply

3.13 Password

In "Password" page, you can change user name and password for security.

Change Password

New User Name:

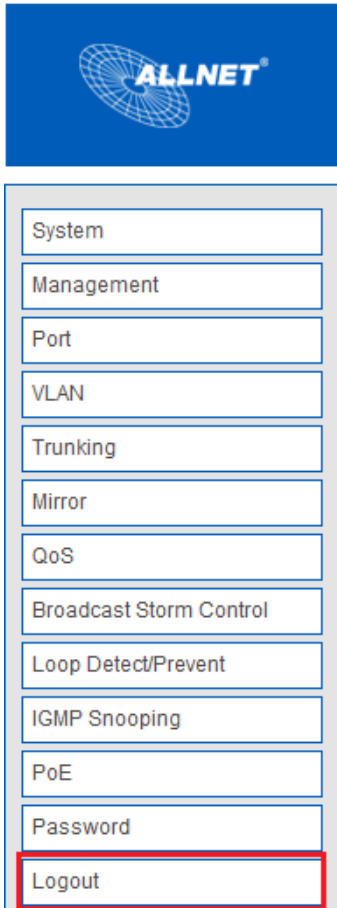
New Password:

Confirm New Password:

Note:
Password can only use "a-z","A-Z","0-9" and the length is at least 4, max is 20.

3.14 Logout

Click "Logout" to logout the switch. After logout, Web UI will be redirect to login page immediately.



Product Specifications

Standard	IEEE802.3, IEEE802.3u, and IEEE802.3ab IEEE 802.3x flow control IEEE 802.1p class of service, priority protocols IEEE 802.1Q VLAN tagging IEEE 802.3ad LACP aggregation IEEE 802.3az Energy Efficient Ethernet(EEE) IEEE 802.3af PoE IEEE 802.3at PoE+
Interface	8* 10/100/1000Mbps ports 4* PoE ports (support IEEE 802.3af and IEEE802.3at) 2* SFP ports
Transmission Mode	10/100Mbps: Full-duplex, Half-duplex 1000Mbps: Full-duplex
MAC Address Table	4K
Jumbo Frame	9216 Bytes
Buffer Memory	1.5Mbits
Temperature	Operating: 0 ~ 50°C Storage : -40 ~ 70°C
Humidity	Operating: 10% ~ 90% RH (non-condensing) Storage : 5% ~ 90% RH (non-condensing)
LED Indications	1*PWR/SYS LED(Green) 1*PoE/Alert LED(Green) 8*Gigabit port LEDs(Link/Act: Green/Amber) 2*SFP port LEDs(Link/Act: Green) 4*PoE port LEDs(Green)
Power Supply	AC-to-DC external power adapter Input: 100-240V AC Output: 55V DC/1.3A
Dimensions	240 x 105 x 27 mm
Case Material	Metal, Fan-less
Certification	FCC Class A, CE

Safety Warnings & CE



Safety Warnings

For your safety, be sure to read and follow all warning notices and instructions.

- Do not open the device. Opening or removing the device cover can expose you to dangerous high voltage points or other risks. Only qualified service personnel can service the device. Please contact your vendor for further information.
- Do not use your device during a thunderstorm. There may be a risk of electric shock brought about by lightning.
- Do not expose your device to dust or corrosive liquids.
- Do not use this product near water sources.
- Make sure to connect the cables to the correct ports.
- Do not obstruct the ventilation slots on the device.

ALLNET GmbH Computersysteme declares that the device **ALL-SG8210PM** is in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC or 2014/30/EU. The Declaration of conformity can be found under this link: www.allnet.de/downloads.html

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