

QUICK START GUIDE

LGB5028A-R3

L2+ MANAGED GBE POE+ SWITCH QUICK START GUIDE

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Contents

Chapter 1	Introduction.....	1
	Overview	1
	Front View of the Switch	1
	Rear View of the Switch.....	1
	LED Descriptions.....	2
	Mode/Reset Button.....	5
Chapter 2	Installing the Switch	6
	Package Contents	6
	Mounting the Switch in a 19-inch Rack.....	6
	Mounting the Switch on Desk or Shelf.....	7
	Connecting the AC Power Cord.....	8
	Installing SFP+ Modules.....	9
Chapter 3	Initial Configuration of Switch.....	10
	Initial Switch Configuration Using Web Browsers	10
	Initial Switch Configuration Procedure	10
Chapter 4	Troubleshooting.....	13

Chapter 1 Introduction

Overview

This user guide describes how to install, configure, and troubleshoot the LGB5028A-R3, 28 Ports L2+ Managed GbE PoE+ Switch.

By reading this user guide, users can perform the following tasks:

- To check the switch status by reading the LED behavior
- To reset the switch or to restore the switch to factory defaults
- To install the switch
- To use a Web browser to initially configure the switch
- To troubleshoot the switch

Front View of the Switch

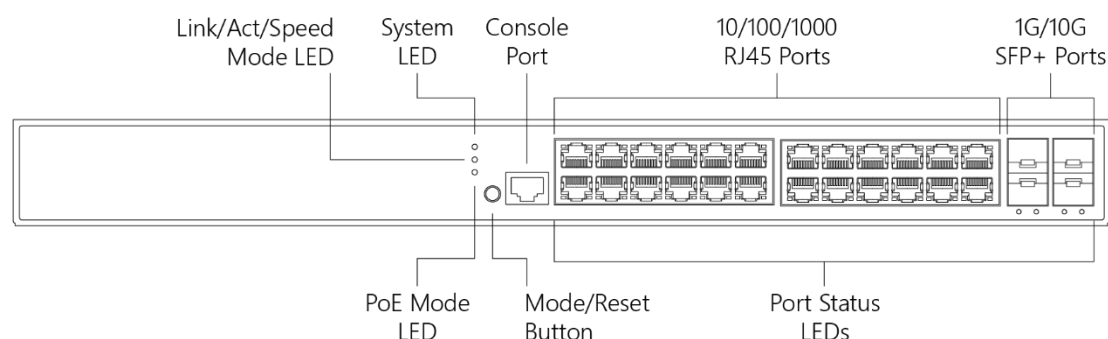


Figure 1: Front panel of the switch

Rear View of the Switch



Figure 2: Rear panel of the switch

LED Descriptions

The LEDs on the front panel provide users with switch status checking and monitoring. There are three types of LEDs as follows:

- **System LED**

Indicates if the switch is powered up correctly or not, or, indicates if there is a system alarm triggered for troubleshooting.

- **Mode LEDs**

Indicates the mode of all ports on the switch. Users can press the Mode button sequentially to switch among the two different modes (Link/Activity/Speed mode and PoE mode).

- **Port Status LEDs**

Indicates the current status of each port. Users can check these LEDs to understand the port status in different modes, after changing the mode by pressing Mode button.

The following table details the functions and descriptions of various LED indicators.

Table 1: System LED

LED	Color	State	Description
System	Green	On	The switch is powered ON correctly.
		Off	The switch is not receiving power.
	Red	On	An abnormal state, such as exceeding operating temperature range, has been detected in the switch.

Table 2: Mode LEDs

LED	Color	State	Description
Link/Act/Speed	Green	On	The Port Status LEDs are displaying link status, network activity and speed of each port.
PoE	Green	On	The RJ45 Port Status LEDs are displaying PoE powering status of each port.

By pressing the MODE button in less than 2 seconds to change LED modes (Link/Act/Speed Mode or PoE Mode), users can check the port status by reading the LED behaviors per the table below.

Table 3: Port Status LEDs

When Link/Act/Speed Mode LED Lit			
LED	Color	State	Description
RJ45 Ports	Green	On	The port is enabled and established a link to connected device, and the connection speed is 1000Mbps.
	Green	Blinking	The port is transmitting/receiving packets, and the connection speed is 1000Mbps.
	Amber	On	The port is enabled and established a link to connected device, and the connection speed is 10/100Mbps.
	Amber	Blinking	The port is transmitting/receiving packets, and the connection speed is 10/100Mbps.
	--	Off	The port has no active network cable connected, or it is not established a link to connected device. Otherwise, the port may have been disabled through the switch user interface.
SFP+ Ports	Blue	On	The port is enabled and established a link to connected device, and the connection speed is 10Gbps.
	Blue	Blinking	The port is transmitting/receiving packets, and the connection speed is 10Gbps.
	Green	On	The port is enabled and established a link to connected device, and the connection speed is 1Gbps.
	Green	Blinking	The port is transmitting/receiving packets, and the connection speed is 1Gbps.
	--	Off	The port has no active network cable connected, or it is not established a link to connected device. Otherwise, the port may have been disabled through the switch user interface.
When PoE Mode LED Lit			
LED	Color	State	Description
RJ45 Ports	Green	On	The port is enabled and supplying power to connected device.
	Amber	On	An abnormal state, such as overload status, has been detected in the switch.
	--	Off	The port has no active network cable connected, or it is not connected a PoE PD device. Otherwise, the port may have been disabled through the switch user interface.

Mode/Reset Button

By pressing the Mode/Reset Button for certain period of time, users can perform the following tasks.

- **Change Port Status LED Mode**

To read the port status correctly in the two different modes (Link/Act/Speed mode or PoE mode).

- **Reset the Switch**

To reboot and get the switch back to the previous configuration settings saved.

- **Restore the Switch to Factory Defaults**

To restore the original factory default settings back to the switch.

Note:

According to the table below, users can easily judge which task is being performed by reading the LED behaviors while pressing the Mode/Reset button. **Once the LED behaviors are correctly displayed, users may just release the button.**

Table 4: Mode/Reset Button Descriptions

Task to be Performed	Time Period of Pressing Button	SYS LED Behavior	Port Status LED Behavior
Change LED Mode	0 ~ 2 seconds	ON Green	LED status will be changed according the mode selected.
Reset the Switch	2 ~ 7 seconds	Blinking Green	ALL LEDs Light OFF
Restore to Defaults	7 ~ 12 seconds	Blinking Green	ALL LEDs Stay ON

Chapter 2 Installing the Switch

Package Contents

- The Switch
 - AC Power cord (Option)
 - Four adhesive rubber feet
 - Installation Guide
 - Mounting kit (Option)
 - RJ45 to DB9 Serial Console Cable (Option)
-

Note:

The switch is an indoor device. If you need to use it to connect outdoor devices such as outdoor IP cameras or outdoor WiFi Aps with cable, then you need to install an arrester on the cable between outdoor device and the switch.



Fig. Addition an arrester between outdoor device and this switch

Mounting the Switch in a 19-inch Rack

Step 1: Attach the mounting brackets to both sides of the chassis. Insert screws and tighten then with a screwdriver to secure the brackets.

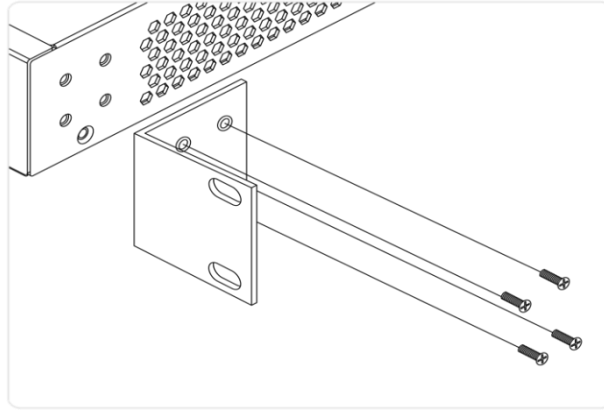


Figure 3: Attaching Brackets to the Switch

Step 2: Place the switch on a rack shelf in the rack. Push it in until the oval holes in the brackets align with the mounting holes in the rack posts.

Step 3: Attach the brackets to the posts. Insert screws and tighten them.

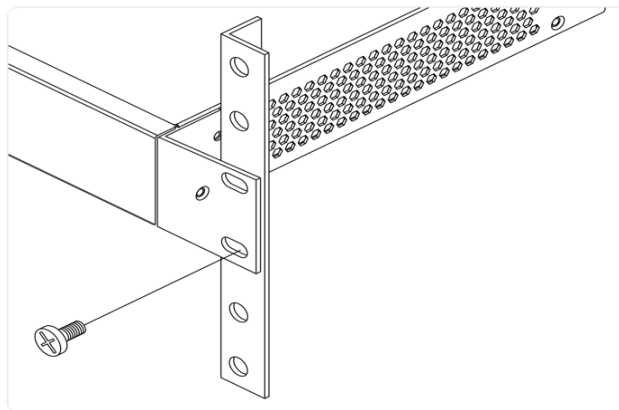


Figure 4: Attaching Brackets to the Rack Post

Mounting the Switch on Desk or Shelf

Step 1: Verify that the workbench is sturdy and reliably grounded.

Step 2: Attach the four adhesive rubber feet to the bottom of the switch.

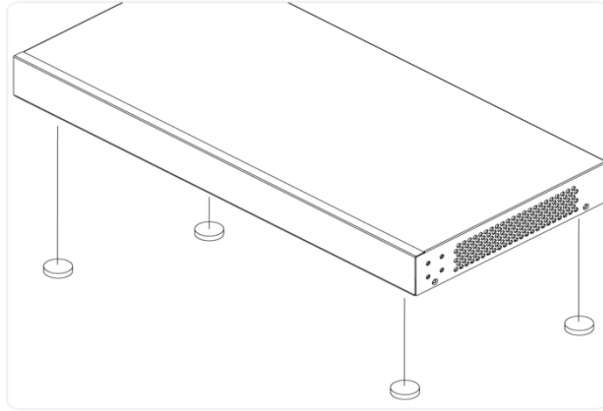


Figure 5: Attaching the Rubber Feet

Connecting the AC Power Cord

Step 1: Connect the AC power cord to the AC power receptacle of switch.

Step 2: Connect the other end of the AC power cord to the AC power outlet.

Step 3: Check the SYS LED. If it is ON, the power connection is correct.

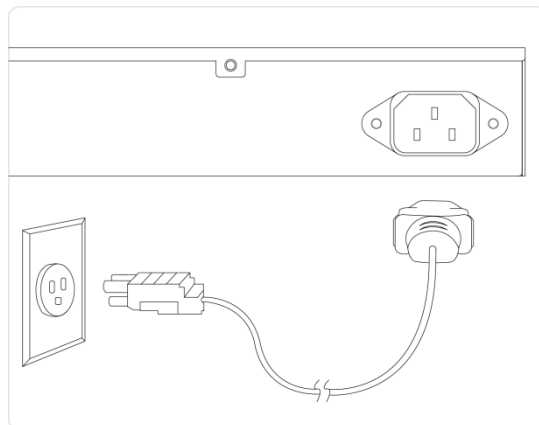


Figure 6: Connecting AC power cord

Installing SFP+ Modules

You can install or remove a mini-GBIC SFP+ module from a SFP+ port without having to power off the switch.

Step 1: Insert the module into the SFP+ port.

Step 2: Press firmly to ensure that the module seats into the connector.

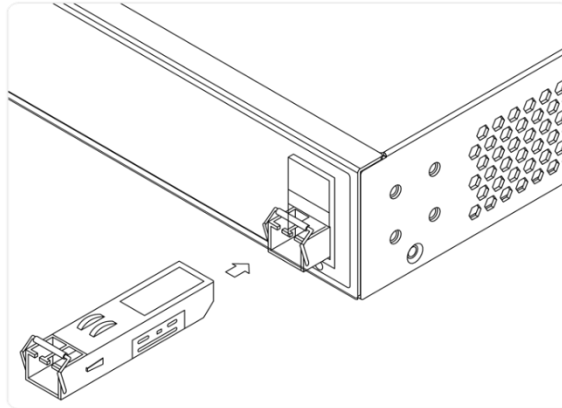


Figure 7: Installing a SFP+ Module into a SFP+ Port

Note:

The SFP+ ports should use UL Listed Optional Transceiver product, Rated 3.3Vdc, Laser Class 1.

Chapter 3 Initial Configuration of Switch

Initial Switch Configuration Using Web Browsers

After powering up the switch for the first time, you can perform the initial switch configuration using a web browser. For managing other switch features, please refer to the Web interface user guide for details.

To begin with the initial configuration stage, you need to reconfigure your PC's IP address and subnet mask so as to make sure the PC can communicate with the switch. After changing PC's IP address (for example, 192.168.1.250), then you can access the Web interface of the switch using the switch's default IP address as shown below.

The initial switch configuration procedure is as follows:

Note:

The factory default IP address of the switch is 192.168.1.1

The factory default Subnet Mask of switch is 255.255.255.0

Initial Switch Configuration Procedure

The initial switch configuration procedure is as follows:

1. Power up the PC that you will use for the initial configuration. Please make sure the PC has the Ethernet RJ45 connector to be connected to the switch via standard Ethernet LAN cable.
2. Reconfigure the PC's IP address and Subnet Mask as below, so that it can communicate with the switch. The method to change the PC's IP address, for example, for a PC running Windows® 7/8.x/10, is as follows:

Step 1: Type "*network and sharing*" into the **Search box** in the **Start Menu**

Step 2: Select **Network and Sharing Center**

Step 3: Click on **Change adapter settings** on the left of PC screen

Note:

Users can also skip step 1 to 3, by pressing **WinKey+R** and type "*ncpa.cpl*" command to get to step 4 directly.

Step 4: Right-click on your local adapter and select **Properties**

Step 5: In the **Local Area Connection Properties** window highlight **Internet Protocol Version 4 (TCP/IPv4)** then click the **Properties** button.

Note:

Be sure to record all your PC's current IP settings to be able to restore them later.

Step 6: Select the radio button **Use the following IP address** and enter in the IP for the PC (e.g. any IP address not in use, and in between *192.168.1.2* and *192.168.1.254*), Subnet mask (e.g. *255.255.255.0*), and Default gateway that corresponds with your network setup. Then enter your Preferred and Alternate DNS server addresses.

Step 7: Click **OK** to change the PC's IP address.

3. Power up the switch to be initially configured, and wait until it has finished its start-up processes.
4. Connect the PC to any port on the switch using a standard Ethernet cable, and check the port LED on the switch to make sure the link status of the PC's is OK.
5. Run your Web browser on the PC, enter the factory default IP address, so as to access the switch's Web interface.

If your PC is configured correctly, you will see the login page of the switch as shown by Figure 9 below.

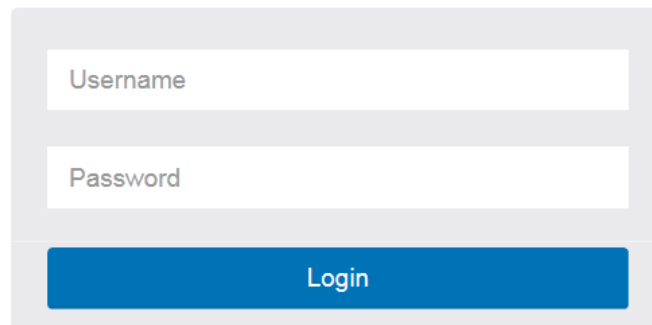
A screenshot of a web interface login page. It features a light gray background with a white rectangular area containing two input fields. The top field is labeled 'Username' and the bottom field is labeled 'Password'. Below these fields is a blue rectangular button with the text 'Login' in white.

Figure 8: Web Interface login page

If you do not see the above login page, please perform the following steps:

- Refresh the web page.
- Check to see if there is an IP conflict issue.
- Clean browser cookies and temporary internet files.
- Check your PC settings again and repeat step 2.

6. Enter the factory default username and password in login page.

Click "Login" to log into the switch.

Note:

The factory default Username of the switch is **admin**.

There is no factory default Password of the switch.

Chapter 4 Troubleshooting

The following table provides information for users to easily troubleshoot problems by taking actions based on the suggested solutions within.

Table 5: Troubleshooting Table

Symptoms	Possible Causes	Suggested Solutions
SYSTEM LED is Off	The switch is not receiving power.	1. Check if correct power cord is connected firmly to the switch and to the AC outlet socket. 2. Perform power cycling the switch by unplugging and plugging the power cord back into the switch. 3. If the LED is still off, try to plug power cord into different AC outlet socket to make sure correct AC source is supplied.
SYSTEM LED is RED	An abnormal state has been detected by the switch.	Check the system log within the switch from WEB UI to understand the abnormal state (e.g. exceeding operating temperature range) and take corresponding actions to resolve.
Port Status LED is Off in the Link/Act/Speed Mode	The port is not connected or the connection is not working.	1. Check if the cable connector plug is firmly inserted and locked into the port at both the switch and the connected device. 2. Make sure the connected device is up and running correctly. 3. If the symptom still exists, try different cable or different port, in order to identify if it is related to the cable or specific port. 4. Check if the port is disabled in the configuration settings via WEB user interface.
Port Status LED is Off in the PoE Mode	The port is not supplying power	1. Check if the cable connector plug is firmly inserted and locked into the port at both the switch and the connected device. 2. Make sure the correct Ethernet cables are used. 3. If the symptom still exists, try different cable or different port, in order to identify if it is related to the cable or specific port. 4. Check if the port is disabled in the configuration settings via WEB user interface.

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