

Installation Guide

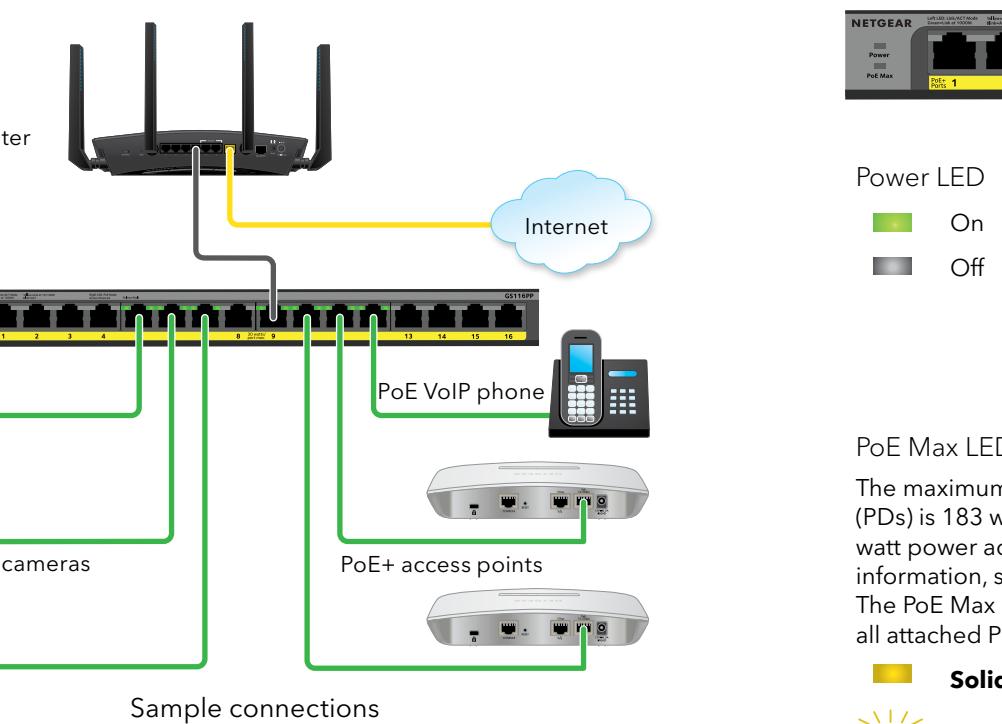
16-Port PoE/PoE+ Gigabit Unmanaged Switch GS116LP and GS116PP



Package Contents

- Switch
- Power adapter
- Power cord (varies by region)
- Wall installation kit
- Rubber feet
- Rack-mount kit
- Mounting ties (for power adapter)
- Installation guide

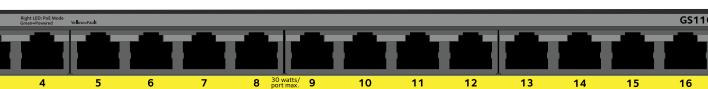
Step 1. Connect the equipment.



Step 2. Connect to power.



LED Status



Power LED	Left Port LEDs	Right PoE LEDs
On	[Green] 1000 Mbps link	PoE in use
Off	[Yellow] 100 or 10 Mbps link	PoE halted (see PoE Troubleshooting)
		No PoE use (off)
	[Blinking] Activity (blinking)	
		No link (off)

PoE Max LED

The maximum PoE power that the switch can deliver to all attached powered devices (PDs) is 183 watts total with a 200 watt power adapter and 76 watts total with a 90 watt power adapter, with a maximum power to each port of 30 watts. (For more information, see [PoE Considerations](#).)

The PoE Max LED indicates the status of the PoE power that the switch can deliver to all attached PDs, as follows:

- **Solid amber.** Less than 7W of PoE power is available on the switch.
- **Blinking amber.** The PoE Max LED was lit solid in the previous two minutes.
- Sufficient (more than 7W of) PoE power is available on the switch (the LED is off).

PoE Considerations

The switch prioritizes the PoE and PoE+ power that it supplies in ascending port order (from port 1 to port 16), with a total power budget of 183 watts with a 200 watt power adapter and 76 watts total with a 90 watt power adapter. If the power requirements for the attached powered devices (PDs) exceed the total power budget of the switch, the PD on the highest-numbered port is disabled to make sure that the PDs that are connected to the higher-priority, lower-numbered ports are supported first.

Just because a PD is listed as an 802.3at PoE powered device does not necessarily mean that it requires the maximum power limit of the specification. Many PDs require less power, allowing all eight PoE ports to be active simultaneously.

The following table describes the PoE classes and switch allocations.

Device Class	Standard Class	Class Description	Minimum Power Allocated to the Powered Device	Range of Power Delivered to the Powered Device
0	PoE and PoE+	Default power (full)	0.44W	0.44W-12.95W
1	PoE and PoE+	Very low power	4.0W	0.44W-3.84W
2	PoE and PoE+	Low power	7.0W	3.84W-6.49W
3	PoE and PoE+	Mid power	15.4W	6.49W-12.95W
4	PoE+ only	High power	30.0W	12.95W-25.5W



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PoE Troubleshooting

Here are some tips for correcting PoE problems that might occur:

- Make sure that the PoE Max LED is off. If the PoE Max LED is solid amber, disconnect one or more PoE devices to prevent PoE oversubscription. Start by disconnecting the device from the highest-numbered port.
- Make sure that the Ethernet cables are plugged in correctly. For each powered device (PD) that is connected to the switch, the corresponding right port LED on the switch lights solid green. If the right port LED lights solid amber, a PoE fault occurred and PoE halted because of one of the conditions that are listed in the following table.

PoE Fault Condition	Possible Solution
A PoE-related short circuit occurred on the port.	The problem is most likely with the attached PD. Check the condition of the PD or restart the PD by disconnecting and reconnecting the PD.
The PoE power demand of the PD exceeded the maximum level that the switch permits, which is 30.9W.	Restart the switch to see if the condition resolves itself.
The PoE current on the port exceeded the classification limit of the PD.	
The PoE voltage of the port is outside the range that the switch permits.	

Cables and Speeds

The following table describes the network cables that you can use for the switch connections and the speeds that these cables can support, up to 328 feet (100 meters).

Speed	Cable Type
100 Mbps	Category 5 (Cat 5) or higher
1 Gbps	Category 5e (Cat 5e) or higher

Attach the Switch to a Wall

To attach the switch to a wall, you need the wall-mount screws that are supplied with the switch.

1. Locate the two mount holes on the bottom panel of the switch.
2. Mark and drill two mounting holes in the wall where you want to mount the switch.

The two mounting holes must be at a precise distance of 4.27 in. (108.4 mm) from each other.

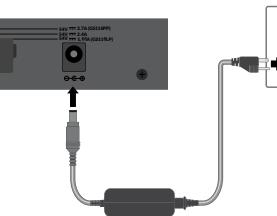
3. Insert the supplied anchors into the wall and tighten the supplied screws with a No. 2 Phillips screwdriver.

Leave about 0.125 in. (4 mm) of each screw protruding from the wall so that you can insert the screws into the holes on the bottom panel.

Change the Switch's Flexible PoE Budget

You can move the slider on the back of the switch to increase or decrease the PoE budget. You can increase the PoE budget if you buy a higher wattage power supply. You also can move the slider to a PoE budget that is lower than the power supply wattage. This reduces your switch's power consumption. However, we recommend using the slider setting that matches your power supply.

1. Power down the switch and disconnect the power cord.
2. Use a screwdriver to remove the metal plate that covers the slider.
3. Move the slider to the correct setting.
4. Replace the metal plate.
5. Connect the power cord and power on the switch.



Install the Switch in a Rack

To install the switch in a rack, you need the rack-mount brackets and screws that are supplied with the switch.

1. Attach the supplied mounting brackets to the side of the switch. Insert the screws provided in the product package through each bracket and into the bracket mounting holes in the switch.
2. Tighten the screws with a No. 2 Phillips screwdriver to secure each bracket.
3. Align the mounting holes in the brackets with the holes in the rack, and insert two pan-head screws with nylon washers through each bracket and into the rack.
4. Tighten the screws with a No. 2 Phillips screwdriver to secure mounting brackets to the rack.

Get the Free NETGEAR Insight App

You can use the NETGEAR Insight app to register your switch.

1. Download the NETGEAR Insight app from your iOS or Android mobile device.



2. Connect your mobile device to the WiFi network of the router or access point.
3. Open the NETGEAR Insight app to log in or create an account.
4. Scan the bar code or enter the serial number of the switch located on the product label or product packaging.

For information about how to connect a NETGEAR Insight managed switch to an existing network, visit kb.netgear.com/000044341.

Support

Thank you for purchasing this NETGEAR product. You can visit www.netgear.com/support to register your product, get help, access the latest downloads and user manuals, and join our community. We recommend that you use only official NETGEAR support resources.

Si ce produit est vendu au Canada, vous pouvez accéder à ce document en français canadien à <http://downloadcenter.netgear.com/other/>.

(If this product is sold in Canada, you can access this document in Canadian French at <http://downloadcenter.netgear.com/other/>.)

For the current EU Declaration of Conformity, visit <http://kb.netgear.com/11621>.

For regulatory compliance information, visit <http://www.netgear.com/about/regulatory/>.

Do not use this device outdoors. If you connect cables or devices that are outdoors to this device, see <http://kb.netgear.com/000057103> for safety and warranty information.

See the regulatory compliance document before connecting the power supply.

Specifications

Specification	Description
Network interfaces	16 Gigabit Ethernet RJ-45 ports that support 1G, 100 M, and 10 M 16 PoE/PoE+ ports
Power adapter input	Power adapter varies by region.
Power adapter output	The switch supports two power adapters: 200W: 54V @ 3.7A 130W: 54V @ 2.4A, 90W: 54V @ 1.66A
Max PoE budget	The maximum budget for each power adapter is as follows: 200W: 183W PoE 130W: 115W PoE 90W: 76W PoE
Dimensions (W x D x H)	11.26 x 4.02 x 1.06 in. (286 x 102 x 27 mm)
Weight	1.94 lb (0.88 kg)
Operating temperature	32-104°F (0-40°C)
Operating humidity	10%-90% relative humidity, noncondensing
Compliance	FCC class A, CB, CE class A, VCCI class A, RCM class A, KC, BSMI, EAC