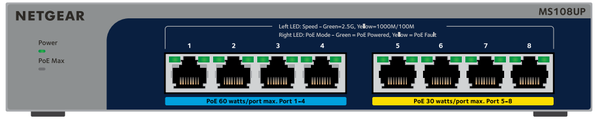
NETGEAR
BUSINESS

Installation Guide

8-port Ultra60 PoE++ Multi-Gigabit (2.5G) Ethernet Unmanaged Switch

Model MS108UP



Package contents

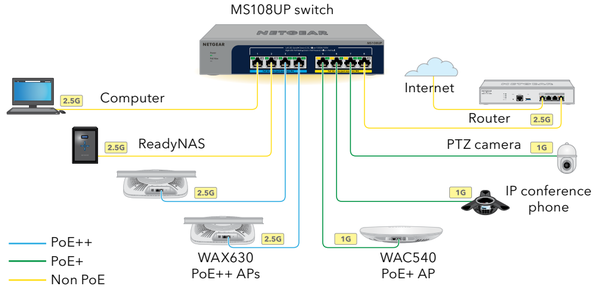
- NETGEAR 8-port Ultra60 PoE++ Multi-Gigabit (2.5G) Ethernet Unmanaged Switch
- Power adapter (power cable varies by region)
- Wall-mount installation kit
- Rubber feet
- Installation Guide

1. Register the switch

1. From a computer or mobile device that is connected to the Internet, visit my.netgear.com.
2. Log in to your NETGEAR account.
   NOTE: If you don't have a free NETGEAR account, you can create one.
   The Your Registered Products page displays.
3. Click the **REGISTER NEW PRODUCT** button.
4. In the **SERIAL NUMBER** field, type the serial number of your switch.
   The serial number is 13 digits long. It is printed on the switch label.
5. From the **PURCHASE DATE** menus, select the date that you purchased the switch.
6. Click the **REGISTER** button.
   Your switch is registered to your NETGEAR account.
   A confirmation email is sent to your NETGEAR account email address.

2. Connect the switch

Sample connections



NOTE: We recommend that you use a Category 5e (Cat 5e) cable or higher-rated cable for Gigabit Ethernet connections.

This switch is designed for indoor use only. If you want to connect it to a device located outdoors, the outdoor device must be properly grounded and surge protected, and you must install an Ethernet surge protector inline between the switch and the outdoor device. Failure to do so can damage the switch.

WARNING: Before connecting this switch to outdoor cables or devices, see https://kb.netgear.com/000057103 for safety and warranty information.

3. Check the LEDs

When you connect the power adapter to the switch and plug the cable into an electrical outlet, the LEDs indicate the status:

LED	Description
Power LED	**Solid green**: The switch is powered on and operating normally. **Off**. Power is not supplied to the switch.
PoE Max LED (The status of the switch's PoE budget.)	**Off**: Sufficient (more than 7W of) PoE power is available. **Solid yellow**: Less than 7W of PoE power is available. **Blinking yellow**: At least once during the previous two minutes, less than 7W of PoE power was available.
Left Port LED	**Solid green**: 2.5 Gbps link on this port. **Blinking green**: 2.5 Gbps activity on this port. **Solid yellow**: 1000 Mbps or 100 Mbps link on this port. **Blinking yellow**: 1000 Mbps or 100 Mbps activity on this port. **Off**. No link is detected on this port.
Right Port LED	**Solid Green**: The port is delivering PoE power. **Off**: The port is not delivering PoE power. **Solid yellow**: A PoE fault occurred.

Technical specifications

Specification	Description
Network interfaces	RJ-45 connectors that support 100BASE-TX, 1000BASE-T, and 2.5GBASE-T
Ports	8
PoE	Ports 1–4: PoE++ (802.3bt) Ports 5–8: PoE+ (802.3at)
PoE budget	230W
Power adapter	54V @ 4.7A DC input
Power consumption	270.5W
Dimensions (W x D x H)	8.27 x 5.51 x 1.58 in. (210 x 140 x 40 mm)
Weight	1.98 lb (900 g)
Operating temperature	32 to 104° F (0 to 40° C)
Operating humidity	10 to 90% relative humidity, noncondensing
Maximum operating altitude	10,000 ft. (3,000 m)
Storage temperature	–4 to 158° F (–20 to 70° C)
Storage humidity	5 to 95% relative humidity, noncondensing
Maximum storage altitude	10,000 ft. (3,000 m)
Electromagnetic certifications and compliance	EMC class B device, FCC, ISED, CE, RCM, VCCI, BSMI, CCC, KC
Safety certifications	CB, CE LVD, CSA, BSMI, CCC

201-29171-02

May 2022

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Mount the switch on a wall

We recommend that you use the wall-mount screws that are included. The screws are 0.25 in. (6.5 mm) in diameter, 0.63 in. (16 mm) in length.

1. Locate the two mounting 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 3.95 in. (100 mm) apart, center-to-center.
3. Insert the supplied anchors into the wall and tighten the screws with a No. 2 Phillips screwdriver.

   Leave about 0.15 in. (4 mm) of each screw protruding from the wall so that you can insert the screws into the holes on the bottom panel.

PoE considerations

PoE power supplied by the switch is prioritized in ascending port order (from port 1 to port 8). The switch can supply a total of 230W across all active PoE+ and PoE++ ports.

- **Ports 1–4**: Each port can supply up to 60W PoE++ (802.3bt) power.
- **Ports 5–8**: Each port can supply up to 30W PoE+ (802.3at) power.

This table shows the standard power ranges without overrides applied, calculated with the maximum cable length of 328 feet (100 meters). If a device receives insufficient PoE power from the switch, consider using a shorter cable.

Device class	Compatible PoE standard	Class description	Maximum power supplied by the switch	Power delivered to the device
0	PoE, PoE+, and PoE++	Default power (full)	15.4W	0.44W–13.0W
1	PoE, PoE+, and PoE++	Very low power	4.0W	0.44W–3.84W
2	PoE, PoE+, and PoE++	Low power	7.0W	3.84W–6.49W
3	PoE, PoE+, and PoE++	Mid power	15.4W	6.49W–13.0W
4	PoE+ and PoE++	High power	30.0W	13.0W–25.5W
5	PoE++	Ultra high power	45.0W	25.5W–40.0W
6	PoE++	Ultra high power	60.0W	40.0W–51.0W

PoE troubleshooting

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

- If the PoE Max LED is solid yellow, disconnect one or more PoE devices to prevent PoE oversubscription.
- For each powered device (PD) that is connected to the switch, the associated PoE LED on the switch lights solid green. If the PoE LED lights solid yellow, a PoE fault occurred and PoE halted because of one of the conditions 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. The maximum level is 15.4W for a PoE connection, 30W for a PoE+ connection, and 60W for a PoE++ connection.	
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.	Restart the switch to see if the condition resolves itself.

Support and Community

Visit netgear.com/support to get your questions answered and access the latest downloads.

You can also check out our NETGEAR Community for helpful advice at community.netgear.com.

Regulatory and Legal

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(If this product is sold in Canada, you can access this document in Canadian French at https://www.netgear.com/support/download/.)

For regulatory compliance information including the EU Declaration of Conformity, visit https://www.netgear.com/about/regulatory/.

See the regulatory compliance document before connecting the power supply.

For NETGEAR's Privacy Policy, visit https://www.netgear.com/about/privacy-policy.

By using this device, you are agreeing to NETGEAR's Terms and Conditions at https://www.netgear.com/about/terms-and-conditions. If you do not agree, return the device to your place of purchase within your return period.

Do not use this device outdoors. The PoE source is intended for intra building connection only.

Applicable to 6 GHz devices only: Only use the device indoors. The operation of 6 GHz devices is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet. Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

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