

Installation Guide

8-Port Multi-Gigabit/10G Ethernet Smart Managed Pro Switch with 2 SFP+ Ports
MS510TXM

8-Port Multi-Gigabit/10G Ethernet Ultra60 PoE++ Smart Managed Pro Switch with 2 SFP+ Ports
MS510TXUP

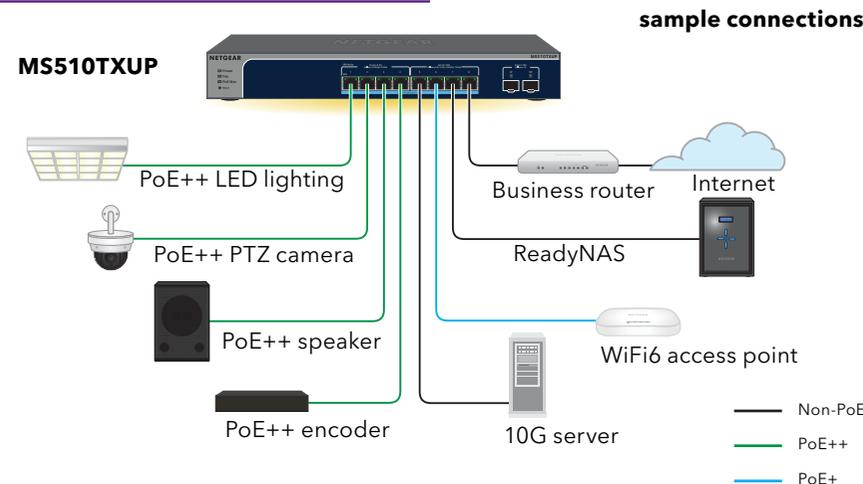


Package contents

- NETGEAR MS510TXM or MS510TXUP Switch
- Detachable power cord (varies by region)
- Rubber footpads for tabletop installation
- Rack-mount kit
- Installation guide

Note: For information about installation, see the hardware installation guide, which you can download from www.netgear.com/support/.

1. Connect the switch



This switch is designed for indoor use only. If you want to connect 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.

1. Connect devices to the RJ-45 ports (1-8) on the switch front panel.
Use Category 5e (Cat 5e) Ethernet cables terminated with RJ-45 connectors to make 1G, 2.5G, and 5Gbps connections. For 10G connections, use Cat 6a or better Ethernet cables terminated with RJ-45 connectors.
2. Connect a port on the switch to a network that includes a DHCP server.
Note: In a small office or home office network, connect the switch to the LAN port of a router that is connected to a modem.
To use the SFP+ port, you must insert a SFP+ transceiver module, which you can purchase from NETGEAR.
3. Power on the switch and wait two minutes.
If you connected the switch to a network with a DHCP server such as a router, the switch is automatically assigned a new IP address. (The default switch IP address is 192.168.0.239.)

2. Check the PoE++ status (MS510TXUP only)

PoE++ power is provided by the MS510TXUP switch on ports 1-8. The switch can supply up to 60W PoE++ (IEEE 802.3bt) to each port, with a PoE power budget of 295W across all active PoE++ ports.

The PoE Max LED indicates the status of the PoE budget on the switch:

- **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.

Register with the NETGEAR Insight app

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

Note: If the switch is connected to a WiFi router or access point and to the Internet and you connect your smartphone to the same WiFi network as the switch, you can use the NETGEAR Insight app to both discover the IP address of the switch in your network and register the switch with NETGEAR.

1. On your mobile device, visit the app store, search for NETGEAR Insight, and download the latest version of the app.



2. Open the NETGEAR Insight app.
3. If you did not set up a NETGEAR account, tap **Create NETGEAR Account** and follow the onscreen instructions.
4. Enter the email address and password for your account and tap **LOG IN**.
Note: If your switch and smartphone are connected to the same network, after you log in to your account, the IP address of the switch displays in the devices list. Then, in the devices list, select the switch, tap the **ADD DEVICE** button, and continue with Step 7.
However, if the switch does not display in the devices list, tap **+** in the upper-right corner, and either tap **Scan Network** or continue with Step 6.
5. Tap **+** in the upper right corner.
6. Either use the camera on your smartphone to scan the bar code or QR code, or type in the serial number. Then, follow the onscreen instructions.
7. Create or select a network location to add this device to.

8. Follow the onscreen instructions to complete the registration of the switch.

Note: To complete the registration process and unlock full access to the local browser user interface (UI), your switch must be connected to a network with Internet access. Alternatively, you can enter the registration key on the login screen of the local browser UI as described in the next sections.

Get a registration key for offline access

If your switch is not connected to the Internet, you can use a registration key to unlock full access to the local browser UI.

To get a registration key, you must register your switch. Visit www.mynetgear.com or use the NETGEAR Insight app. NETGEAR Insight Premium or Pro subscribers can use the Insight Cloud Portal. Log in to your account, register the switch using its serial number, and receive a registration key.

Log in to configure the switch

You can use the switch as a plug-and-play device or you can change the settings by logging in to the local browser UI.

If you did not get a registration key, make sure that the switch is connected to the Internet. During the initial login, the switch must access a NETGEAR server before you can log in to your NETGEAR account and configure the switch.

Note: Before the initial login, if the switch is not connected to the Internet and you did not get a registration key, you can log in with the local device password (by default, **password**), but only a limited menu is available. After you log in once with your NETGEAR account, with the switch still in its default management mode (Directly Connect to Web Browser Interface), you can log in with the local device password and the full menu is available, even if the switch is not connected to the Internet.

1. Open a web browser from a computer or tablet connected to the same network as your switch.
You can use a wired or WiFi connection.
2. Enter the IP address of the switch.

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To discover the IP address of the switch, use the NETGEAR Insight app or another discovery method (see [Other discovery and configuration methods](#)).

Your browser might display a security message. Ignore it or add an exception.

The Register to unlock all features page displays. You can now register the switch.

- Click the **Log in with NETGEAR account** button, and follow the directions onscreen to register the switch with your NETGEAR email address and password. If you obtained a registration key, you can enter it instead.

Note: If you did not yet create a NETGEAR account, click the **Create account** link, follow the directions onscreen to create an account, and register the switch with your NETGEAR email address and password.

- Click the **Login** button.

The System Information page displays. You can now configure the switch.

For more information, see the user manual, which you can download from www.netgear.com/support/.

Change the management mode to Insight

By default, the management mode is set to Directly Connect to Web Browser Interface, which lets you configure the switch from the local browser UI.

You can change the management mode so that you can manage the switch remotely from the cloud with the NETGEAR Insight app or Insight Cloud Portal.

- While you are logged in to the local browser UI, in the Management Mode section on the System Information page, select the **NETGEAR Insight Mobile App and Insight Cloud Portal** radio button.
- In the pop-up window, click the **OK** button.
- Click the **Apply** button.
- In the pop-up window, click the **OK** button.

Your settings are saved.

The first time that you change the management mode to Insight, the switch is reset to its factory default settings, and you must configure the switch using the NETGEAR Insight app or Insight Cloud Portal.

Other discovery and configuration methods

The NETGEAR Switch Discovery Tool and the Smart Control Center Utility let you discover the IP address and configure the switch.

- NETGEAR Switch Discovery Tool.** You can use a Mac or a 64-bit Windows-based computer on the same network as the switch. To download this tool, visit www.netgear.com/support/product/netgear-switch-discovery-tool.aspx.
- Smart Control Center Utility.** You can use a Windows-based computer on the same network as the switch. To download this utility, visit www.netgear.com/support/product/SCC.

PoE considerations (for MS510TXUP only)

PoE power supplied by the switch is prioritized in ascending port order (from port 1 to port 8), with a total power budget of 295W across all active PoE++ ports. 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
6-8	PoE++	Ultra high power	60.0W	40.0W-51.0W

PoE troubleshooting (for MS510TXUP only)

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 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 problem is most likely with the attached PD. Check the condition of the PD, restart the PD by disconnecting and reconnecting the PD, or try a shorter cable.
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. Check the condition of the PD, restart the PD by disconnecting and reconnecting the PD, or try a shorter cable.

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

Si ce produit est vendu au Canada, vous pouvez accéder à ce document en français canadien à <https://www.netgear.com/support/download/>.

(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.

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