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)
- Rack-mount kit for rack installation
- Installation guide

1. Connect the switch

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

1. Connect one port on the switch to a network that includes a DHCP server such as a router, a gateway, or other network device.
2. Connect devices to the RJ-45 ports (1–8) on the switch front panel.
3. Power on the switch and wait two minutes.
4. Connect the switch to the LAN port of a router that is connected to a modem, or to a gateway.

You can use a wired or WiFi connection.

5. If you do not have a NETGEAR account, tap Create NETGEAR Account. Your switch and its IP address display in the devices list. Do the following:
   a. On the next screen, tap Add Device to your account, and tap Register to activate your warranty.
   b. Either use the camera on your mobile device to scan the bar code or QR code on the switch label, or use the NETGEAR Insight app to discover the switch IP address in your network. Regardless of your setup, you can use the Insight app to register the switch and activate your warranty.
   c. Enter the email address and password for your NETGEAR account and tap LOG IN.
   d. If you do not have a NETGEAR account, tap Create NETGEAR Account and follow the onscreen instructions.

Check the PoE status (MS510TXUP only)

Model MS510TXUP can supply PoE+ power on ports 1–8, up to 60W PoE+ (IEEE 802.3bt) to each port, and a PoE power budget of 255W across all active PoE+ ports. The PoE Max LED indicates the status of the PoE budget on the switch:

- Off: 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.

Discover the switch in your network

Depending on your setup, you can use the NETGEAR Insight app to discover the switch IP address in your network, or you can use other discovery methods.

Use the NETGEAR Insight app to discover the switch

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 do not have a NETGEAR account, tap Create NETGEAR Account and follow the onscreen instructions.
4. Enter the email address and password for your NETGEAR account and tap LOG IN.
5. Follow the onscreen instructions to complete the registration of the switch. During the process, decide if you want to manage and monitor the switch from the device UI or remotely from the cloud using NETGEAR Insight:
   a. Device UI: Tap Now.
   b. NETGEAR Insight Cloud Portal or Insight app: Tap Manage with Insight.
   c. Then, continue with log in to the device UI to configure the switch.

Use another method to discover the switch

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

Log in to the device UI to configure the switch

You can use the switch as a plug-and-play device or play device that you can change the settings by logging in to the device user interface (UI).

1. Open an internet browser from a computer connected to the same network as your switch.
2. Enter the IP address of the switch in the address field of your web browser (see Table 1). You can use a wired or WiFi connection.
3. In the address field of your web browser, enter the IP address of the switch. To discover the IP address of the switch, use the NETGEAR Insight app or another discovery method (see another method to discover the switch). If the switch is connected to the Internet, the Register to activate your warranty page displays. However, if you already registered the switch with the NETGEAR Insight app, the Device UI login page displays, and you can continue with Step 4.

Continue on the next page
To manage the switch remotely from the cloud with the NETGEAR Insight Cloud Portal or Insight app, first change the management mode to Insight. By default, the management mode in the device UI is set to Directly Connect to Web Browser Interface, which lets you configure the switch from the device UI.

To change the management mode to Insight:

1. Open a web browser from a computer or tablet connected to the same network as your switch.
2. In the address field of your web browser, enter the IP address of the switch. You can use a wired or WiFi connection.
3. If you did not yet register the switch, the Register to activate your warranty page displays. For more information, see the user manual, which you can download by visiting MyNETGEAR.com.
4. If you did not yet register the switch, click one of the following buttons:
   - Skip Registration and Access the UI
   - Enter Registration Key

   You can register the switch and activate the warranty. For information about configuring the switch from the device UI, see the user manual, which you can download by visiting MyNETGEAR.com.

5. Select the NETGEAR Insight Mobile App and Insight Cloud Portal radio button.
6. In the pop-up window, click the OK button.
7. Click the Apply button.
8. 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 Cloud Portal or Insight app. We recommend that you use the Insight Cloud Portal.

Note: You can still log in to the device UI and access a limited menu, but instead of the device admin password, you now must enter the Insight network password for the Insight Cloud Portal or Insight app. We recommend that you use the Insight Cloud Portal.

To log in to the Insight Cloud Portal, enter the following information:

- **User Name**: deviceadmin
- **Password**: The password that you specified the first time that you logged in to the device UI.

PoE considerations (MS510TXUP only)

PoE power supplied by the switch is prioritized in ascending order (port 1 to port 8), with a total power budget of 295W across all active PoE++ ports.

The following 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.

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<tr>
<th>Device class</th>
<th>IEEE PoE standard</th>
<th>Device description</th>
<th>Measured power</th>
<th>Power delivered to the device</th>
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<td>PoE++, PoE+, and PoE+</td>
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<td>Full</td>
<td>15.4W</td>
</tr>
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<td>1</td>
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<td>Low power</td>
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<tr>
<td>2</td>
<td>PoE++, PoE+, and PoE+</td>
<td>Low power</td>
<td>2.75W</td>
<td>0.65W–0.7W</td>
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<td>3</td>
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<td>Mid power</td>
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<td>4.94W–5.2W</td>
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<td>PoE++, PoE+, and PoE+</td>
<td>High power</td>
<td>30.0W</td>
<td>13.05W–25.5W</td>
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<td>60.0W</td>
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PoE fault condition

A PoE-related short circuit occurred on the port.

The PoE power demand of the PD exceeded the classification limit of the PD. A PoE-related fault condition results. If the PoE Max LED is solid yellow, disconnect one or more PoE devices to prevent PoE oversubscription.

If the PoE LED is solid green, the PD is in oversubscription mode. Restart the switch, and proceed to the next step.

The PoE current on the port exceeded the classification limit of the PD. A PoE-related fault condition results. If the PoE Max LED is solid yellow, disconnect one or more PoE devices to prevent PoE oversubscription.

The PoE current on the port is outside the range that the switch permits. Reset the switch to see if the condition resolves itself. If the condition persists, contact your PoE device vendor to see if the device supports overclocking.

PoE troubleshooting (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.
- **If the PoE LED lights solid yellow**, a PoE fault occurred because of one of the conditions listed in the following table.

PoE considerations (MS510TXUP only)

PoE power supplied by the switch is prioritized in ascending order (port 1 to port 8), with a total power budget of 295W across all active PoE++ ports.

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