Installation Guide

5-Port Gigabit Ethernet Smart Managed Plus Switch with PoE+ (63W) GS305EP

5-Port Gigabit Ethernet Smart Managed Plus Switch with High-Power PoE+ (120W) GS305EPP

Package contents

- NETGEAR Smart Managed Plus Switch
- Power adapter
- Detachable power cable (varies by region)
- Wall installation kit
- Rubber feet
- Installation guide

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.

3. Check the LEDs

When you connect the power cord to the switch and plug it into an electrical outlet, the LEDs indicate the status.

<table>
<thead>
<tr>
<th>LED</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>Solid green. The switch is powered on and operating normally. Off. Power is not supplied to the switch.</td>
</tr>
<tr>
<td>PoE Max</td>
<td>Off. Sufficient (more 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.</td>
</tr>
<tr>
<td>Left port</td>
<td>Solid green. 1000 Mbps link on this port. Blinking green. 1000 Mbps activity on this port. Solid yellow. 100 Mbps or 10 Mbps link on this port. Blinking yellow. 100 Mbps or 10 Mbps activity on this port. Off. No link is detected on this port.</td>
</tr>
<tr>
<td>Right port</td>
<td>Solid green. The port is delivering PoE power. Off. The port is not delivering PoE power. Solid yellow. A PoE fault occurred.</td>
</tr>
</tbody>
</table>

Continued on the next page.

1. **Register with the NETGEAR Insight app**

   1. Search for **NETGEAR Insight** and download the latest app.
   2. Set up a NETGEAR account if you do not have one.
   3. Tap the menu in the upper left corner.
   4. Tap **REGISTER ANY NETGEAR DEVICE**.
   5. Enter the serial number located on the bottom of the switch, or use the camera on your mobile device to scan the serial number bar code.
   6. Tap **GO**.

   The switch is registered and added to your account. You can now view the switch in the NETGEAR Insight app.

2. **Connect the switch**

   ![Sample connection diagram]

   - **PoE WiFi access point**
   - **PoE VoIP Phone**
   - **Router**
   - **Internet**
   - **Laptop**

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

The PoE and PoE+ power supplied by the switch is prioritized in ascending port order: Ports 1–4 support PoE and PoE+ with a total power budget of 63W for the GS305EP and 120W for the GS305EPP.

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 connected to the higher-priority, lower-numbered ports are supported first.

A PD listed as an 802.3at PoE powered device does not necessarily require the maximum power limit of the specification. Many PDs require less power, potentially allowing more PoE ports to be active simultaneously.

The following table shows the standard power ranges calculated with the maximum cable length of 328 feet (100 meters).

<table>
<thead>
<tr>
<th>Device Class</th>
<th>Standard</th>
<th>Description</th>
<th>Power Reserved by the Device</th>
<th>Power Delivered to the Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>PoE and PoE+</td>
<td>Default power (full)</td>
<td>0.44W</td>
<td>0.44W–12.95W</td>
</tr>
<tr>
<td>1</td>
<td>PoE and PoE+</td>
<td>Very low power</td>
<td>4.0W</td>
<td>0.44W–3.84W</td>
</tr>
<tr>
<td>2</td>
<td>PoE and PoE+</td>
<td>Low power</td>
<td>7.0W</td>
<td>3.84W–6.49W</td>
</tr>
<tr>
<td>3</td>
<td>PoE and PoE+</td>
<td>Mid power</td>
<td>15.4W</td>
<td>6.49W–12.95W</td>
</tr>
<tr>
<td>4</td>
<td>PoE only</td>
<td>High power</td>
<td>30.0W</td>
<td>12.95W–25.5W</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>PoE Fault Condition</th>
<th>Possible Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>A PoE-related short circuit occurred on the port.</td>
<td>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.</td>
</tr>
<tr>
<td>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 and 30W for a PoE+ connection.</td>
<td>Restart the switch to see if the condition resolves itself.</td>
</tr>
<tr>
<td>The PoE current on the port exceeded the classification limit of the PD.</td>
<td></td>
</tr>
<tr>
<td>The PoE voltage on the port is outside the range that the switch permits</td>
<td></td>
</tr>
</tbody>
</table>

Mount the switch on a wall

We recommend that you use the wall-mount screws that came with the switch.

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.
3. Insert the supplied anchors into the wall and tighten the 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.

Note: The screws are 6.5 mm in diameter, 16 mm in length.

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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.

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