NETGEAR Installation Guide

ProSafe Light Wireless Access Point, WAGL102 or WGL102

Start Here

This guide describes installation for the WAGL102 ProSafe™ 802.11a/g Dual Band Light Wireless Access Point or WGL102 ProSafe 802.11g Light Wireless Access Point.

Note: The WAGL102 or WGL102 Light Wireless Access Points work only in conjunction with the WFS709TP ProSafe Smart Wireless Switch. In order to complete access point installation, the WFS709TP should be already configured and available on your network.

For instructions on advanced configuration options for access points, please refer to the WFS709TP ProSafe Smart Wireless Switch Software Administration Manual, which can be downloaded from http://www.netgear.com/support.

Estimated Completion Time: 20 minutes.

Installing the Access Point

1. Unpack the box and verify the contents, as follows:
   - WAGL102 ProSafe 802.11a/g Dual Band Light Wireless Access Point or WGL102 ProSafe 802.11g Light Wireless Access Point
   - Antenna:
     - WAGL102—one 2.4 GHz antenna and one 5 GHz antenna
     - WGL102—one 2.4 GHz antenna
   - Wall mounting screws
   - Straight through Category 5 Ethernet cable
   - Power adapter and cord (12 V dc, 1.2 A)
   - ProSafe Light Wireless Access Point, WAGL102 or WGL102 Installation Guide (this document)
   - Support Registration card

   Note: Contact your reseller or customer support in your area if there are any missing or damaged parts. You can refer to the Support Information Card for the telephone number of customer support in your area. You must keep the Support Information card, along with the original packing materials, and use the packing materials to repack the WAGL102 or WGL102 if you need to return it for repair.

2. Connect the access points directly to the WFS709TP ProSafe Smart Wireless Switch to configure them and to download firmware (for full instructions, see the documentation for the WFS709TP ProSafe Smart Wireless Switch).

3. Mount or place the access point where you intend to deploy it.

4. Power the access point by one of these methods:
   - Power adapter—connect to a power source using the supplied power adapter.
   - PoE (power over Ethernet)—connect an Ethernet cable between the access point’s 65 FE Port and:
     - A network port on a WFS709TP ProSafe Smart Wireless Switch, or
     - A network mid-span device that supports a 802.3af compliant port.

5. Orient the antenna (for best performance, a vertical position is recommended).

6. Verify successful installation by observing the LED status:

   LED | Color(s) | Activity | Action
   ---|---------|---------|------
   ENET (10/100 Mbps) | Green | Off | No link
   | Green | On | 10/100 Mbps link negotiated
   | Green flashing | 10/100 Mbps data activity
   WLAN LEDs | Green | Off | Wireless radio disabled
   | Green flashing | Wireless radio AP mode enabled
   | Green flashing | Wireless radio AM mode enabled

7. Complete your installation by defining the operational behavior for each access point in your network.

Troubleshooting Tips

Here are some tips for correcting simple problems you may have.

No lights are lit on the access point.
   - Make sure the Ethernet cable connectors (if used) are securely plugged in at the access point and the network device (hub, switch, or router).
   - Make sure the connected device is turned on.

The WLAN lights are not lit.
   - Disconnect the adapter from its power source and then plug it in again. Contact NETGEAR if the Wireless LAN lights remain off.

I cannot configure the access point from the WFS709TP ProSafe Smart Wireless Switch.
   - Check that the WAGL102 or WGL102 is properly installed, the LAN connections are OK, and that the LAN port LED is green. Check the operational status of the WFS709TP ProSafe Smart Wireless Switch.

Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>WAGL102 ProSafe 802.11a/g Dual Band Light Wireless Access Point</th>
<th>WAGL102 ProSafe 802.11g Light Wireless Access Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Clients</td>
<td>Limited by the amount of wireless network traffic generated by each node; typically 15 to 20 nodes.</td>
<td></td>
</tr>
<tr>
<td>Status LEDs</td>
<td>Power/Ethernet/WLAN/Test</td>
<td>Power/Ethernet/WLAN/Test</td>
</tr>
<tr>
<td>Power Adapter</td>
<td>12V DC, 1 A</td>
<td>12V DC, 1 A</td>
</tr>
<tr>
<td>Environmental Specifications</td>
<td>Operating temperature: 0 to 50° C</td>
<td>Operating temperature: 0 to 50° C</td>
</tr>
<tr>
<td></td>
<td>Operating humidity: 5-95%, non-condensing</td>
<td>Operating humidity: 5-95%, non-condensing</td>
</tr>
<tr>
<td>Antenna</td>
<td>WAGL102: One (1) external 5dBi 2.4 GHz detachable antenna and one (1) external 5 dBi 5GHz detachable antenna</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WGL102: One (1) external 5 dBi 2.4 GHz detachable antenna</td>
<td></td>
</tr>
<tr>
<td>Wireless LAN network standards</td>
<td>IEEE 802.11b, IEEE 802.11a and IEEE 802.11g</td>
<td>IEEE 802.11b, IEEE 802.11a and IEEE 802.11g</td>
</tr>
<tr>
<td>Radio technology</td>
<td>802.11b: 1 and 2 Mbps, Direct Sequence Spread Spectrum (DSSS) 802.11a: 6 Mbps, Orthogonal Frequency Division Multiplexing (OFDM)</td>
<td></td>
</tr>
<tr>
<td>Radio modulation type</td>
<td>802.11b: - BPSK, QPSK, 16-QAM, 64-QAM 802.11a: - OFDM, 64-QAM</td>
<td></td>
</tr>
<tr>
<td>Made Access</td>
<td>CSRUSA with ADD</td>
<td>CSRUSA with ADD</td>
</tr>
</tbody>
</table>
Compliance
Access Points are radio transmission devices and so are subject to governmental regulation. Network administrators responsible for the configuration and operation of Access Points must comply with local transmission regulations. Specifically, Access Points must use channel assignments appropriate to the location in which the Access Point will be used.

• WAGL102 or WGL102 Light Wireless Access Points are intended only for installation in Environment A as defined in IEEE 802.11. Power over Ethernet. All interconnected equipment must be contained within the same building, including the interconnected equipment’s associated LAN connections.
• When installed in an air-handling space, such as above suspended ceiling (plenum), the unit is required to be suitably marked for use in plenum and air-handling spaces with regard to smoke propagation, such as CL2-P, CL3-P, MPP or CMP.

Certifications

<table>
<thead>
<tr>
<th>Frequency Bands</th>
<th>2.412 - 2.4835GHz (Global), 5.18 - 5.32 GHz, 5.470 - 5.825 GHz, country specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission</td>
<td>802.11b/g: 1, 6, 11 at 1, 2, 5.5, 9, 11, 18, 33, 48, 54 Mbps; 802.11a: 6, 9, 12, 18</td>
</tr>
<tr>
<td>Typical Receive Sensitivity</td>
<td>802.11g mode at 6 Mbps: -91 dBm; 802.11g mode at 9 Mbps: -90 dBm; 802.11g mode at 24 Mbps: -84 dBm; 802.11g mode at 36 Mbps: -81 dBm; 802.11g mode at 48 Mbps: -77 dBm; 802.11g mode at 54 Mbps: -75 dBm; 802.11g mode at 108 Mbps: -79 dBm</td>
</tr>
</tbody>
</table>

Technical Support
Thank you for selecting NETGEAR products.

After completing installation, locate the serial number on the bottom label of the Light Wireless Access Point and use it to register your product at http://www.netgear.com/register.

Registering on the web site or over the phone is required before you can use our telephone support service. The phone numbers for worldwide regional customer support centers are on the Warranty and Support Information card that came with your product.

Go to http://www.netgear.com/support for product updates and web support.

This symbol was placed in accordance with the European Union Directive 2002-96 on the Waste Electrical and Electronic Equipment (the WEEE Directive). If disposal of within the European Union, this product should be treated and recycled in accordance with the laws of your jurisdiction implementing the WEEE Directive.