# Installation

#### **AC WiFi Business Access Point**

with NETGEAR Insight app for easy management



#### **Package Contents**

Unpack the box and verify the contents:

- NETGEAR® AC WiFi Business Access Point (WAC505 )
- Installation guide
- · Ceiling and wall installation kit
- Mounting installation guide

## **NETGEAR**<sup>®</sup>

#### Set Up the Access Point

The following table shows the different setup options that are available to you and the requirements for the access point (AP).

| Setup Option                         | Connect<br>Over | Power<br>Source  | Mode           | Extra<br>Requirements                                | Setup<br>Information   |
|--------------------------------------|-----------------|------------------|----------------|--|------------------------|
| AP to Ethernet<br>PoE Switch         | WAN port        | PoE              | AP mode        | None   | See this guide         |
| AP to Ethernet<br>non-PoE Switch     | WAN port        | Power<br>adapter | AP mode        | Order a power<br>adapter                             | See the user<br>manual |
| AP to DSL or cable<br>Internet modem | WAN port        | Power<br>adapter | Router<br>mode | Order a power<br>adapter<br>Change to<br>Router mode | See the user<br>manual |

Note: For more information about the various setup options, see the NETGEAR AC WiFi Business Access Point (WAC505) User Manual.

Before mounting the access point in a high location, first set up, configure, and test the access point to verify WiFi network connectivity.

#### > To set up the access point with a PoE switch:

Connect an Ethernet cable from the yellow WAN port on the access point to a Power over Ethernet (PoE) switch.

The WAN port on the access point also functions as a PoE port. In this setup, the access point does not require a power adapter.



The following table shows the LED behavior on the access point.

| LED                       | Description   |
|---------------------------|---|
| Ċ                         | •Off. Power is off.   |
|                           | •Solid green. Power is on and the access point is ready.  |
| Power LED                 | •Solid amber. During startup, the Power LED lights solid amber.<br>If after 5 minutes the LED remains solid amber, a boot error occurred.   |
|                           | •Fast blinking amber. Firmware update in progress.  |
| Activity LED              | •Off. No link with the network is detected.<br>•Solid green. A link with the network is detected.<br>•Blinking green. Network traffic is detected.  |
| WAN LED                   | •Off. No Ethernet link is detected.<br>•Solid amber. A 10/100 Mbps Ethernet link is detected.<br>•Solid green. A 1000 Mbps Ethernet link is detected.   |
| LAN LED                   | •Off. No Ethernet link is detected.<br>•Solid amber. A 10/100 Mbps Ethernet link is detected.<br>•Solid green. A 1000 Mbps Ethernet link is detected.   |
| 2.4 GHz<br>2.4G WLAN LED  | •Off. The 2.4 GHz WiFi radio is off.<br>•Solid green. The 2.4 GHz WiFi radio is on.<br>•Solid blue. One or more WLAN clients are connected to the 2.4 GHz radio.<br>•Blinking blue. WLAN traffic is detected on the 2.4 GHz radio |
| 5 GHz<br>•<br>5G WLAN LED | Off. The 5 GHz WiFi radio is off.     Solid green. The 5 GHz WiFi radio is on.     Solid blue. One or more WLAN clients are connected to the 5 GHz radio.     Blinking blue. WLAN traffic is detected on the 5 GHz radio.         |

#### **Configure the Access Point**

- > Choose one of the following methods to configure the access point:
  - Method 1: Use the NETGEAR Insight app. On your iOS or Android mobile device, go to the app store. Search for NETGEAR Insight, and download the app.



Open the NETGEAR Insight app and log in to your existing NETGEAR account or create a new account to log in with. Then, follow the prompts in the NETGEAR Insight app to discover and register the access point on the network so that you can configure and manage the access point.

Method 2: Log in over WiFi. From your computer or mobile device, connect over WiFi to the access point's default SSID. The default SSID is on the



bottom of the access point and is shown in the format NETGEARxxxxxx-SETUP. The default password is sharedsecret. Open a web browser. In

the address bar, enter www.routerlogin.net

(or www.aplogin.net). The Day Zero Easy Setup page displays so that you can configure the basic settings, including the country of operation. After you save these basic settings, the Day Zero Easy Setup page no longer displays when you log in.

Method 3: Log in over Ethernet. Open a web browser from a computer that is connected to the same Ethernet subnet as the access point or to the access point's LAN port directly through an Ethernet cable.

In the address bar, enter the IP address of the access point.



NETGEAR INTL LTD Building 3, University Technology Centre Curraheen Road, Cork, Ireland

Note: If the access point is connected to a network that includes a DHCP server (or router that functions as a DHCP server), determine the IP address by using an IP network scanner. Otherwise, the default IP address of the access point is 192.168.0.100. If you use an Ethernet cable from your computer to the access point's LAN port and the access point functions with its default IP address, make sure that the IP address of your computer is in the 192.168.0.x subnet.

The Day Zero Easy Setup page displays so that you can configure the basic settings, including the country of operation. After you save these basic settings, the Day Zero Easy Setup page no longer displays when you log in.

#### **Deploy the Access Point**

The best location for the access point is elevated, such as mounted on a wall or ceiling, at the center of the WiFi coverage area, and within line of sight of all mobile devices.

For information about mounting the access point, see the NETGEAR AC WiFi Business Access Point (WAC505) Ceiling and Wall Installation Guide.

- > To deploy the access point:
- 1. Disconnect the access point and position it where you will deploy it.
- 2. Reconnect the access point. See Set Up the Access Point.
- 3. Using a WiFi device, verify connectivity by connecting to the access point and using a browser to connect to the Internet.

#### **Troubleshooting Tips**

The following table provides some tips for correcting simple problems that you might encounter. For more troubleshooting information, see the NETGEAR AC WiFi Business Access Point (WAC505) User Manual.

| Problem   | Cause   | Possible Solution  |
|---|---|--|
| No LEDs are lit on the AP.                      | The AP is not<br>receiving power.                 | Make sure that the AP is securely connected to a PoE switch.     Make sure that the PoE switch is connected to a power source. |
| The Power LED<br>alternates green<br>and amber. | The AP is receiving<br>insufficient PoE<br>power. | Make sure that PoE switch is not overloaded.     Connect to a power source such as a 12V 2.5 A power adapter.                  |

| Problem   | Cause                                       | Possible Solution   |
|---|---|---|
| The WAN or<br>LAN port LEDs<br>are off.                                   | A hardware<br>connection<br>problem exists. | Make sure that the cable connectors are securely plugged into<br>the AP and the switch.     Make sure that the switch is turned on  |
| The WLAN LEDs are off.  | The WiFi<br>connection does<br>not work.    | • Make sure that the PoE switch is providing sufficient power to<br>the AP.<br>• Verify that the radio or radios are turned on.<br>• If the WLAN LEDs remain off, contact NETGEAR.  |
| You cannot<br>connect to<br>the AP from a<br>browser.                     | Multiple possible causes.                   | Make sure that your computer is using an IP address in the same<br>subnet as the AP. The AP default IP address is 192.168.0.100, and<br>the default subnet mask is 255.255.255.0.<br>Quit the browser, clear the cache, delete the cookies, and launch<br>the browser again.  |
| You cannot<br>access the<br>Internet or the<br>LAN from a WiFi<br>device. | A configuration problem exists.             | <ul> <li>Make sure that the SSID and WiFi security settings of the WiFi device are the same as those of the AP.</li> <li>The device might not be configured for the correct TCP/IP settings to communicate with the network. Restart the device and check that the TCP/IP settings are set up correctly for the network.</li> <li>The AP default values might not work with your network. Check the access point default configuration against the configuration of other devices in your network.</li> </ul> |

#### Support

Thank you for purchasing this NETGEAR product. You can visit www.netgear.com/support to register your product, get help, access the latest downloads and user manuals, and join our community. We recommend that you use only official NETGEAR support resources.

For more information about the installation and configuration options, visit www.netgear.com/support to access the user manual.

For the current EU Declaration of Conformity, visit http://support.netgear.com/app/answers/detail/a\_id/11621/.

For regulatory compliance information, visit http://www.netgear.com/about/regulatory/.

See the regulatory compliance document before providing power to the access point.

April 2017

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#### Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

For operation within 5.15  $\sim$  5.25GHz frequency range, it is restricted to indoor environment.

## Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 22cm between the radiator & your body.

#### Industry Canada statement:

This device complies with ISED's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d' ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

#### Caution :

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;

(iii) the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

(iv) the worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in Section 6.2.2(3) shall be clearly indicated.

(v) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

## Avertissement:

Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment :

(i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes de 5250 à 5 350 MHz et de 5470 à 5725 MHz doit être conforme à la limite de la p.i.r.e; (iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande de 5 725 à 5 850 MHz) doit être conforme à la limite de la p.i.r.e. spécifiée pour l'exploitation point à point et l'exploitation non point à point, selon le cas;

(iv) les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, et énoncée à la section 6.2.2 3), doivent être clairement indiqués.

(v) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

#### **Radiation Exposure Statement:**

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 26 cm between the radiator & your body.

#### Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 26 cm de distance entre la source de rayonnement et votre corps.