

Dell Networking 207 Series Access Points Installation Guide

The Dell Networking 207 Series wireless access points (W-AP207 and W-IAP207) support IEEE 802.11ac standards for high-performance WLAN, and are equipped with two radios. Multiple-in, Multiple-output (MIMO) technology allows the access points to deliver high-performance 802.11n 2.4 GHz and 802.11ac 5 GHz functionality, while also supporting 802.11a/b/g wireless services.

The W-AP207 access point works in conjunction with a Dell controller, while the W-IAP207 access point can be configured via a built-in virtual controller.

The 207 Series access points provide the following capabilities:

- Wireless transceiver
- IEEE 802.11a/b/g/n/ac operation as a wireless access point
- IEEE 802.11a/b/g/n/ac operation as a wireless air monitor
- Compatibility with IEEE 802.3af PoE
- Centralized management configuration and upgrade
- Integrated Bluetooth Low Energy (BLE) Radio

Package Contents

- 207 Series access point
- 9/16" and 15/16" Ceiling Rail Adapter (spare: AP-220-MNT-C1)
- Dell Networking 207 Series Access Points Installation Guide (printed version)
- Dell Networking 207 Series Access Points Regulatory Compliance and Safety Information Guide
- Dell Networking W-Series Instant Quick Start Guide (W-IAP207 only)
- Dell Networking W-Series Instant Access Point Professional Installation Guide Supplement (W-IAP207 only)



Note: Inform your supplier if there are any incorrect, missing, or damaged parts. If possible, retain the carton, including the original packing materials. Use these materials to repack and return the unit to the supplier if needed.

Software

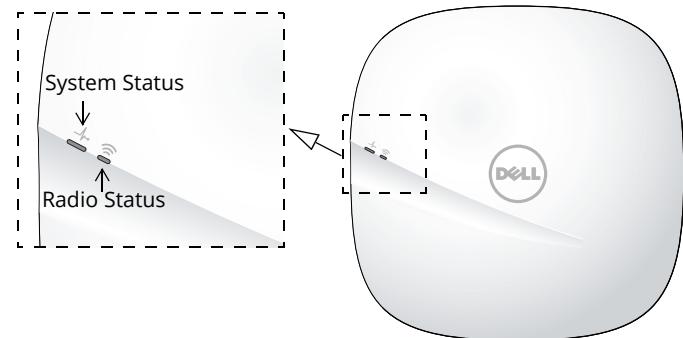
The W-AP207 access point requires AOS 6.5.1 or higher. For additional information, refer to the AOS User Guide and AOS Quick Start Guide.

The W-IAP207 access point requires Instant 4.3.1 or higher. For additional information, refer to the Instant User Guide and Instant Quick Start Guide.

CAUTION: Dell access points are classified as radio transmission devices, and are subject to government regulations of the host country. The network administrator(s) is/are responsible for ensuring that configuration and operation of this equipment meet all regulatory standards of their country/domain. For complete list of country-approved channels and devices, refer to the *Dell Networking W-Series Downloadable Regulatory Table (DRT) Release Notes* at download.dell-pcw.com.

Hardware Overview

Figure 1 Front



LEDs

The 207 Series access points have two LEDs that indicate the system and radio status of the device. These two LEDs can be configured via AOS (for W-AP207) or Instant (for W-IAP207) software for three separate modes:

- Normal mode (by default): See the LED table below
- Off mode: LEDs are off
- Blink mode: Both LEDs blink green (synchronized)

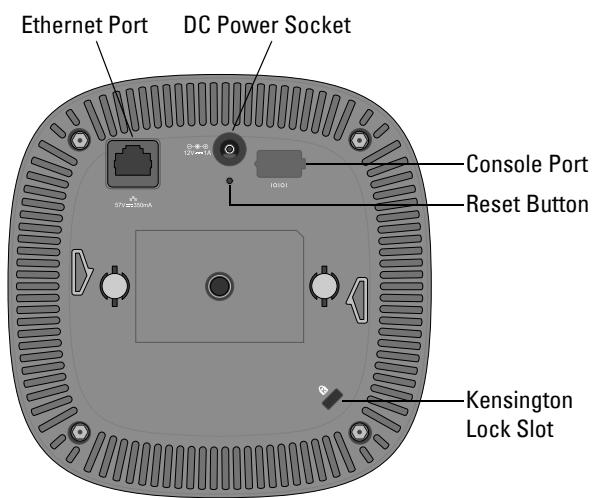
LED	Color/State	Meaning
System Status (Left)	Off	Device powered off
	Green-Blinking*	Device booting, not ready for use
	Green-Solid	Device ready for use, no restrictions
	Green-Flashing**	Device ready for use, uplink negotiated in sub optimal speed (<1Gbps)
	Red-Solid	System error condition

LED	Color/ State	Meaning
Radio Status (Right)	Off	Device powered off, or both radios disabled
	Green- Solid	Both radios enabled in access mode
	Green- Blinking	One radio enabled in access mode
	Amber- Solid	Both radios enabled in monitor mode
	Amber- Blinking	One radio enabled in monitor mode
	Alternating	<ul style="list-style-type: none"> ● Green: one radio in access mode ● Amber: one radio in monitor mode

* Blinking: 1s on/1s off

**Flashing: off a fraction of a second every 2s

Figure 2 Back Panel



Console Port

The serial console port is located at the back of the 207 Series access points and is a 4-pin connector covered by a dust cover. An optional serial adapter cable (AP-CBL-SER) is sold separately to connect the access points to a serial terminal or a laptop for direct local management.

Ethernet Port

The 207 Series access points are equipped with one 10/100/1000Base-T (RJ-45) auto-sensing, MDI/MDX Ethernet port (ENET0) for wired network connectivity. This port supports IEEE 802.3af Power over Ethernet (PoE), as a standard defined Powered Device (PD) from a Power Sourcing Equipment (PSE) such as a PoE midspan injector or network infrastructure that supports PoE.

Kensington Lock Slot

The 207 Series access points are equipped with a Kensington lock slot for additional security.

Reset Button

To reset the 207 Series access points to factory default settings, press and hold down the reset button using a small, narrow object such as a paper clip while the access points are powered on.

DC Power Socket

If PoE is not available, an optional AP-AC-12V30B power adapter kit (sold separately) can be used to power the 207 Series access points.

Additionally, a locally-sourced AC-to-DC adapter (or any DC source) can be used to power this device, as long as it complies with all applicable local regulatory requirements and the DC interface meets the following specifications:

- 12 Vdc (+/- 5%) and at least 12W
- Center-positive 2.1/5.5 mm circular plug, 9.5 mm length

Before You Begin

CAUTION: FCC Statement: Improper termination of access points installed in the United States configured to non-US model controllers will be in violation of the FCC grant of equipment authorization. Any such willful or intentional violation may result in a requirement by the FCC for immediate termination of operation and may be subject to forfeiture (47 CFR 1.80).



ATTENTION: Déclaration FCC l'arrêt incorrect des points d'accès installés aux États-Unis qui sont configurés sur des contrôleurs autres que le modèle agréé aux États-Unis est considéré comme contrevenant à l'homologation FCC. Toute violation délibérée ou intentionnelle de cette condition peut entraîner une injonction d'arrêt immédiat de son utilisation par la FCC et peut déboucher sur la confiscation de l'équipement (47 CFR 1.80).

Verifying Pre-Installation Connectivity

CAUTION: EU Statement:

Lower power radio LAN product operating in 2.4 GHz and 5 GHz bands. Please refer to the *User Guide* for details on restrictions.



Produit réseau local radio basse puissance operant dans la bande fréquence 2.4 GHz et 5 GHz. Merci de vous referrer au manuel utilisateur pour les détails des restrictions.

Low Power FunkLAN Produkt, das im 2.4 GHz und im 5 GHz Band arbeitet. Weitere Informationen bezüglich Einschränkungen finden Sie im Benutzerhandbuch..

Apparati Radio LAN a bassa Potenza, operanti a 2.4 GHz e 5 GHz. Fare riferimento alla manuale utente per avere informazioni dettagliate sulle restrizioni.

Access Point Pre-Installation Checklist

Before installing your 207 Series access points, ensure that you have the following:

- Cat5E or better UTP cable of required length
- One of the following power sources:
 - IEEE 802.3af-compliant Power over Ethernet (PoE) source.
 - Dell AP-AC-12V30B power adapter kit (sold separately)

For W-AP207 only:

- Dell Controller provisioned on the network:
 - Layer 2/3 network connectivity to your access point
- One of the following network services:
 - Aruba Discovery Protocol (ADP)
 - DNS server with an “A” record
 - DHCP Server with vendor-specific options



Note: Dell access points are designed in compliance with governmental requirements, so that only authorized network administrators are permitted to change the settings for this device. For more information about access point configuration, refer to the Quick Start Guide and User Guide for your device.



Note: The instructions for this section are applicable to the W-AP207 only.

Before installing access points in a network environment, make sure that they are able to locate and connect to the controller after power on.

Specifically, you must verify the following conditions:

- When connected to the network, each access point is assigned a valid IP address
- Access points are able to locate the controller

Refer to the AOS Quick Start Guide for instructions on locating and connecting to the controller.

Pre-Installation Network Requirements



Note: The instructions for this section are applicable to the W-AP207 only.

After WLAN planning is complete and the appropriate products and their placement have been determined, the Dell controller(s) must be installed and initial setup performed before the Dell access points are deployed.

For initial setup of the controller, refer to the AOS Quick Start Guide for the software version installed on your controller.

Identifying Specific Installation Locations

You can mount the 207 Series access point on the ceiling or a wall. Use the access point placement map generated by Dell VisualRF Plan software application to determine the proper installation location(s). Each location should be as close as possible to the center of the intended coverage area and should be free from obstructions or obvious sources of interference. These RF absorbers/reflectors/interference sources will impact RF propagation and should have been accounted for during the planning phase and adjusted for in RF plan.

Identifying Known RF Absorbers, Reflectors and Interference Sources

Identifying known RF absorbers, reflectors, and interference sources while in the field during the installation phase is critical. Make sure that these sources are taken into consideration when you attach an access point to its fixed location. Examples of sources that degrade RF performance include:

- Cement and brick
- Objects that contain water
- Metal
- Microwave ovens
- Wireless phones and headsets

Installing the Access Point

The 207 Series access points ship with two ceiling rail adapters for 9/16" and 15/16" ceiling rails. Additional ceiling rail adapters for other rail styles and wall mount adapters are available as accessory kits.

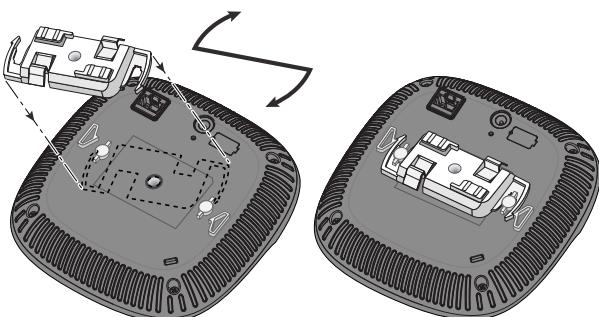
CAUTION: All Dell access points should be professionally installed by certified technician. The technician is responsible for ensuring that grounding is available that meets applicable regional regulatory and electrical standards.



ATTENTION: Tous les points d'accès Dell doivent impérativement être installés par un professionnel agréé. Ce dernier doit s'assurer que l'appareil est mis à la terre et que le circuit de mise à la terre est conforme aux codes électriques nationaux en vigueur.

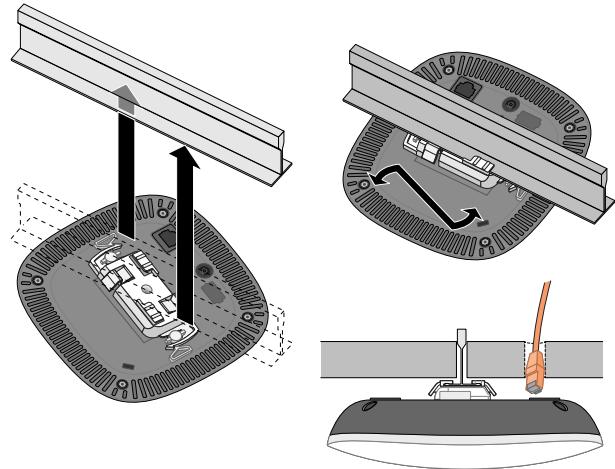
1. Pull the necessary cables through a prepared hole in the ceiling tile near where the access point will be placed.
2. Place the adapter against the back of the access point with the adapter at an angle of approximately 30 degrees to the tabs (see [Figure 3](#)).
3. Twist the adapter clockwise until it snaps into place in the tabs (see [Figure 3](#)).

Figure 3 Attaching the Ceiling Rail Adapter



4. Hold the access point next to the ceiling tile rail with the ceiling tile rail mounting slots at approximately a 30-degree angle to the ceiling tile rail (see [Figure 4](#)). Make sure that any cable slack is above the ceiling tile.
5. Pushing toward the ceiling tile, rotate the access point clockwise until the device clicks into place on the ceiling tile rail.

Figure 4 Mounting the Access Point



Connecting Required Cables

Install cables in accordance with all applicable local and national regulations and practices.

Verifying Post-Installation Connectivity

The integrated LEDs on the access point can be used to verify that the access point is receiving power and initializing successfully (see [Figure 1](#)). Refer to the Quick Start Guide for further details on verifying post-installation network connectivity.

Configuring the 207 Series



Note: The instructions for this section are applicable to the W-AP207 access points only.

Access Point Provisioning/Reprovisioning

Provisioning parameters are unique to each access point. These local access point parameters are initially configured on the controller which are then pushed out to the access point and stored on the access point itself. Dell recommends that provisioning settings be configured via the AOS Web UI only. Refer to the AOS User Guide for complete details.

Access Point Configuration

Configuration parameters are network or controller specific and are configured and stored on the controller. Network configuration settings are pushed out to the access point but remain stored on the controller.

Configuration settings can be configured via the AOS Web UI or AOS CLI. Refer to the respective guides for further details.

Contacting Dell

Website Support	
Main Website	dell.com
Contact Information	dell.com/contactdell
Support Website	dell.com /support
Documentation Website	dell.com /support/manuals

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