



Dell PowerConnect W-AP105 Access Point

The multifunction Dell™ PowerConnect™ W-AP105 is an affordable indoor, dual-radio 802.11n access point (AP) designed for high-density deployments in offices, hospitals, schools and retail stores. The compact, high-speed W-AP105 delivers wire-like performance at data rates up to 300 Mbps per radio. The W-AP Access Points and W-Series Controllers complement Dell's existing PowerConnect portfolio of networking solutions, and securely and efficiently extend wired network capabilities to the mobile workforce.

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The W-AP105 features two 2x2 MIMO dual-band 2.4-GHz/5-GHz radios with two internal omni-directional antennas. With ceiling and wall-mounting options, the AP105 is built to provide years of trouble-free operation and is backed by a one-year warranty.

Working with Dell's line of centralized PowerConnect W Series Controllers, the W-AP105 delivers secure, high-speed wireless network services for user mobility that works seamlessly within enterprise, branch and campus network deployments.

802.11n enables the use of wireless as a primary connection with speed and reliability comparable to a wired LAN. It also increases performance by utilizing techniques such as channel bonding, block acknowledgement and MIMO radios. Advanced antenna technology also increases range and reliability.

Key to ensuring wire-like performance and reliability is Dell's unique Adaptive Radio Management (ARM) capability, which manages the 2.4-GHz and 5-GHz radio bands to deliver maximum client performance. ARM enables mixed 802.11a, b, g and n clients to interoperate at the highest performance levels via band steering, airtime fairness between clients and mitigating channel interference between APs.

The multifunction W-AP105 can be configured through the controller to provide wireless LAN (WLAN) access with part-time air monitoring, dedicated air monitoring for wireless intrusion protection, Remote AP (RAP) functionality or secure enterprise

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Managed Access point with
802.11n performance and
automated configuration for
reduced deployment time

Specifications

Operating modes

- Multiservice concurrent 802.11a/n + b/g/n WLAN
- Can be configured to operate individually or simultaneously as:
 - 802.11a/b/g/n access point
 - Air monitor
 - Remote AP
 - Secure enterprise mesh
- Backward compatible with 802.11a/b/g and mixed-mode 11a/b/g/n deployments

Radios

- Multifunction, dual radio capable of 2.4-GHz and 5-GHz operation
- Both 802.11n radios implement 2x2 MIMO with two spatial streams, providing up to 300 Mbps data rate per radio
- Maximal ratio combining (MRC) for improved receiver performance

Wireless radio specifications

- Supported frequency bands (country-specific restrictions apply):
 - 2.400 to 2.4835 GHz
 - 5.150 to 5.250 GHz with Dynamic Frequency Selection (DFS) capability
 - 5.250 to 5.350 GHz with Dynamic Frequency Selection (DFS) capability
 - 5.470 to 5.725 GHz with Dynamic Frequency Selection (DFS) capability
 - 5.725 to 5.850 GHz with Dynamic Frequency Selection (DFS) capability
- Available channels: Controller-managed, dependent upon configured regulatory domain
- Transmit power:
 - 2.4 GHz: Up to 23 dBm (limited by local regulatory requirements)
 - 5 GHz: Up to 23 dBm (limited by local regulatory requirements)
 - Transmit power configurable in increments of 0.5 dBm
- Supported radio technologies:
 - 802.11b: Direct-sequence spread-spectrum (DSSS)
 - 802.11a/g/n: Orthogonal frequency division multiplexing (OFDM)
 - 802.11n: 2x2 MIMO with 2 spatial streams
- Supported modulation types:
 - 802.11b: BPSK, QPSK, CCK
 - 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM
- Association rates (Mbps):
 - 802.11b: 1, 2, 5.5, 11
 - 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54
 - 802.11n: MCS0 - MCS15 (6.5 Mbps to 300 Mbps)
 - 802.11n high-throughput (HT) support: HT 20/40
 - 802.11n packet aggregation: A-MPDU, A-MSDU

Antenna

- 4 x integrated, omni-directional antennas (supporting up to 2x2 MIMO with spatial diversity)
- Maximum antenna gain:
 - 2.4 GHz/2.5 dBi
 - 5.150 GHz to 5.875 GHz/4.0 dBi

Interfaces

- 1 x 10/100/1000BASE-T Ethernet (RJ-45), auto-sensing, MDI/MDX
- 1 x RJ-45 console interface

Power options

- 48V DC 802.3af or 802.3at PoE+
- External AC power providing 12V DC to AP (adapter sold separately)
- Maximum power consumption: 12.5 watts

Mounting

- Ceiling tile rail (15/16" & 9/16" recessed or non-recessed)
- Desk stand and wall outlet mount plate
- Wall box mount bracket (for US single gang wall mount)
- Solid wall stand-off

Mechanical

- 132 mm x 135 mm x 45 mm (5.2" x 5.3" x 1.8")
- Weight: 300g (10.56 oz)

Certifications

- Wi-Fi certified: 802.11a/b/g/n, Wi-Fi Multimedia (WMM)
- WPA, WPA2, 802.1X

Extended Life Warranty*

Select PowerConnect products carry an Extended Life Warranty with Basic Hardware Service (repair or replacement) for as long as you own the product. *Warranty extends until five years after end of product model sales. PowerConnect switches not only provide the quality, reliability and capability you expect from Dell, but also the protection that comes with an Extended Life Warranty.

[Details at Dell.com/warranty](http://Dell.com/warranty)



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*Select PowerConnect products carry an Extended Life Warranty with Basic Hardware Service. Warranty covers repair or replacement of the product for as long as it remains in use by the customer. In the event of discontinuance of product manufacture, Dell Extended Life Warranty extends until five (5) years after end of product model sales. Warranty limits fan and power supply to five (5) years from date of purchase. Warranty does not include troubleshooting, configuration, or other advanced service provided by Dell ProSupport. For more information see dell.com/warranty.

Learn more at Dell.com/PowerConnect-W-Series

