



Dell PowerConnect W-IAP105 Instant Access Points

Dell™ PowerConnect™ W-IAP105 is feature rich 802.11n based dual radio, dual band access points (AP) with built in virtualized controller functionality that delivers the affordability and simplicity of an entry-level enterprise-grade Wi-Fi network.

The W-IAP105 has dual radio, each radio capable of working in either 2.4 or 5GHz band, (dual radio, dual band) and has built in internal Omni-directional antennas.

Virtual controller technology

The virtual controller technology in PowerConnect W-IAP105 delivers enterprise-grade controller capabilities without needing a separate access point controller. The virtual controller in a single IAP is capable of controlling up to fifteen other IAPs, supporting total of 256 users that are either local or dispersed across multiple locations. Like dedicated controller it is able to perform all key task from AP auto discovery, 802.1X authentication, role- and device-based policy enforcement, rogue detection as well as specialized Adaptive Radio Management (ARM) task that optimizes Wi-Fi client behavior by making sure that IAPs stay clear of RF interference. When multiple IAPs are connected together, a single IAP acts as a primary virtual controller. In the event of primary virtual controller failure, another W-series IAP in a chain automatically takes on the role with no disruption to services.

Ease of deployment

PowerConnect W-IAP is up and running in minutes. From a laptop, simply connect wirelessly to an SSID to perform over-the-air provisioning in three easy steps. To expand, just install more PowerConnect W IAP – configurations are automatically uploaded from the designated Virtual Controller.

Management and visibility

Multiple PowerConnect W-IAP networks can be securely and centrally managed by Dell PowerConnect W-Series AirWave software management suite, allowing W-IAPs to operate hundreds of remote locations. With Dell PowerConnect W-Series AirWave, IT has real-time visibility into users, mobile devices, Wired and Wireless LANs infrastructure all from a single management console.

Investment protection

As WLAN requirements expand, PowerConnect W-IAP can be re-imaged as an 802.11n campus AP and migrate to a centralized Mobility Controller architecture capable of supporting hundreds and thousands of APs. Firmware to covert IAP to campus AP is expected to be available by early 2012. In addition to providing WLAN access, campus APs in a centralized, controller architecture can provide wireless intrusion protection and powerful spectrum analysis capabilities.

High performance, feature rich, 802.11n indoor wireless AP with built in virtual controller that delivers the affordability and simplicity of an entry-level enterprise grade Wi-Fi network.

Specifications

Operating mode

- Multiservice concurrent 802.11a/n or b/g/n WLAN
- Backward compatible with 802.11a/b/g and mixed-mode 11a/b/g/n deployments

Radios

- Multifunctional dual radio capable of supporting 2.4 GHz and 5 GHz operation
- 802.11n radio implements 2x2 MIMO with 2 spatial streams, providing up to 300 Mbps data rate per radio

Wireless radio specifications

- Supported frequency bands (country-specific restrictions apply):
 - 2.400 to 2.4835 GHz
 - 5.150 to 5.250 GHz, 5.250 to 5.350 GHz, 5.470 to 5.725 GHz, 5.725 to 5.850 GHz with dynamic frequency selection (DFS) capability
- Available channels: dependent upon configured regulatory domain
- Transmit power: Configurable in increments of 0.5 dBm
 - 2.4GHz: Up to 23 dBm (limited by local regulatory requirements)
 - 5 GHz: up to 23 dBm (limited by local regulatory requirements)
- 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 - 300 Mbps)
 - 802.11n high-throughput (HT) Support: HT 20/40
 - 802.11n packet aggregation: A-MPDU, A-MSDU

RF management

- Automatic transmit power and channel management control with auto coverage hole correction via Adaptive Radio Management (ARM)
- Maximum ratio combining (MRC) for improved receiver performance

Advanced features

- Wireless intrusion detection
- Integrated Trusted Platform Module (TPM) for secure storage of credentials and keys

*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.

Antenna

- 4 x integrated, Omni-directional antenna elements (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 link speed and MDI/MDX
- 1 x RJ-45 Console Interface

Power options

- Ethernet IEEE 802.3af power over Ethernet (48 V DC)
- External AC power providing 12 V DC to AP (adapter sold separately)
- Maximum power consumption: 12.5 watts

Mounting

- Wall Mount
- Ceiling tile rail (15/16" & 9/16" recessed or non-recessed)

Mechanical

- 132 mm x 135 mm x 45 mm (5.2" x 5.3" x 1.8")
- Weight: 300g (10.6 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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Learn more at Dell.com/PowerConnect-W-Series

