



# Professional Installation Guide Supplement

Read this document before installing and using your product. Products covered in this supplement are listed in the following table.

Part Number	Description
W-IAP92	Dell PowerConnect W-IAP92 Instant Access Point, 802.11abgn, dual-band, single radio, antenna connectors. Unrestricted Regulatory Domain. These products should be considered as "Rest of World" products and <b>must not</b> be used for deployments in the United States or Japan.
W-IAP92-US/JP	Dell PowerConnect W-IAP92 Instant Access Point, 802.11abgn, dual-band, single radio, antenna connectors. Restricted Regulatory Domain - US/JP
W-IAP104	Dell PowerConnect W-IAP104 Wireless Access Point. Unrestricted Regulatory Domain. These products should be considered as 'Rest of World' products and must not be used for deployments in the United States or Japan.
W-IAP104-US/JP	Dell PowerConnect W-IAP104 Wireless Access Point. Restricted Regulatory Domain - US/JP
W-IAP134	Dell PowerConnect W-IAP134 Wireless Access Point, 802.11abgn, 3x3:3, dual radio, antenna connectors. Unrestricted Regulatory Domain. These products should be considered as 'Rest of World' products and must not be used for deployments in the United States or Japan.
W-IAP134-US/JP	Dell PowerConnect W-IAP134 Wireless Access Point, 802.11abgn, 3x3:3, dual radio, antenna connectors. Restricted Regulatory Domain - US/JP
W-IAP175P	Dell PowerConnect W-IAP175P Instant Access Point, 802.11n dual 2x2 320mW; POE
W-IAP175P-US/JP	Dell PowerConnect W-IAP175P Instant Access Point, 802.11n dual 2x2 320mW; POE. Restricted Regulatory Domain -US/JP
W-IAP175AC	Dell PowerConnect W-IAP175AC Outdoor Access Point, 802.11n 2x2 dual radio 320mW; AC powered (with PSE)
W-IAP175AC-US/JP	Dell PowerConnect W-IAP175AC Outdoor Access Point, 802.11n 2x2 dual radio 320mW; AC powered (with PSE). Restricted Regulatory Domain - US/JP
W-IAP108	Dell PowerConnect W-IAP108 Wireless Access Point, 802.11a/b/g/n, 2x2:2, dual radio, antenna connectors.
W-IAP108-US/JP	Dell PowerConnect W-IAP108 Wireless Access Point, 802.11a/b/g/n, 2x2:2, dual radio, antenna connectors - Restricted regulatory domain: United States or Japan



**NOTE:** For the latest information and documentation related to this product, see [dell.com/support/manuals](http://dell.com/support/manuals).

This device must be installed and used in strict accordance with the manufacturer's instructions. This product is suitable for installation in plenum spaces (air handling). Only power adapters approved by the manufacturer may be used. For replacement, contact your supplier or distributor.

Installation of this product must comply with local regulations and codes. When this product is used with an external antenna/s, please refer to the installation documentation provided for the antenna/s.

Changes or modifications to the device not approved by the manufacturer of the product could void the user's authority to operate the equipment and will void the warranty of the product. No user serviceable parts; all repairs and service must be handled by a qualified service center.

All products using external antennas must be professionally installed, and the transmit power of the system must be adjusted by the professional installer/s to ensure that the system's EIRP (Equivalent Isotropically Radiated Power) is in compliance with the limit specified by the regulatory authority of the country of deployment.

During deployment of the system and its initial setup, professional installer must ensure that the allowed EIRP limit is not exceeded (in the Country of exploitation of this equipment). To achieve this, the professional installer must use the approved/recommended antennas by Dell.

The professional installer must enter the antenna gain in Controller software, using the following steps:

1. Login to the Instant UI.
2. In the Instant UI, navigate to the **Access Point** tab, select the specific access point and then click **edit**.
3. In the **Edit Access Point** window, select **External Antenna** to configure the antenna gain value. This option is available only for access points (W-IAP134/92) with external antenna support.
4. Enter the antenna gain values (dBm) for 2.4GHz and 5GHz bands.

Additional attenuation between the device and antenna may have to be measured or calculated.

The following formula can be used to calculate the EIRP limit related RF power based on selected antennas (antenna gain) and feeder (Coaxial Cable loss): **EIRP = Tx RF Power (dBm) +GA (dB) - FL (dB)**

**Table 1** *Formula Variable Definitions*

<b>Parameter</b>	<b>Description</b>
EIRP	Limit specific for each country of deployment
Tx RF Power	RF power measured at RF connector of the unit
GA	Antenna gain
FL	Feeder loss (including the connectors' loss)

# Antenna Types and Maximum Antenna Gains

Table 2 contains the maximum allowable antenna gains for the supported products.

**Table 2** *Antenna Types and Gain Values*

Frequency Band	Type	Gain (dBi)
2.4 GHz	Dipole/Omni	6
	Panel	12
	Sector	12
5 GHz	Dipole/Omni	6
	Panel	14
	Sector	14




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**NOTE:** The antenna information provided above reflects approved antennas for the initial release of the device. For a full list of antennas approved/recommended by the manufacturer, contact your Dell sales representative.

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