



# Dell Networking W-Series Instant Access Point Professional Installation Guide Supplement

Read this document before installing and using a Dell Networking W-Series Instant Access Point. Products covered by this supplement are listed in the following table:

| Part Number      | Description   |
|------------------|---|
| W-IAP92          | Dell W-IAP92 Wireless Instant Access Point, 802.11n, 2x2:2, dual-band, single radio, antenna connectors. Unrestricted Regulatory Domain.<br><b>NOTE:</b> These products should be considered as 'Rest of World' products and must not be used for deployments in the United States and Japan. |
| W-IAP92-US/JP    | Dell W-IAP92 Wireless Instant Access Point, 802.11n, 2x2:2, dual-band, single radio, antenna connectors. Restricted Regulatory Domain - United States/Japan.  |
| W-IAP104         | Dell W-IAP104 Wireless Instant Access Point, 802.11n, 2x2:2, dual radio, antenna connectors. Unrestricted Regulatory Domain.<br><b>NOTE:</b> These products should be considered as 'Rest of World' products and must not be used for deployments in the United States and Japan.             |
| W-IAP104-US/JP   | Dell W-IAP104 Wireless Instant Access Point, 802.11n, 2x2:2, dual radio, antenna connectors. Restricted Regulatory Domain - United States/Japan.  |
| W-IAP134         | Dell W-IAP134 Wireless Instant Access Point, 802.11n, 3x3:3, dual radio, antenna connectors. Unrestricted Regulatory Domain.<br><b>NOTE:</b> These products should be considered as 'Rest of World' products and must not be used for deployments in the United States and Japan.             |
| W-IAP134-US/JP   | Dell W-IAP134 Wireless Instant Access Point, 802.11n, 3x3:3, dual radio, antenna connectors. Restricted Regulatory Domain - United States/Japan.  |
| W-IAP175P        | Dell W-IAP175P Wireless Instant Outdoor Access Point, 802.11n, 2x2:2, dual radio, 320mW, POE.   |
| W-IAP175P-US/JP  | Dell W-IAP175P Wireless Instant Outdoor Access Point, 802.11n, 2x2:2, dual radio, 320mW, POE. Restricted Regulatory Domain - United States/Japan  |
| W-IAP175AC       | Dell W-IAP175AC Wireless Instant Outdoor Access Point, 802.11n, 2x2:2, dual radio, 320mW, AC powered (with PSE).  |
| W-IAP175AC-US/JP | Dell W-IAP175AC Wireless Instant Outdoor Access Point, 802.11n, 2x2:2, dual radio, 320mW, AC powered (with PSE). Restricted Regulatory Domain - United States/Japan.  |
| W-IAP108         | Dell W-IAP108 Wireless Instant Access Point, 802.11n, 2x2:2, dual radio, antenna connectors.<br><b>NOTE:</b> These products should be considered as 'Rest of World' products and must not be used for deployments in the United States and Japan.   |
| W-IAP108-US/JP   | Dell W-IAP108 Wireless Instant Access Point, 802.11n, 2x2:2, dual radio, antenna connectors. Restricted Regulatory Domain - United States/Japan.  |
| W-IAP224-RW      | Dell W-IAP224 Wireless Instant Access Point, 802.11ac, 3x3:3, dual radio, antenna connectors. Restricted Regulatory Domain - Rest of World (excludes United States and Japan)   |
| W-IAP224-US/JP   | Dell W-IAP224 Wireless Instant Access Point, 802.11ac, 3x3:3, dual radio, antenna connectors. Restricted Regulatory Domain - United States/Japan  |
| W-IAP114-RW      | Dell W-IAP114 Wireless Instant Access Point, 802.11n, 3x3:3, dual radio, antenna connectors. Restricted Regulatory Domain - Rest of World (includes Japan, excludes United States)  |
| W-IAP114-US      | Dell W-IAP114 Wireless Instant Access Point, 802.11n, 3x3:3, dual radio, antenna connectors. Restricted Regulatory Domain - United States   |

| Part Number    | Description  |
|----------------|--|
| W-IAP274-RW    | Dell W-IAP274 Wireless Instant Access Point, Outdoor, 802.11ac, 3x3:3, dual radio, antenna connectors. Restricted Regulatory Domain - Rest of World (includes Japan, excludes United States) |
| W-IAP274-US    | Dell W-IAP274 Wireless Instant Access Point, Outdoor, 802.11ac, 3x3:3, dual radio, antenna connectors. Restricted Regulatory Domain - United States.   |
| W-IAP214-RW    | Dell W-IAP214 Wireless Instant Access Point, 802.11ac, 3x3:3, dual radio, antenna connectors. Restricted Regulatory Domain - Rest of World (excludes United States and Japan)                |
| W-IAP214-US/JP | Dell W-IAP214 Wireless Instant Access Point, 802.11ac, 3x3:3, dual radio, antenna connectors. Restricted Regulatory Domain - United States/Japan   |
| W-IAP204-RW    | Dell W-IAP204 Wireless Instant Access Point, 802.11ac, 2x2, dual radio, antenna connectors. Restricted Regulatory Domain - Rest of World (excludes United States and Japan)                  |
| W-IAP204-US/JP | Dell W-IAP204 Wireless Instant Access Point, 802.11ac, 2x2, dual radio, antenna connectors. Restricted Regulatory Domain - United States/Japan   |



**NOTE:** For the latest product information and documentation, visit [dell.com](http://dell.com)

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 external antennas, refer to the installation documentation provided for the antennas. 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 installers 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 gain for each antenna in the Dell Instant User Interface (UI), using the following steps:

1. Log in to the Dell Instant UI.
2. Navigate to the **Access Point** tab. Select the required 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 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):  $EIRP = Tx\ RF\ Power\ (dBm) + GA\ (dB) - FL\ (dB)$

| Parameter | Description                                   |
|-----------|---|
| EIRP      | Limit specific for each country of deployment |

| Parameter   | Description                                   |
|-------------|---|
| Tx RF Power | RF power measured at RF connector of the unit |
| GA          | Antenna gain                                  |
| FL          | Feeder loss (including the connectors' loss)  |

For example, the maximum gain that can be configured on an IAP-134 with AP-ANT-1F dual-band and omnidirectional antenna is as follows:

| Frequency Band | Gain (dBi) |
|----------------|------------|
| 2.4-2.5 GHz    | 2.0 dBi    |
| 4.9-5.875 GHz  | 5.0 dBi    |




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**NOTE:** For information on antenna gain recommended by the manufacturer and for a full list of antennas approved/recommended by the manufacturer, visit [dell.com](http://dell.com) or contact your Dell sales representative.

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## 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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