Professional Installation Guide

Supplement

Read this document before installing and using your product. Products covered in this supplement are listed in Table 1.

Table 1 *Supported Products*

Part Number	Description
OAW-IAP92	AOS-W Instant OAW-IAP92 Wireless Access Point, 802.11abgn, dual-band, single 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, Japan or Israel
OAW-IAP92-US/IL/JP	AOS-W Instant OAW-IAP92 Wireless Access Point, 802.11abgn, dual-band, single radio, antenna connectors. Restricted Regulatory Domain - US/IL/JP
OAW-IAP104	AOS-W Instant OAW-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, Japan or Israel.
OAW-IAP104-US/JP	AOS-W Instant OAW-IAP104 Wireless Access Point. Restricted Regulatory Domain - US/JP
OAW-IAP134	AOS-W Instant OAW-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, Japan or Israel
OAW-IAP134-US/IL/JP	AOS-W Instant OAW-IAP134 Wireless Access Point, 802.11abgn, 3x3:3, dual radio, antenna connectors. Restricted Regulatory Domain - US/IL/JP
OAW-IAP175P	AOS-W Instant OAW-IAP175P, 802.11n dual 2x2 320mW; POE
OAW-IAP175P-US/JP	AOS-W Instant OAW-IAP175P, 802.11n dual 2x2 320mW; POE. Restricted Regulatory Domain -US/JP
OAW-IAP175AC	AOS-W InstantOAW-IAP175AC Outdoor Access Point, 802.11n 2x2 dual radio 320mW; AC powered (with PSE)
OAW-IAP175AC-US/JP	AOS-W Instant OAW-IAP175AC Outdoor Access Point, 802.11n 2x2 dual radio 320mW; AC powered (with PSE). Restricted Regulatory Domain - US/JP
OAW-RAP3WN	AOS-W Instant OAW-RAP3WN 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, Japan or Israel.
OAW-RAP3WN-US/IL/JP	AOS-W Instant OAW-RAP3WN Wireless Access Point with POE support. Restricted Regulatory Domain - US/IL/JP
OAW-RAP3WNP	AOS-W Instant OAW-RAP3WN Wireless Access Point with POE support. Unrestricted Regulatory Domain. These products should be considered as 'Rest of World' products and must not be used for deployments in the United States, Japan or Israel.
OAW-RAP3WNP-US/IL/JP	AOS-W Instant OAW-RAP3WNP Wireless Access Point with POE support. Restricted Regulatory Domain - US/IL/JP

Table 1 *Supported Products*

Part Number	Description
OAW-RAP108	AOS-W Instant OAW-RAP108 Wireless Access Point, 802.11a/b/g/n, 2x2:2, dual radio, antenna connectors.
OAW-RAP108-US/JP	AOS-W Instant OAW-RAP108 Wireless Access Point, 802.11a/b/g/n, 2x2:2, dual radio, antenna connectors - Restricted regulatory domain: United States or Japan
OAW-RAP109	AOS-W Instant OAW-RAP109 Wireless Access Point, 802.11a/b/g/n, 2x2:2, dual radio, integrated antennas.
OAW-RAP109-US/JP	AOS-W Instant OAW-RAP109 Wireless Access Point, 802.11a/b/g/n, 2x2:2, dual radio, integrated antennas - Restricted regulatory domain: United States or Japan.
OAW-RAP155	AOS-W Instant OAW-RAP155 Wireless Access Point, 2x2:2, dual radio, integrated antennas.
OAW-RAP155P	AOS-W Instant OAW-RAP155 Wireless Access Point with POE support, 2x2:2, dual radio, integrated antennas.

For the latest information and documentation related to this product, go to https://service.esd.alcatel-lucent.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 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 the manufacturer (www.alcatel-lucent.com). The professional installer must enter the antenna gain in the AOS-W Instant user interface (UI), using the following steps:

1. Log in to the AOS-W 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 (IAP-134/92) 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 2 *Formula Variable Definitions*

Parameter	Description
`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 3 contains the maximum allowable antenna gains for these products (see Table 1).

Table 3 *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

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, see https://service.esd.alcatel-lucent.com.

www.alcatel-lucent.com

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