Alcatel-Lucent Enterprise
OmniAccess Stellar AP1220 Series Installation Guide

060455-10 Rev. B

THIS IS A BARCODE

Summary of installation Steps

- WLAN Planning. Usually, a comprehensive site survey is required before installation, such as installation location, brackets, cables, power source, etc.
- Unpack the AP box and check all contents
- Install the AP bracket on ceiling or wall
- Installing the AP
- Connecting required cables
- Power connection
- Verifying post-installation connectivity
- AP provisioning

AP is a radio transmission device and subject to governmental regulation. Network administrators must comply with local regulations.

Package Contents

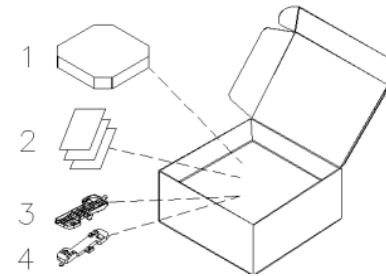| Item	Name	Qty	Unit
1	Access Point	1	Pcs
2	Quick Start Guide	1	Pcs
	Installation Guide	1	Pcs
	Regulatory Compliance and Safety Information	1	Pcs
	User Guide Info Card	1	Pcs
3	Mounting Bracket (15/16")	1	Pcs
4	Mounting Bracket (9/16")	1	Pcs

Figure1: AP Packing

Inform your ALE sales representative of incorrect, missing, or damaged parts. If possible, retain the carton, including the original packing materials. Use these materials to repack and return the unit to the supplier if needed. Additional mounting kits for use with the OmniAccess Stellar AP1220 series access points are sold separately. Contact your ALE sales representative for details.

Unpack OAW-AP1221 or AP1222 box:

- AP Dimensions: 180mm (W) x 180mm (D) x 36mm (H) -7.08" (W) x 7.08" (D) x 1.41" (H)
- Net Weight:
  - 700g / 1.54lb(OAW-AP1221)
  - 720g / 1.59lb(OAW-AP1222)

OAW-AP1221 View

The OmniAccess Stellar AP1220 Series APs are mid-end 802.11ac wave2 APs for medium density and large business deployments. AP1220 Series APs provide high throughput and seamless user experience.
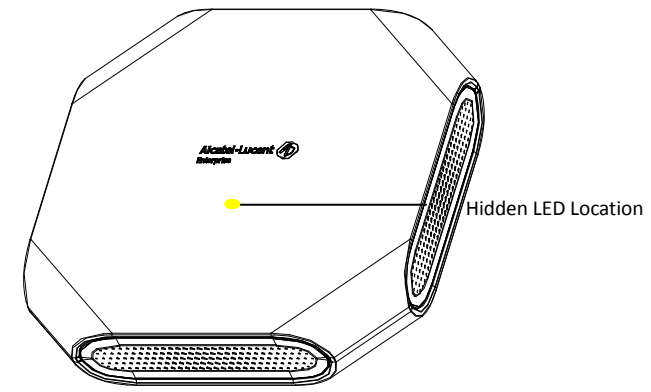
Figure 2: AP Front View
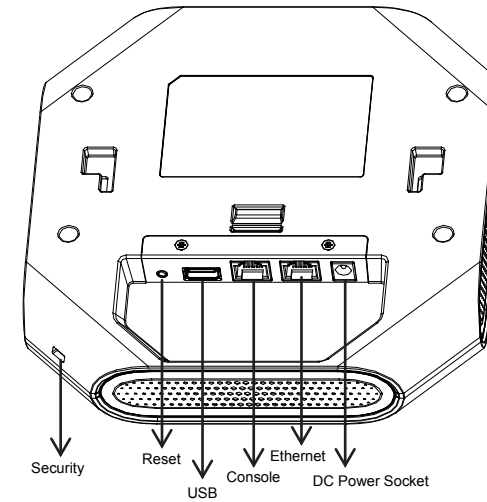
Figure 3: AP Back View

Interface	Specifications
Ethernet	1× 10/100/1000BASE-T autosensing (RJ-45) port, Power over Ethernet (PoE).
Console	1× Management Console Port (RJ-45). **Note**: Currently for use by Service & Support only.
USB	1× USB 2.0 (Type A connector)
DC Power Socket	DC 48V power socket. Optional AC-DC adapter kit (sold separately) could be used to power the AP.
Kensington Lock Slot	A Kensington security slot for additional security.
Reset	Factory reset. Press reset button for 5s, AP LEDs will quickly flashing for 3s, then AP will restart and restore factory configurations.

Table 1: External Interfaces

Pre-Installation

Pre-Installation Checklist
Before installing AP, be sure that you have the following items:
- 4- or 8-conductor, CAT5 or better UTP cable of required length.
- One of the following power sources:
  - IEEE 802.3at compliant Power over Ethernet (PoE) source (The PoE source can be any power source equipment (PSE) controller or mid-span PSE device).
  - AC-DC adapter (sold separately)，output voltage DC 48V, output current > 0.4A
- A terminal or a notebook

Identifying Specific Installation Locations
You can mount the OmniAccess Stellar AP on a ceiling rail (using the shipped bracket in the box) or on a wall (using the wall mount adapter, sold separately). You should first determine the location of the installation. The installation position is located at the center of the required coverage area and should be free from obstructions or obvious sources of interference.

- Minimize the number of obstructions (such as walls) between the AP and user terminals.
- Electronic equipment or devices (such as microwave ovens) which may produce radio frequency noise should be away from the installation position of the AP.

It is strictly prohibited to install around stagnant water, water seepage, leakage or condensation. Avoid cable condensation or water seepage along the cables connecting to the AP.

Temperature and Humidity requirement

- Operating temperature: 32°F to 113°F(0°C to 45°C)
- Storage temperature: -40°F to 158°F(-40°C to 70°C)
- Relative Humidity: 10% to 90% non-condensing

AP Installation

Using Ceiling Mounting Bracket
Make sure the AP fits securely on the ceiling tile rail when hanging the device from the ceiling, poor installation could cause it to fall onto people or equipment.

The OmniAccess Stellar AP has been shipped with two mounting brackets for 9/16" and 15/16" ceiling rails. Following is the general sequence to install the AP with the mounting bracket.
- Pull the cables through a prepared hole in the ceiling tile near where the AP will be placed.
- Place the bracket against the back of the AP, insert by aligning the slot on the backside with the hanging feet on both sides of the bracket (see Figure 4).
- Push the bracket along the direction of the arrow until it locks in the slot (see Figure 4).
- Connect the cable to the port on the AP.
- Hold the AP next to the ceiling tile rail with the ceiling tile rail mounting slots at approximately a 20-degree angle to the ceiling tile rail (see Figure 5). Make sure that any cable slack is above the ceiling tile.
- Pushing toward the ceiling tile, rotate the AP clockwise until the device clicks into place on the ceiling tile rail (see Figure 5).
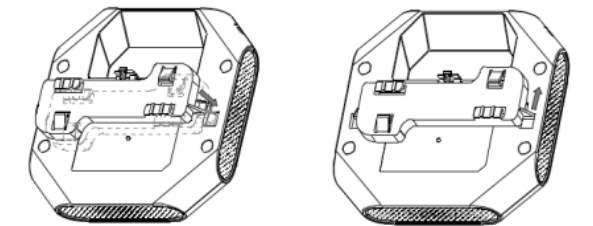

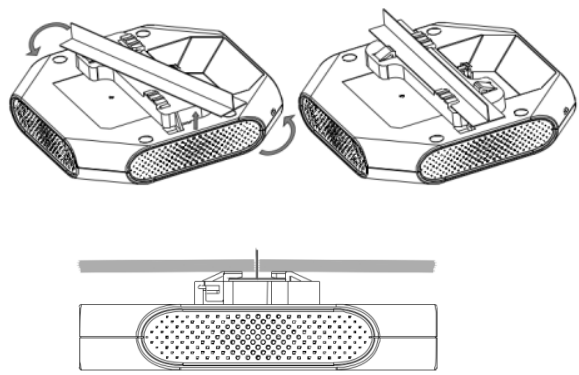Figure 4: Attaching Ceiling Mounting Bracket

Figure 5: Mounting AP

Connect Ethernet
Use the Ethernet port to connect the AP with a twisted pair Ethernet LAN segment. Use a 4- or 8-conductor, Category 5 UTP cable. The port is an RJ-45 female connector with the pinouts shown in Table2.

Connector	Pin	Signal Name	GE	FE	PoE
	1	RJ45_DA+	BI_DA+	RX+	PoE-
	2	RJ45_DA-	BI_DA-	RX-	PoE-
	3	RJ45_DB+	BI_DB+	TX+	PoE+
	4	RJ45_DC+	BI_DC+	Spare	PoE+
	5	RJ45_DC-	BI_DC-	Spare	PoE+
			BI_DA-		
	6	RJ45_DB-	BI_DB-	TX-	PoE+
	7	RJ45_DD+	BI_DD+	Spare	PoE-
	8	RJ45_DD-	BI_DD-	Spare	PoE-

Table 2:   Ethernet Port Pinout

Connect Power Sources
Confirm that you have an IEEE 802.3at compliant Power over Ethernet (PoE) source on the Ethernet cable, if not, connect by using the ALE 48V AC-DC adapter kit (sold separately) to the DC Power Socket and AC power jack.

If both PoE and DC power are available, the use of DC is preferred. OmniAccess Stellar AP supports the power adapter provided by ALE ONLY.

Verifying Post-Installation Connectivity
The LED on the AP can be used at this point to verify that the AP is receiving power and initializing successfully (see Table 3).

Red	Blue	Green	Time Line	Status
ON			Power on	
ON			Bootloader-OS loading	System start up
Flash			System running	Network abnormal (Interface down)
		Flash	System running	Network normal, without SSID created

		ON	System running	Network normal, single band working, either 2.4Ghz or 5Ghz
	ON		System running	Network normal, dual bands working, 2.4Ghz and 5Ghz are both working
Flash	Flash		System running	Red and Blue LEDs alternate flashing in specific frequency; OS upgrading
Flash	Flash	Flash	System running	3 LEDs alternate flashing in specific frequency; Used for locating an AP

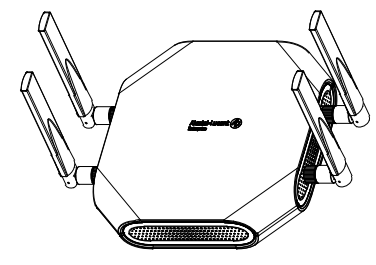Table 3: OmniAccess Stellar AP LED Meaning

Console Port
The serial console port allows you to connect the AP to a serial terminal or a laptop for direct local management. This port is an RJ-45 female connector with the pinouts described in Table 4.

Note: Currently for use by Service & Support only.

Connector	Pin	Signal Name	Function
	3	TXD	Transmit
	4	GND	Ground
	5	GND	Ground
	6	RXD	Receive
	Pins not listed are not connected.		

Table 4:   Console Port Pinout

Configuring the OmniAccess Stellar AP
Refer to the Quick Start Guide and Configuration Guide for complete details.
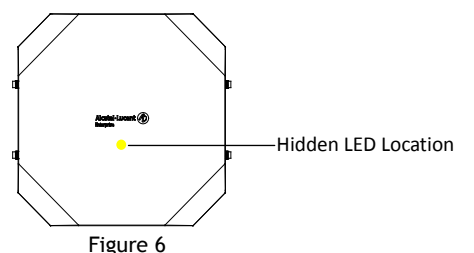
OAW-AP1222 View

Hidden LED Location

Figure 6

It is installed in the same way as OAW-AP1221. After the installation is complete, install the external antenna on OAW-AP1222 (see figure 7). Install the antenna as the figure 8:
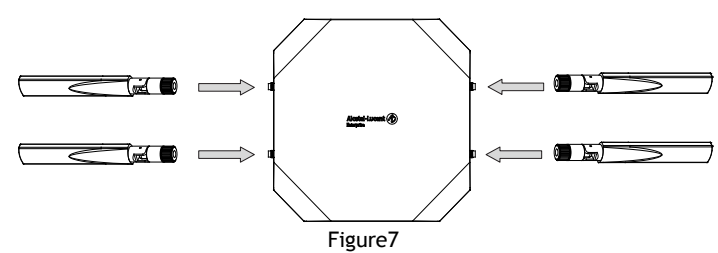

Figure7

Figure 8

The external antenna is sold separately.

Contacting Alcatel-Lucent Enterprise

Website Support	
Main Site	http://enterprise.alcatel-lucent.com
Support Site	http://support.esd.alcatel-lucent.com
Telephone Support	
North America	1-800-995-2696
Latin America	1-877-919-9526
Europe	+800 00200100 (Toll Free) or +1(650)385-2193
Asia Pacific	+65 6240 8484
Other Region	1-818-878-4507

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