Alcatel-Lucent Enterprise OmniAccess Stellar AP1201H Series Installation Guide

060535-10 Rev. A

Introduction

The Multi-functional Alcatel-Lucent OmniAccess® Stellar OAW-AP1201H access point is a highly versatile, and performance rich access point providing operational simplicity and a quality user experience. The OmniAccess Stellar OAW-AP1201H indoor WiFi access point provides high-performance Gigabit WiFi for in-room applications such as hotels, classrooms, dormitories, clinics, remote/home office and more.

The AP1201H offers Gigabit ethernet uplink, 3x Gigabit downlink one of which supports 802.3af PSE to power the attached device, one pair of RJ-45 pass through ports, and a USB 2.0 port.

The AP1201H ships with a mounting plate to attach the AP to a single-gang wall-box (most international variations covered). A desk mount kit can be ordered separately.

## Package Contents

Figure 1
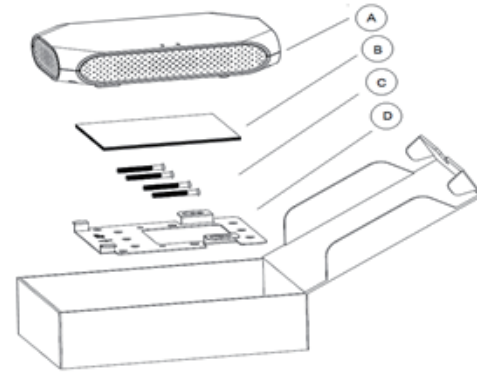
A.   OAW-AP1201H Access Point

B.   Documents:

   1)   Installation Guide (this document)

   2)   Quick Start Guide

   3)   User Guide Info Card

   4)   Regulatory Compliance and Safety Information

C.   (2x) #6-32 slotted screws & (2x) M4 Phillips screws 【backup for different country usage】

D.   Single-gang wall-box mounting plate

Inform your supplier if there are any 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.

Hardware Overview

The following sections outline the hardware components of the OAW-AP1201H access point.

Figure 2 OAW-AP1201H Front View
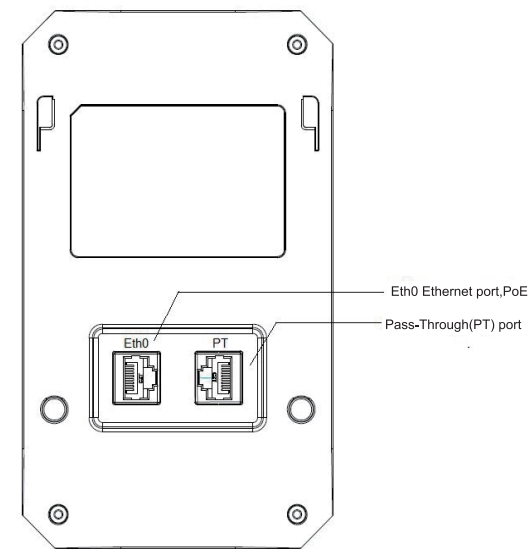

STATUS

PSE
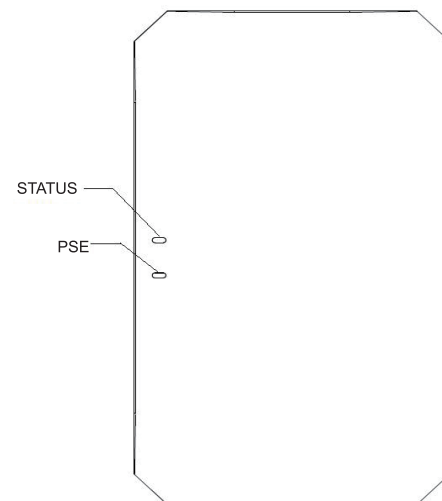
LED

The LED displays located on the front of the access point indicate the following functions:

STATUS: System status (Tri-color LED)

PSE: PoE-PSE status

For the details of the LED status, please refer to the Quick Start Guide.

Figure 3 OAW-AP1201H Rear View

Eth0 Ethernet port,PoE

Pass-Through(PT) port

Ethernet Ports

The OAW-AP1201H access point is equipped with four active Ethernet ports. One is shown in *Figure 3* (Eth0) and the others are shown in *Figure 4* (Eth1-Eth3/PSE).

In addition, the OAW-1201H AP has one pair of RJ-45 passive pass through ports, which provide an electrical connection between the back and the bottom of the access point.
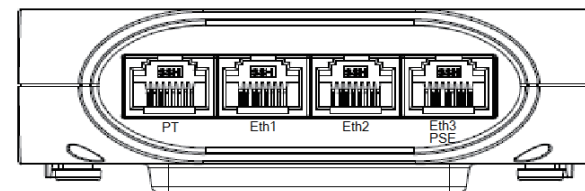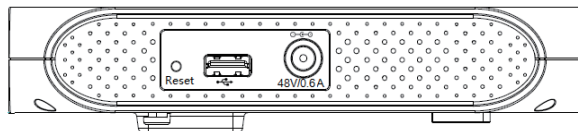
Figure 4 OAW-AP1201H Bottom View

PT   Eth1   Eth2   Eth3 PSE

Table 1

Interface	Description
Eth0	1 x 10/100/1000Base-T auto-sensing uplink connectivity (RJ-45) port. IEEE 802.3af/802.3at PoE compliant.
Eth1~ ~Eth2	2 x 10/100/1000Base-T auto-sensing downlink connectivity (RJ-45) ports.
☆Eth3/PSE	1 x 10/100/1000Base-T auto-sensing downlink connectivity (RJ-45) port. IEEE 802.3af PoE-PSE compliant.
PT	One pair passive Pass-Through ports (two RJ-45, back and bottom)

☆   Note: When the AP1201H is powered by an 802.3at or DC power source, the PoE-out (PoE-PSE) functionality could be enabled on port Eth3/PSE, supplying (1) maximum output of 12W while USB is active, or (2) maximum output of 802.3af PSE while USB is inactive.

Figure 5 *Gigabit Ethernet Port Pin-Out*

Table 2

Eth0 Port Pinout

Connector	Pin	Signal Name	Function
	1	BI_DA+	Bi-directional pair +A, PoE Negative
	2	BI_DA-	Bi-directional pair -A, PoE Negative
	3	BI_DB+	Bi-directional pair +B, PoE Positive
	4	BI_DC+	Bi-directional pair +C, PoE Positive
	5	BI_DC-	Bi-directional pair -C, PoE Positive
	6	BI_DB-	Bi-directional pair -B, PoE Positive
	7	BI_DD+	Bi-directional pair +D, PoE Negative
	8	BI_DD-	Bi-directional pair -D, PoE Negative

Table 3

Eth1~Eth2 Port Pinout

Connector	Pin	Signal Name	Function
	1	BI_DA+	Bi-directional pair +A
	2	BI_DA-	Bi-directional pair -A
	3	BI_DB+	Bi-directional pair +B
	4	BI_DC+	Bi-directional pair +C
	5	BI_DC-	Bi-directional pair -C
	6	BI_DB-	Bi-directional pair -B
	7	BI_DD+	Bi-directional pair +D
	8	BI_DD-	Bi-directional pair -D

Table 4

Eth3/PSE Port Pinout

Connector	Pin	Signal Name	Function
	1	BI_DA+	Bi-directional pair +A
	2	BI_DA-	Bi-directional pair -A
	3	BI_DB+	Bi-directional pair +B
	4	BI_DC+	Bi-directional pair +C, PoE Positive
	5	BI_DC-	Bi-directional pair -C, PoE Positive
	6	BI_DB-	Bi-directional pair -B
	7	BI_DD+	Bi-directional pair +D, PoE Negative
	8	BI_DD-	Bi-directional pair -D, PoE Negative

Figure 6 OAW-AP1201H Side View

USB Interface

The OAW-AP1201H access point is equipped with a USB 2.0 interface (Type A). When active, the USB port can supply up to 5V/0.5A power to an attached device.

Reset button

Factory reset. Press reset button for 5s, AP LEDs will quickly flash for 3s, then AP will restart and restore factory configurations.

Power

The OAW-AP1201H access point supports direct DC power adapter (48V DC nominal, sold separately) and Power over Ethernet (PoE).
The DC power connector port is located on the side of the device, as shown in *Figure 6*.

When both power sources are available, DC power takes priority over PoE. OmniAccess Stellar AP supports the power adapter provided by ALE ONLY.

The PoE-in allows the Eth0 port to draw power from an 802.3at (preferred) source, or an 802.3af (optional) source.
When powered by an 802.3at or DC power source, the PoE-out (PoE-PSE) functionality could be enabled on port Eth3/PSE.

Before You Begin

Refer to the sections below before beginning the installation process.

Pre-Installation Checklist

Before installing your OAW-AP1201H access point, be sure that you have the following items:

- Gigabit Ethernet cable of required length,CAT5 or CAT6 is preferred.
- One of the following power sources:
  - ☐ IEEE 802.3af/at compliant Power over Ethernet (PoE) source.
  - ☐ ALE AC-DC adapter (sold separately)，Output voltage DC 48V, output current ⩾ 0.6A is recommended.
- A PC terminal or a notebook

Identifying Specific Installation Locations

The OAW-AP1201H access point must be secured to an ALE-approved wall or to a desk mount kit (sold separately).
The installation position should be as close as possible to 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.

Installing the Access Point

The OAW-AP1201H can be mounted into a single-gang wall-box with shipped mounting plate.

Installing all ALE access points requires professional training. The AP must be professionally installed by a qualified engineer familiar with WLAN system. Failure to properly install this product may result in physical injury and/or damage to property.

Use the steps below to install your OAW-AP1201H.

1. Begin by removing the existing data wall plate (if applicable).
2. Make sure that there is an uplink Ethernet cable with RJ-45 plug in the wall-box. If not, please crimp an RJ-45 plug (not supplied) on the Ethernet cable.
3. Align the mounting holes of the AP1201H mounting plate with mounting holes in your gang box, as shown in *Figure 7* and *Figure 8*. For worldwide single gang outlet box, the mounting plate has two sets of mounting holes to meet the individual installation position requirement.
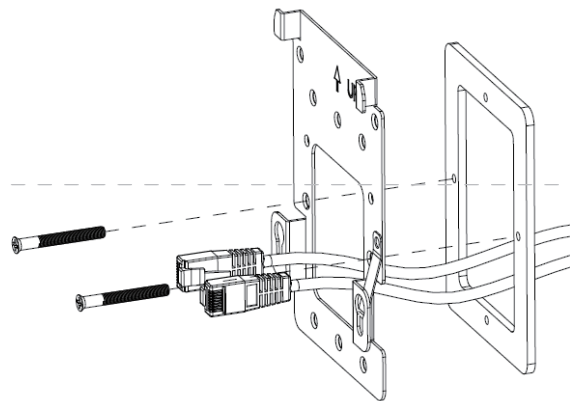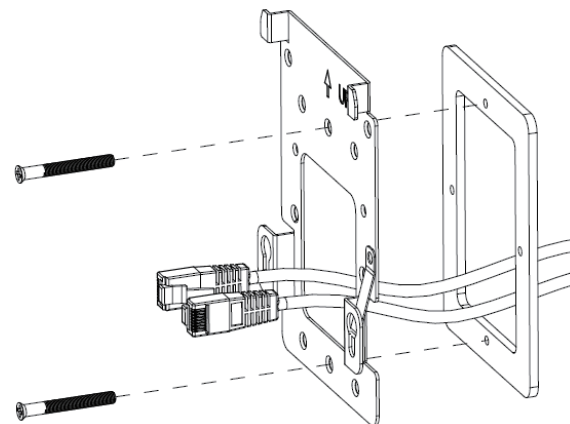
Figure 7 Mounting Plate to Gang Box(1)

**Figure 8** Mounting Plate to Gang Box (2)

4. Insert the two included slotted screws (or the two M4 screws, according to onsite requirement) and tighten them to secure the mounting plate.
5. Connect the uplink Ethernet cable to the Eth0 port on the back of the AP1201H. Do the same for the PT port, if used.
6. Align the mounting slots on the back of the AP1201H with the corresponding mounting posts on the wall

mounting plate as shown in *Figure 9*.
7. Push the access point against the posts and downward until the posts engage the slots at the top of the slots.

Figure 9 Attaching OAW-AP1201H to wall mounting plate
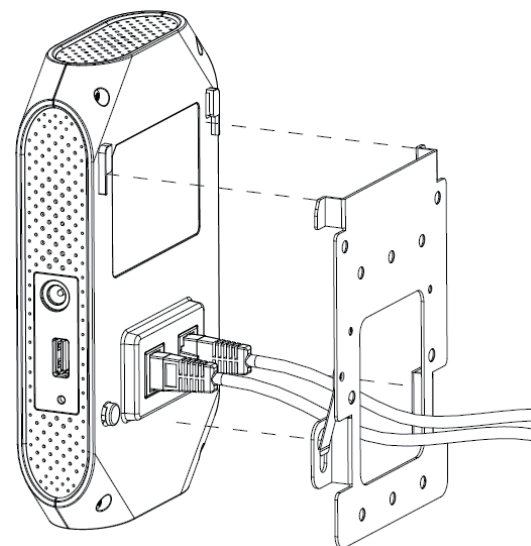
Verifying Post-Installation Connectivity

The integrated LED on the access point can be used to verify that the AP is receiving power and initializing successfully.

Product Specifications

Dimensions/Weight

- Single AP excluding packing box and accessories:
  - ☐ 95 mm (W) x 34.45 mm (D) x 161.5 mm (H)
  - ☐ 3.74" (W) x 1.35" (D) x 6.35" (H)
  - ☐ 237g/0.522lb
- Single AP including packing box and accessories:
  - ☐ 115 mm (W) x 54 mm (D) x 182 mm (H)
  - ☐ 4.52" (W) x 2.13" (D) x 7.17"(H)
  - ☐ 417g/0.919lb

Power

- Supports direct DC power and Power over Ethernet (PoE)
- Power over Ethernet (PoE): 48 V DC (nominal) IEEE 802.3af/ 802.3at compliant source
- Maximum power consumption with PSE function and USB load: 25.5W

Environmental

- Operating :
  - ☐ Temperature: 0°C to +45°C (+32°F to +113°F)
  - ☐ Humidity: 5% to 95% non-condensing
- Storage and transportation :
  - ☐ Temperature: -40°C to +70°C(-40°F to +158°F)

For additional specifications on this product, please refer to the Datasheet.

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
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