

HAN NETWORKS

HAN Access Point AP351 Series

Installation Guide

0xxxxx-00 Rev. A

0xxxxx-00 Rev. A

- Installing the AP
- Connecting required cables
- Power connection
- Verifying post-installation connectivity
- AP provisioning

Access points are radio transmission devices and are subject to governmental regulation. Network administrators who are responsible for the configuration and operation of access points must comply with local broadcast regulations. Specifically, access point must use channel assignments appropriate to the location where the access point will be deployed.

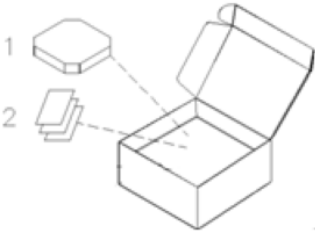
Package Contents

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

Optional Accessories (To be ordered separately)

Item	Name	Description
1	OAW-AP-MNT-B	Indoor mounting kit, Type B1(9/16") and B2(15/16") for T shaped ceiling rail.
2	OAW-AP-MNT-C	Indoor mounting kit, Type C1(Open Silhouette) and C2 (Flanged Interlude), for other shaped ceiling rail mounting.
3	OAW-AP-MNT-W	Indoor mounting kit, Type W wall and ceiling mounting with screws.

Figure1: Product Packing

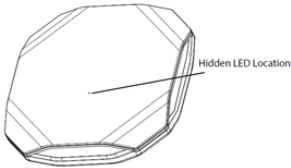


Inform your HAN sales representative of incorrect, missing, or damaged parts. If possible, retain the carton, including the original packing materials. Use these materials to repack and return the unit to the supplier if needed. Additional mounting kits for use with the OmniAccess Stellar access points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

Hardware Overview

The following sections outline the hardware components of the AP351 Series access point.

Figure 2: AP351 Front View



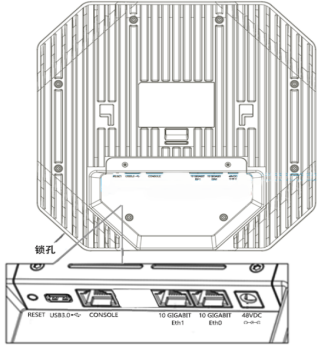
Summary of Installation Steps

- 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

LED

The AP351 Series access point is equipped with hidden LED display that indicates different status with different color. For the details of the LED status, please refer to the Quick Start Guide.

Figure 3: AP351 Back View



AP351 series External Interfaces

Table 1

Interface	Specifications
1 Gigabit Eth0	1x 10/100/1000BASE-T autosensing (RJ-45) port, Power over Ethernet (PoE). In case of only one WAN link, Eth0 would be preferred.
1 Gigabit Eth1	1x 10/100/1000BASE-T autosensing (RJ-45) port, Power over Ethernet (PoE). In case of only one WAN link, either of Eth0 and Eth1 could work as WAN, Eth0 would be more preferred. In case of two WAN links, Eth0 + Eth1 would be preferred.
Console	RJ-45 connector, default is RS-232 Console for Service & Support only. Support software configure to RS-485 mode.
USB	USB 3.0 host interface (Type C, output current 0.5A)
DC Power Socket	DC 48V power jack, support powering AP through a designated AC-DC power adapter.
Reset	Factory reset. Press reset button for 5s, AP LEDs will quickly flash for 3s, then AP will restart and restore factory configurations.
Security Lock Slot	The AP is equipped with a security lock slot for additional security.

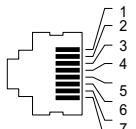
Table 2

Ethernet Port Pinout

Connector	Pin	Signal Name	PoE
	1	RJ45_DA+	PoE-
	2	RJ45_DA-	PoE-
	3	RJ45_DB+	PoE+
	4	RJ45_DC+	PoE+
	5	RJ45_DC-	PoE+
	6	RJ45_DB-	PoE+
	7	RJ45_DD+	PoE-
	8	RJ45_DD-	PoE-

Table 3

Console Port Pinout

Connector	Pin	Signal Name	Function
	3	TXD	Transmit
	4	GND	Ground
	5	GND	Ground
	6	RXD	Receive
	Pins not listed must be not connected.		
	8		

Power

The AP351 series 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 back of the device, as shown in Figure 3.

The PoE allows the Ethernet port to draw power from an IEEE 802.3at compliant source with full functionality.

OmniAccess Stellar AP supports the power adapter provided by HAN ONLY.

Before You Begin

Refer to the sections below before beginning the installation process.

Pre-installation Checklist

Before installing your AP351 Stellar access point, be sure that you have the following items:

- 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 (PoE switch or PoE injector).
 - AC-DC adapter (sold separately), output voltage DC 48V, output current $\geq 1.1\text{A}$
- A terminal or a notebook

Identifying Specific Installation Locations

You can mount the HAN Access Point on a ceiling rail or on a wall. 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.

AP Installation

Refer to mounting kits installation Guide.

Verifying Post-Installation Connectivity

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

HAN NETWORKS
AP351 Regulatory Compliance and
Safety Information

xxxxxx-xx Rev. x

xxxxxxx-xx Rev. x

■ Introduction

This document contains domestic and international regulatory compliance information for the access point AP351. To ensure that this device complies with the regulatory standards for your region, please refer to the content below.

FCC Part 15:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generate, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

RF exposure warning

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This product may not be collocated or operated in conjunction with any other antenna or transmitter

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

For EU

ALE USA Inc., hereby declares that these models are compliant with the essential requirements and other provisions of Directive 2014/53/EU. For the complete CE DoC, please access the website below to get more information:
<https://businessportal2.alcatel-lucent.com/>

Waste Electrical and Electronic Equipment (WEEE) Statement



ALE products are subject to separate collection and treatment in the EU Member States, Norway, and Switzerland when they are at end of life, and therefore are marked with the symbol shown. The treatment applied to these products in these countries shall be compliant with the applicable national laws which are under the

implementing of Directive 2012/19/EU on Waste of Electrical and Electronic Equipment (WEEE).

European Union RoHS

ALE products are compliant with the EU Restriction of Hazardous Substances Directive 2011/65/EU (RoHS). EU RoHS restricts the use of specific hazardous materials in the manufacture of electrical and electronic equipment. The restricted materials under the Directive are Lead (including Solder used in printed circuit assemblies), Cadmium, Mercury, equivalent Chromium, and Bromine.

■ Global RF health information:

RF Radiation Exposure Statement: This equipment complies with FCC and CE RF radiation exposure limits. This equipment should be installed and operated with a minimum distance of 20 cm between the equipment and a human's body for 2.4 GHz and 5 GHz operations. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

AT	BE	BG	CZ	DK
EE	FR	DE	IS	IE
IT	EL	ES	CY	LV
LI	LT	LU	HU	MT
NL	NO	PL	PT	RO
SI	SK	TR	FI	SE
CH	UK	HR		

IC Radiation Exposure Statement for Canada

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.
L'exploitation est autorisée aux deux conditions suivantes : (1)

l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent is isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

User manuals for transmitters equipped with detachable antennas shall also contain the following notice in a conspicuous location:

This radio transmitter (identify the device by certification number, or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (identifier le dispositif par son numéro de certification ou son numéro de modèle s'il fait partie du matériel de catégorie I) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

IMPORTANT NOTE:

Radiation Exposure Statement:
This equipment complies with "Industry Canada RSS-102 for radiation exposure limits set forth for an uncontrolled environment".

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Déclaration d'exposition aux radiations:
Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20cm de distance entre la source de rayonnement et votre corps.

Industry Canada - Emissions compliance statement

This Class B digital apparatus complies with Canadian ICES-003.
Avis de Conformité à la Réglementation d' Industrie Canada.
Cet appareil numérique de la classe B est conform à la norme NMB-003 du Canada.

[REMAINING SECTIONS INTENTIONALLY LEFT BLANK]