

HAN NETWORKS
AP211 Access Point Installation Guide

060436-11 Rev. F

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
	User Guide Info Card	1	Pcs
	Regulatory Compliance and Safety Information	1	Pcs
3	Mounting Bracket (15/16")	1	Pcs
4	Mounting Bracket (9/16")	1	Pcs

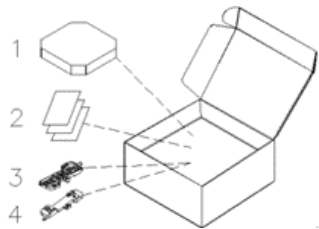


Figure1: Product Packing

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 AP211 access points are sold separately. Contact your HAN sales representative for details.

Unboxed AP211:

- Net Weight: 0.68 lbs / 0.31 kg
- Dimensions (HxWxD): 6.1 inches x 6.1 inches x 1.1 inches (15.5 cm x 15.5 cm x 2.8 cm)

Device View

The AP211 access point is equipped with one hidden LED light that indicates different status with different color.

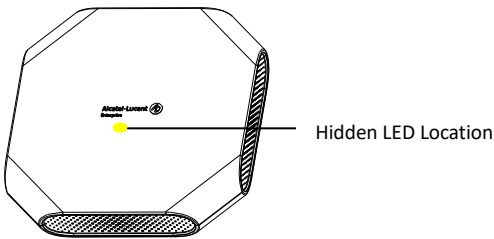


Figure 2: AP211 Access Point (Front View)

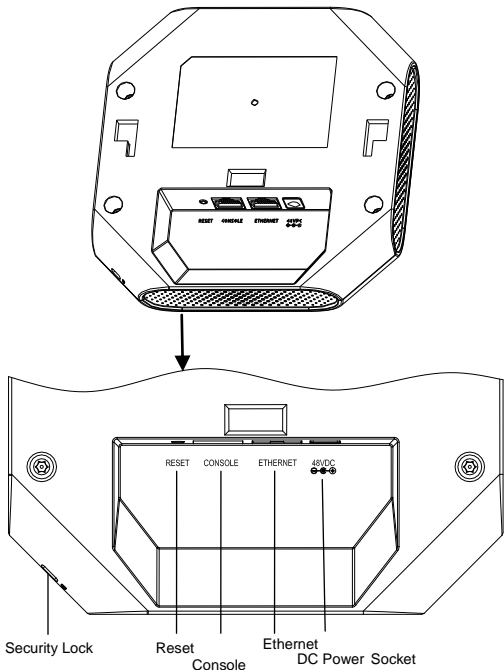


Figure 3: AP211 Access Point (Back View)

Interface	Description
Ethernet Port	1x 10/100/1000BASE-T autosensing (RJ-45) port, Power over Ethernet (PoE).
Console Port	1x Management console port (RJ-45) Note: Currently for use by Service & Support only.
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 button	Factory reset. Press reset button for 5s then release, AP LEDs will quickly flashing for 3s, then AP will restart and restore factory configurations.

Table 1: External Interfaces

Pre-Installation Checklist

Before installing your AP211 access point, 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 802.3af-compliant Power over Ethernet (PoE) source (The POE source can be any power source equipment (PSE) controller or mid-span PSE device.
 - 48 V/0.6A DC AP AC-DC adapter kit (sold separately)
- A terminal or a notebook

Identifying Specific Installation Locations

You can mount the AP211 on a ceiling rail (using the included bracket) 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: 5% 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 AP211 has been shipped with two mounting brackets for 9/16" and 15/16" ceiling rails. Following is the general sequence to install the AP211 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).

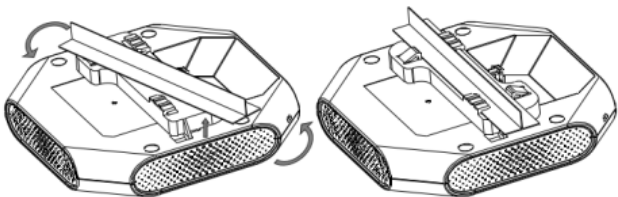


Figure 4: Attaching Ceiling Mounting Bracket

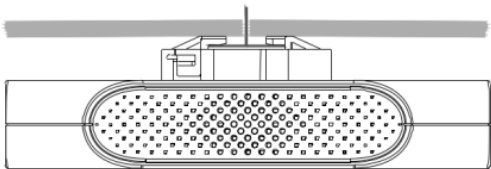
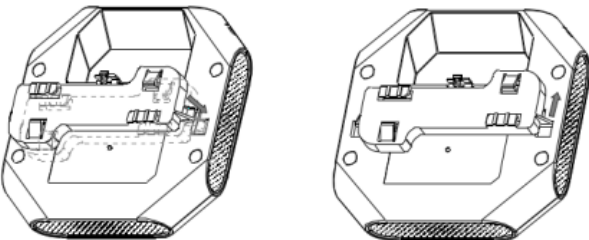


Figure 5: Mounting AP

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 Table 2 .

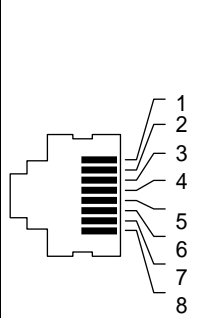
Connector	Pin	Signal Name	GE	FE	PoE
	1	RJ45_DA+	BI_DA+	RX+	PoE-
	2	RJ45_DA-	BI_DA-	RX-	PoE-
	3	RJ45_DB+	BI_DB+	TX+	PoE+
	4	RJ45_DC+	BI_DC+	Spare	PoE+
	5	RJ45_DC-	BI_DC-	Spare	PoE+
	6		BI_DA-		
	7	RJ45_DB-	BI_DB-	TX-	PoE+
	8	RJ45_DD+	BI_DD+	Spare	PoE-
	8	RJ45_DD-	BI_DD-	Spare	PoE-

Table 2: Ethernet Port Pinout

Connect Power Sources
Confirm that you have an IEEE 802.3af-compliant Power over Ethernet (PoE) source on the Ethernet cable, if not, connect by using the HAN 48V DC AP 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. AP211 supports the power adapter provided by HAN 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 (For the details of the LED status, please refer to the Quick Start Guide.).

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.

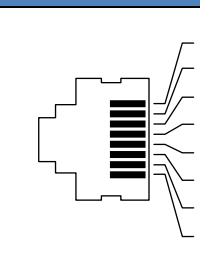
Connector	Pin	Signal Name	Function
	3	TXD	Transmit
	4	GND	Ground
	5	GND	Ground
	6	RXD	Receive
	Pins not listed are not connected.		

Table 4: Console Port Pinout

Configuring the AP211
Refer to the Quick Start Guide and Configuration Guide for complete details.

[REMAINING SECTIONS INTENTIONALLY LEFT BLANK]