

AP Series Indoor Wireless LAN Access Points

Quick Start Guide

18 (2017-08-24)
Part number: 31505502



1 Packing List

- AP device (with the product model on the nameplate)
 - Sheet metal mounting bracket
 - SN label
- Antenna
 - Adjustable buckle
 - MAC address label
- Power adapter (optional)
 - Quick Start Guide
 - Warranty card
- Screws
 - OT terminal

NOTE

The packing list and figures in the document are for reference only and may be different from actual devices.

2 Safety Guidelines

Observe all safety regulations and precautions

- Before you start the installation procedure, read all safety precautions described in this document and observe any warning labels affixed to the AP. Safety precautions provided may not cover every eventuality, so remain mindful of safety at all times.
- Follow all the safety precautions and instructions provided by Huawei. The safety precautions outlined in this document are only those that Huawei can predict. Huawei is not liable for any consequence that results from violation of regulations pertaining to safe operations or safety codes pertaining to design, production, and equipment use.

NOTICE

- When handling an AP, always take precautions against ESD. For example, wear ESD gloves or an ESD wrist strap.
- During equipment transport and installation, prevent the equipment from colliding with objects like doors, walls, or shelves.
- Do not touch unpainted metal surfaces of equipment components with wet or contaminated gloves.

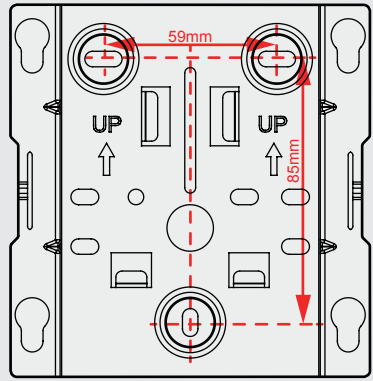
3 Site Environment

- Install the AP in an environment free of high temperature, dust, unstable voltage, vibration, strong noise, and noxious, flammable, or explosive gases or smoke, as well as free of interference sources such as large radar stations, radio stations, and electrical substations.
- Install the AP in a dry environment away from sources of water, and take protective measures to prevent water from flowing into the equipment along the cable.
- Install the AP in a hidden place and ensure that the AP does not disturb daily work or life of residents.
- Make the engineering design by fully considering such factors as hydrology, geology, earthquake, electric power, and traffic. The selected site should comply with the environment design specifications of communications equipment.
- Select installation positions based on the site survey. Leave at least 200 mm between the cabling end of the AP and the wall.

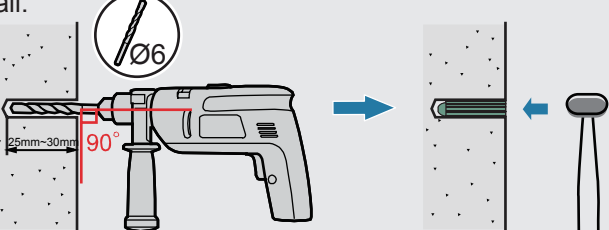
4 Installing the AP

Scenario 1: Wall Mounting

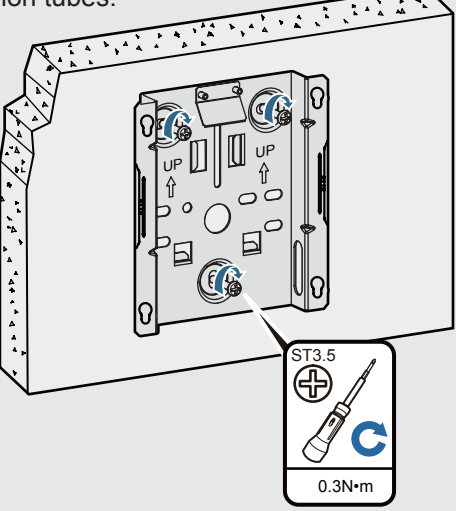
- 1 Fix the mounting bracket to the wall, adjust the installation position, and use the marker to mark the drilling positions where expansion screws are installed.



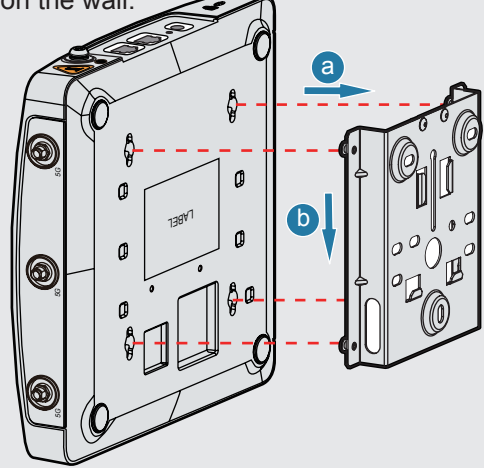
- 2 Use a 6 mm drill bit to drill 25 mm to 30 mm deep holes in the drilling positions. Hammer the expansion tubes into the holes until they are completely embedded into the wall.



- 3 Fix the mounting bracket to the wall and use the Phillips screwdriver to fasten three expansion screws into the expansion tubes.

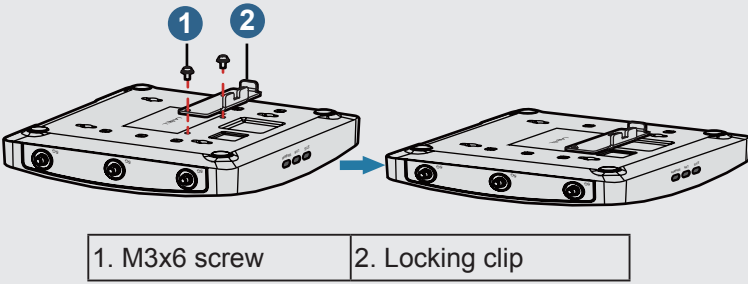


- 4 Align the mounting holes at the rear of the AP with the mounting screws on the mounting bracket and hang the AP on the bracket. Press the AP downwards to secure the AP on the wall.



Scenario 2: Ceiling Mounting

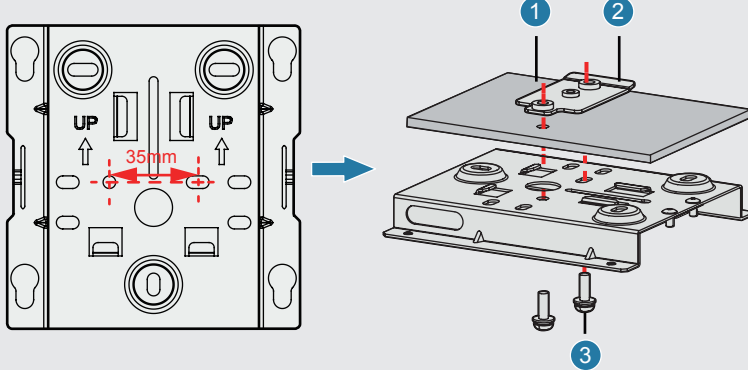
- 1 Fix a locking clip at the rear of the AP with two M3x6 screws.



NOTE

Only the AP6310SN-GN and AP7110 series require the locking clip during their installation.

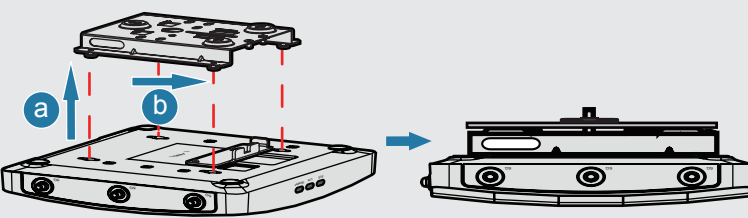
- 2 Remove a ceiling tile, determine locations of mounting holes based on the distance between two installation holes on the mounting bracket, use a hammer drill to drill holes on the ceiling tile, and fix the mounting bracket to the ceiling tile.



NOTE

The screws provided for ceiling-mounting of APs are 30 mm long and can be used to fix an AP on a ceiling not thicker than 15 mm. To install APs on thicker ceilings, you need to purchase longer screws.

- 3 Hang the AP on the mounting screws by aligning the mounting holes at the rear of the AP with the mounting screws on the bracket and push the AP horizontally to secure the AP.



NOTE

Ensure that the AP is correctly installed on the mounting bracket and there must be 200 mm space above and around the AP for maintenance.

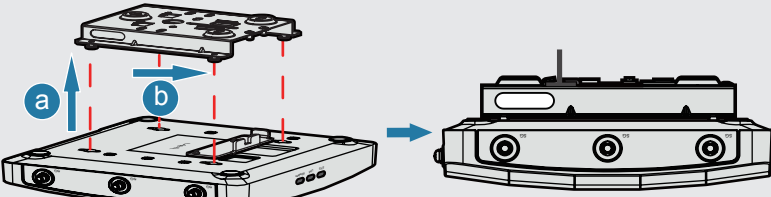
Scenario 3: T-rail Mounting

- 1 Fix a locking clip at the rear of the AP with two M3x6 screws. For installation methods, see step 1 in Ceiling Mounting.

NOTE

Only the AP6310SN-GN and AP7110 series require the locking clip during their installation.

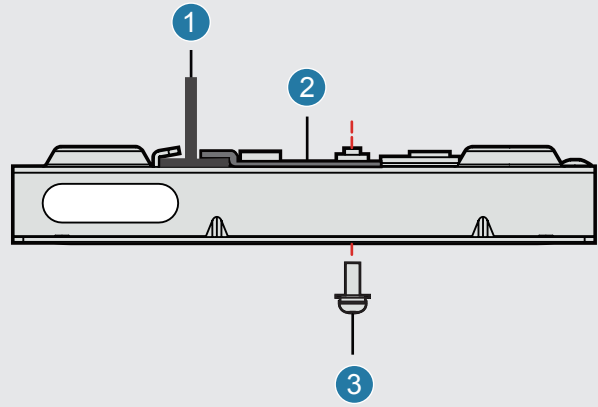
- 2 Hang the AP on the mounting holes by aligning the mounting screws at the rear of the AP with the mounting holes on the bracket and push the AP horizontally to secure the AP.



NOTE

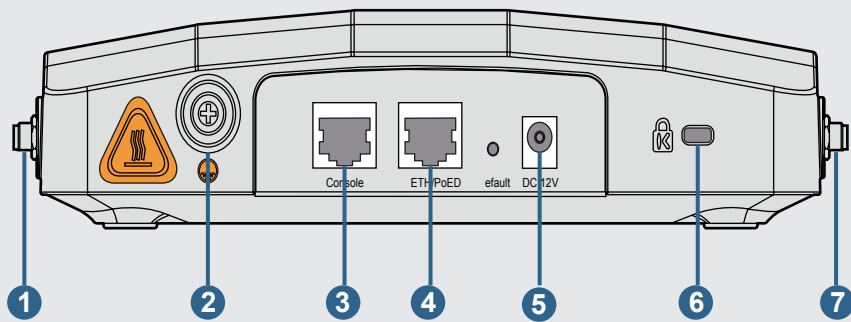
Ensure that the AP is correctly installed on the mounting bracket and there must be 200 mm space above and around the AP for maintenance.

- 3 Remove two ceiling tiles around the T-rail, use screws to fix the adjustable buckle to the mounting bracket, hook the adjustable buckle to the T-rail, and secure the screw on the adjustable buckle to fasten the mounting bracket and T-rail.



1. T-rail 2. Adjustable buckle 3. M3x6 screw

5 Connecting Cables



The following table lists cables to be connected to an AP.

No.	Interface	Cable	Description
1	5 GHz antenna port	5 GHz antenna cable	Connects a 5 GHz antenna to the AP to send and receive service signals. This port is provided only on APs that support external antennas.
2	Ground screw	Ground cable	Connects the AP to the ground cable for grounding.
3	Console	Serial cable	Connects to a maintenance terminal for AP configuration and management.
4	ETH/PoE	Network cable	<ul style="list-style-type: none">• Connects to the wired Ethernet. Cat 5e or higher cables are recommended.• Supports PoE input.
5	DC 12V	DC power cable	Connects to a DC power adapter delivered with the AP to prevent damage to the AP.
6	Security slot	Security cable	Fastens a security lock to an immovable object around using a cable. You can insert the security lock into the security slot and lock the AP.
7	2.4 GHz antenna port	2.4 GHz antenna cable	Connects a 2.4 GHz antenna to the AP to send and receive service signals. This port is provided only on APs that support external antennas.

Pay attention to the following points when installing external antennas:

- Antennas must comply with local laws and regulations.
- Antennas need to be installed by qualified personnel. An AP can only use the antennas delivered with it.

Pay attention to the following points when installing cables:

- Before delivery, radio interfaces of the device are covered with dust caps. Remove the dust caps before connecting the feeder cables.
- After the device installation is complete, cover the unused radio interfaces with dust caps.
- Before connecting an Ethernet cable to the AP, use the cable test tool to check whether the cable is qualified. If the cable is unqualified, replace it.
- The network cable cannot exceed 100 meters.
- Do not insert a service network cable into the console port.

NOTE

For details about cable connections, log in to Support-E and see "Cable Connection" in *Hardware Installation and Maintenance Guide* of this AP model.

6 Logging In to the Device for the First Time

Wired Connection Mode:

- By default, the IP address and subnet mask of the device are **169.254.1.1** and **255.255.0.0**, respectively. The default user name and password are **admin** and **admin@huawei.com**. Configure an IP address on **169.254.x.x** (excluding **169.254.1.1**) for the PC.
- You are advised to change the user name and password on your first login.
- If the device works as a Fit AP and is already online on the AC, you can remotely log in to the AC and run the **display ap all** command to check the IP address of the device.

NOTE

For details about cable connections, log in to Support-E and see "Logging In to the Device" in *Hardware Installation and Maintenance Guide* of this AP model.

Common Errors in Network Planning

No.	Error Case	Analysis	Corrective Action
1	Fat APs are used to achieve large-scale wireless network coverage.	Fat APs are applicable only to small-scale SOHO office scenarios and cannot implement inter-AP roaming. Therefore, Fat APs are not recommended in large-scale coverage scenarios.	In large-scale wireless network coverage scenarios, use the AC+Fit AP networking.
2	Antennas are deployed too close, or electromagnetic interference exists near the antennas.	Signal interference affects data transmission.	Properly control the distance between antennas. It is recommended that you comply with the following requirements: 1. Ensure that antennas are deployed no less than 7 m. In semi-open indoor areas, ensure that APs are around 20 m away from each other. 2. Deploy antennas at least 2 m away from 4G antennas. 3. Keep antennas away from electronic equipment that may cause radio interference, such as microwave ovens.
3	An indoor settled AP is deployed in a corridor to provide wireless coverage for the six rooms on both sides of the corridor.	Generally, washing rooms or compartments exist in rooms. Radio signals attenuate significantly when penetrating walls, which affects service experience. Densely deployed APs in the corridor can also lead to co-channel interference. Such a plan is not recommended.	In a scenario where rooms are on both sides of the corridor, you are advised to deploy agile distributed devices or wall plate APs in the rooms to implement indoor coverage. Alternatively, you can deploy indoor settled APs in the rooms in W-shaped mode. Do not deploy indoor settled APs in two rooms facing each other on both sides of the corridor.

Declaration of Conformity

Hereby, Huawei Technologies Co., Ltd. declares that the radio equipment type is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:
<http://www.huawei.com/en/product-certification>

Obtaining Product Documentation and Technical Support

You can obtain the latest product documentation at <http://support.huawei.com/enterprise>. Log in to the website, and select a specific product model and version to download its documentation. If the instructions contained in the product documentation are insufficient to resolve problems that occur during device operation or maintenance, contact Huawei Technical Assistance Center for technical support.

Enterprise network technical bulletin: <http://support.huawei.com/ecomunity>



Scan the QR code to download more documents.

Open Source Software Notice

The Open Source Software Notice lists notices on open source software components used by the product. You can open the web login page of the AC or Fat AP, and click **Open Source Software Notice** at the lower right corner of the page to view details about the open source software notice.

Trademarks and Permissions



and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd. All other trademarks and trade names mentioned in this document are the property of their respective holders.

Copyright © Huawei Technologies Co., Ltd. 2016. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Qualification Card

