ARISTA

Quick Start Guide

C-430 Access Point

Arista.com

Arista Networks

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Chapter 1

About This Guide

This installation guide explains how to deploy the C-430 access point (AP).

Important: Please read the EULA before installing the access point (AP). You can download and read the EULA from: https://www.arista.com/en/support/product-documentation

Installing the AP constitutes your acceptance of the terms and conditions of the EULA mentioned above.

Intended Audience

This guide can be referred by anyone installing and configuring the access point.

Document Overview

This guide contains the following chapters:

- Package Content
- Access Point Overview
- Installing the Access Point
- Access Point Troubleshooting

Note: Unless otherwise explicitly stated, all instances of the term 'server' in this document refer to the Wireless Manager.

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This equipment conforms to the requirements of the NCC.

- 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
- 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。
- 無線資訊傳輸設備避免影響附近雷達系統之操作。

Chapter 2

Package Content

The access point (AP) package must contain the components shown in the following figure.

Figure 2-1: Package Components

Table 1: Labels: Package Components

Label	Description
1	C-430 Access Point
2	15/16" (24 mm) Mounting Bracket (MNT-AP-24MM)

Important: Make a note of the AP MAC address and the IP address in a safe place before installing it in a hard-to-reach location. Locate the AP MAC address on a label at the bottom of the product.

If you don't have a complete package, please contact the Arista Networks Technical Support Team at support-campus@arista.com or return the package to the vendor or dealer where you purchased the product.

Chapter 3

Access Point Overview

C-430 is a Wi-Fi 7 multi-radio 802.11be access point. Refer the datasheet for more information.

Note: This equipment is suitable for use in environment air spaces (plenums).

This chapter provides an overview of the access point (AP) and describes:

- Front Panel
- Rear Panel
- Side Panel

3.1 Front Panel

The front panel of the AP has 6 LEDs that indicate the status of various AP functions.

Figure 3-1: Front Panel LEDs

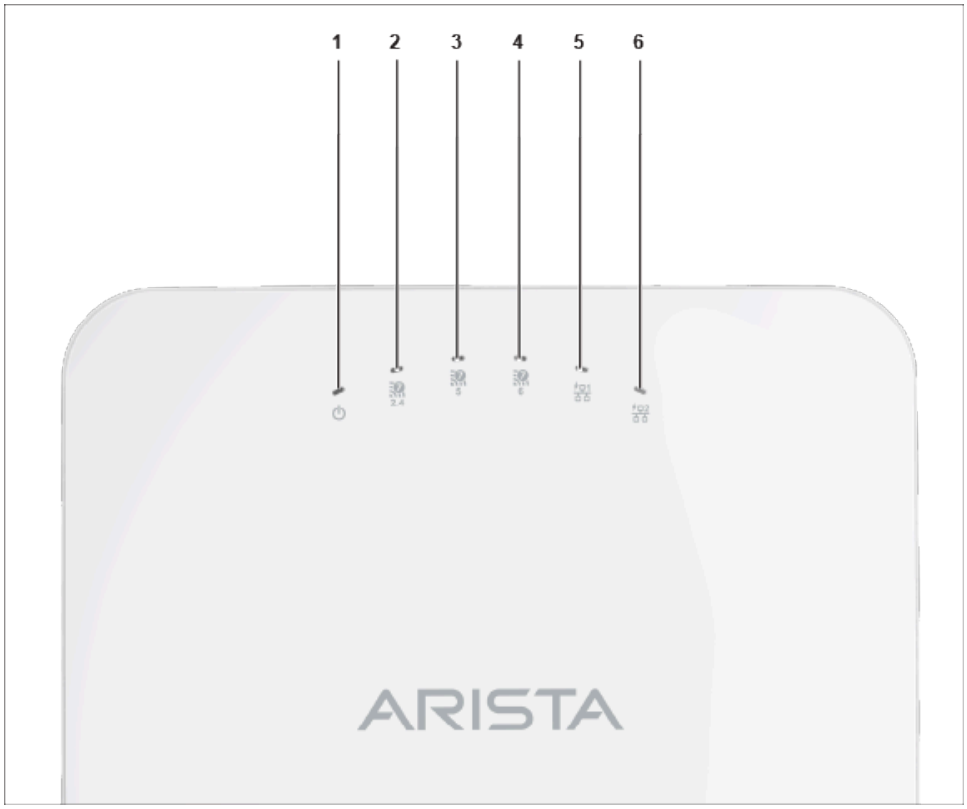


Table 2: Labels: Front Panel LEDs

Label	Description
1	Power
2	2.4 GHz Radio
3	5 GHz Radio
4	6 GHz Radio
5	LAN1
6	LAN2

Power LED: The following table describes the Power LED indicator states.

Table 3: Power LED Indicator States Description

	Green	Orange
Solid	Running at full capability	Running at reduced capability
Blinking	Received IP address, but not connected to the server	Did not receive an IP address

Reduced capability indicates that the AP receives less than the required maximum power from the PoE+ switch. The AP receives 802.3af instead of 802.3at.

LAN1 LED: ON when the corresponding interface UP.

LAN2 LED: ON when the corresponding interface UP and either wired guest or link aggregation configured.

Radio LEDs: ON when the corresponding radio operational.

3.2 Rear Panel

The rear panel of the AP has a DC power port and 802.3at compliant PoE+ LAN ports to power the device and connect it to a wired LAN.

Figure 3-2: Rear Panel

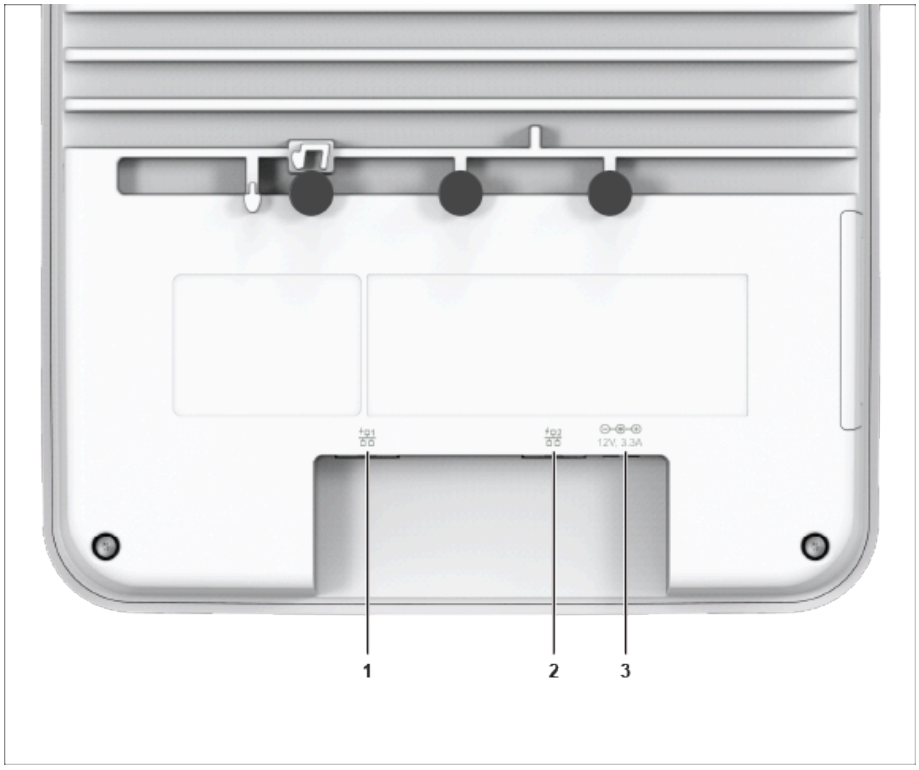


Table 4: Labels: Rear Panel

Label	Description
1	LAN1, POE+
2	LAN2, POE+
3	DC Power

Table 5: Port Details

Port	Description	Connector Type	Speed/Protocol
Power	12V DC/3.3A	5.5 mm overall diameter / 2.1 mm center pinhole	N/A
LAN 1	5 Gigabit Ethernet with 802.3at compliant PoE	RJ-45	100 /1000 Mbps / 2.5/ 5 Gbps Ethernet
LAN 2	5 Gigabit Ethernet with 802.3at compliant PoE	RJ-45	100 /1000 Mbps / 2.5/ 5 Gbps Ethernet

3.3 Side Panel

The side panel of the AP has a reset pinhole, USB port, and console port.

Figure 3-3: Side Panel

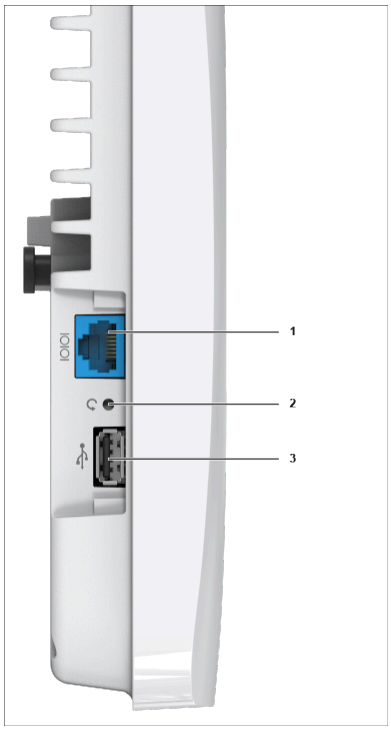


Table 6: Labels: Side Panel

Label	Description
1	Console
2	Reset
3	USB

Port	Description	Connector Type	Speed/Protocol
Console	Establish a 'config shell' terminal session through a serial connection	RJ-45	NA
USB	USB 2.0 port with power output rating of 5V/0.3A (1.5W).	USB	Future Use
Reset	Reset to factory default settings port. Hold down and power cycle the device to reset.	Pinhole push button	NA

When you reset the AP, the following settings also reset:

- The Config shell password resets to **config**.

- Erases the server discovery value and changes it to the default, **redirector.online.spectraguard.net** (primary) and **wifi-security-server** (secondary).
- The AP loses all the VLAN configurations.
- If the AP has a static IP configured, the reset erases the IP address and the AP sets to the DHCP mode with the factory default IP address of 169.254.11.74.

Chapter 4

Installing the Access Point

This chapter contains the procedure to install the access point (AP).

Zero-Configuration of the Access Point

The AP supports zero-configuration under the following conditions:

- The device must be in AP mode with background scanning on and without a configured SSID
- Set up a DNS entry for **wifi-security-server** on all the DNS servers. This entry should point to the server IP address. By default, the AP looks for the DNS entry **wifi-security-server**.
- Place the AP on a DHCP-enabled subnet.

Refer to these articles to understand how APs communicate with the server, and the ports that you need to open to enable the communication:

- Wi-Fi Access Points-Server Communication
- TCP Ports and UDP Ports Used by Access Points

Important: If placing the device on a network segment separated from the server by a firewall, you must first open port 3851, the port assigned to Arista Networks, for User Datagram Protocol (UDP) and Transport Control Protocol (TCP) bidirectional traffic on the firewall. Zero-configuration does not support setting up multiple devices to connect to multiple servers. In this case, you must manually configure the APs. For details on configuring an AP manually, see the Access Point CLI Guide.

Assign a static IP address to the AP or change the settings to DHCP. Make a note of the AP MAC address and the IP address in a safe place before installing it in a hard-to-reach location. Locate the AP MAC address on a label at the bottom of the product.

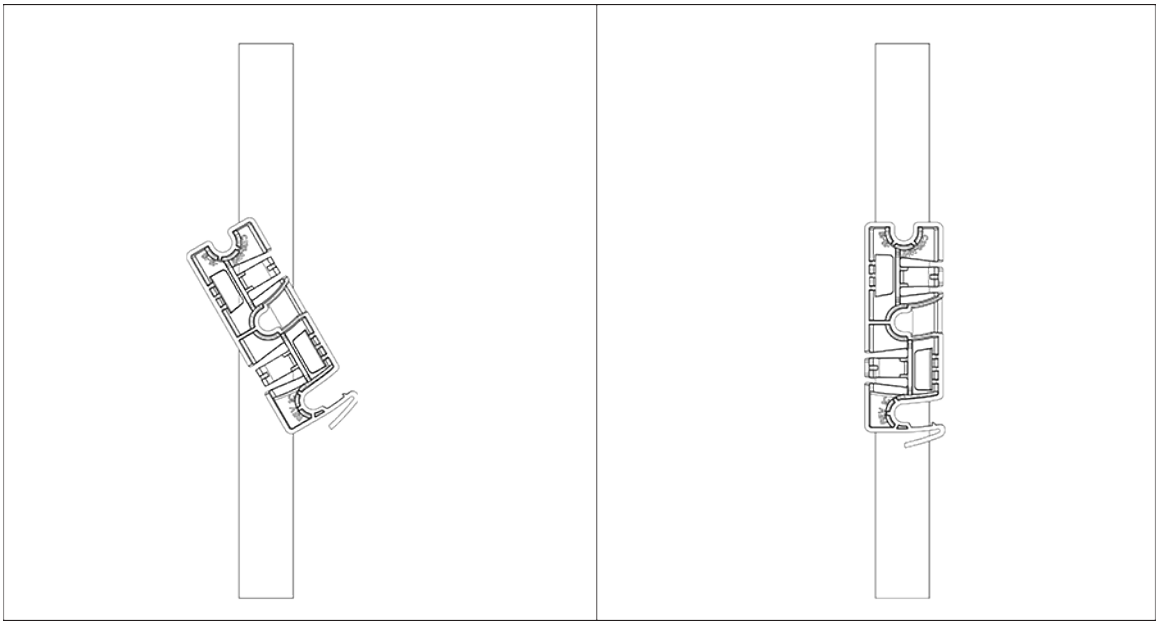
Use the following steps to install the AP with zero-configuration:

1. Ceiling Mounting the Access Point or Wall Mount the Access Point
2. Connecting the Access Point to the Network
3. Power On the Access Point

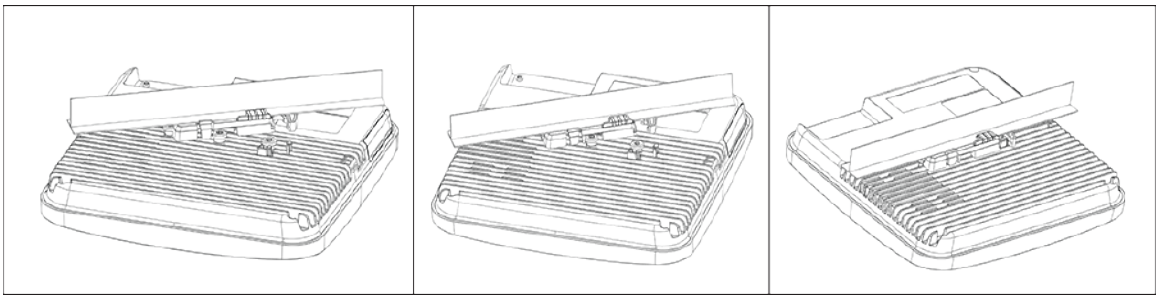
4.1 Ceiling Mounting the Access Point

Mounting the access point (AP) on the ceiling consists of the following steps:

1. **Attach the bracket to the T-grid** - Use the mounting bracket to install the AP on the ceiling. Attach the bracket to the T-grid and rotate the bracket so that it snaps on the T-grid. The bracket becomes parallel to an arm of the T-grid. Be sure the bracket properly snaps to the T-grid, as shown below.



2. **Mounting the AP on the bracket** - Place the first mounting post on the back of the AP to the lower notch of the bracket. Rotate the AP so that the center mounting post fits in to the center notch on the bracket. Be sure all the mounting posts on the back of the AP snap to the respective notches on the bracket. The mounting posts now properly fit in the respective notches of the bracket and the AP mounts properly.



Mounting Instructions using the Silhouette/Interlude Bracket Mount: The Silhouette/Interlude mounting bracket does not ship as part of the standard package and must be procured separately. The mounting instructions for the Silhouette/Interlude Bracket Mount contain similar instructions as the Standard Package Content's mounting instructions.

Note: As a best practice, label the APs using MAC addresses or user your own convention. For example, use serial numbers so that you can easily identify the APs.

4.2 Wall Mount the Access Point

Note: The wall mounting accessory SKU (MNT-AP-FLAT-14CM) can be ordered and purchased separately.

For instructions on wall mounting the access point, refer to Wall Mount the Access Point article.

Chapter 5

Power On the Access Point

Power on the access point (AP) by plugging one end of the Ethernet cable into the PoE+ (802.3at) switch or injector and the other end into the LAN1 PoE+ port on the AP. Be sure to turn on the PoE+ source, or use a compatible power adapter (Arista SKU: PWR-AP-W4) to power the AP. The power adapter must be connected to a socket outlet with an grounded connection.

Note: If not using PoE+, use only an AC power adapter supported by the AP.

5.1 Using the Access Point with a Power Adapter

Use a compatible power adapter (Arista SKU: PWR-AP-W4) to power the AP.

Warning: C-430 is intended to be supplied by approved external power source (UL listed/ IEC 60950-1/IEC 62368-1) whose output complies with ES1/SELV, PS2/LPS, output rating 12V DC, 3.3A minimum (for DC port) or 54V DC, 0.6A minimum (for PoE port), at an ambient temperature of 45°C, and at maximum altitude of 5000m. For any assistance, please contact your Arista representative.

The maximum altitude of operation for the power adapter is 5000m.

To power up the device with power adapter, perform the following steps:

1. Plug the power cable into the DC power receptacle at the rear of the AP.
2. Plug the other end of the power cable into an 110V~240V, 50/60 Hz AC power source.
3. Wait until the AP LED indicators light up. Refer to the LED Indicator status table.

Chapter 6

Connecting the Access Point to the Network

To connect the AP to the network, perform the following steps:

1. Install the AP on a network with a DHCP-enabled server.
2. Set up a DNS entry for **wifi-security-server** on all DNS servers. This entry should point to the server IP address. By default, the AP looks for the DNS entry, **wifi-security-server.**
3. Verify the AP LED indicators as ON with green LEDs, indicating an operational AP connected to the server
4. Log on to the server using SSH and run the `get sensor list` command.

   The command returns a list of all Arista devices recognized by the server. Single Sign-On users can go to the **Monitor** tab in CloudVision WiFi and check if the device appears on the **Access Points** tab.

Note: If zero configuration fails, the AP must be configured manually.

Important: If you do not have DHCP enabled on a subnet, the AP cannot connect to that subnet with zero configuration. If the DNS entry does not exist on the DNS servers or you do not have the DHCP server running on the subnet, you must manually configure the device. For details on configuring an AP manually, see the Access Point CLI Guide.

6.1 Connecting the Access Point using PoE

If using a PoE injector, plug the data connection into a suitable switch port with proper network connectivity.

For PoE port details, see the Rear Panel section.

Chapter 7

Access Point Troubleshooting

The table below lists some of the troubleshooting guidelines for the access point (AP).

Problem	Solution
The AP did not receive a valid IP address via the DHCP.	Be sure that the DHCP server is on and available on the VLAN/subnet connected to the AP. If the AP fails to get a valid IP address, you can reboot it to see if that resolves the problem.
Unable to connect to the server.	• Be sure you have an active server and reachable from the network connected to the AP. If a firewall or a router has Access Control Lists (ACLs) enabled between the AP and the server, allow traffic on UDP port 3851. • Use the IP-based server discovery method and be sure you have correctly entered the DNS name, **wifi-security-server** , on the DNS server. • Be sure the DNS server has correctly configured IP addresses or provided by the DHCP server. • The AP might fail to authenticate with the server. In this case, an 'Authentication failed ' event logs to the server. Refer to the event for recommended action.
The AP has encountered a problem.	• If using Arista Cloud Services, then open the TCP port 443 (SSL). If you have an on-premises installation, then open UDP port 3851 and TCP 443. • If using a Proxy, Web Accelerator, or URL Content Filter between the AP and the Internet, ensure that the settings allow communication between the AP and Arista Cloud Services. For more information, see https://arista.my.site.com/AristaCommunity/s/article/Wi-Fi-Access-Point-Server-Communication-Workflow • If your configuration requires you to specify an exact IP address or IP range for Arista Cloud Services, please contact support-campus@arista.com

Appendix A: AP-Server Mutual Authentication

The AP-server communication begins with a mutual authentication step where the AP and server authenticate each other using a shared secret. The AP-server communication takes place only if this authentication succeeds.

After the authentication succeeds, the server generates a session key and encrypts all communication between the AP and server using the session key.

The AP and server ship with the same default value for the shared secret. Use the CLI commands on the server and the AP to change the shared secret.

Note: After changing the shared secret (communication key) on the server, all APs connected to the server automatically use the new communication key. You must manually configure the new communication key on an AP if not connected to the server when the key changes on the server.

For more information on the AP-server communication process, see the Wi-Fi Access Point Server Communication Workflow article.

Appendix B: Product Compliance

Singapore IMDA Registration Mark