C-460

Contents

About This Guide

This installation guide explains how to deploy the C-460 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 who wants to install and configure the access point.

Document Overview

This guide contains the following chapters:

> 📝 **Note:** All instances of the term 'server' in this document refer to the Wireless Manager, unless the server name or type is explicitly stated.

Product and Documentation Updates

To receive important news on product updates, please visit our website at https://www.arista.com/en/support/product-documentation. We continuously enhance our product documentation based on customer feedback

This equipment conforms to the requirements of the NCC.

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□ 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。

Package Content

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

Figure 1: Package Components

Table 1: Labels: Package Components

Label	Description
1	C-460 Access Point
2	15/16" (24 mm) Mounting Bracket (MNT-AP-24MM)

⚠️ **Important:** The MAC address of the AP is printed on a label at the bottom of the product and the packaging box. Note down the MAC address before mounting the AP on the ceiling or at a location that is difficult to access.

If the package is not complete, 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.

Access Point Overview

C-460 is a 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 on page 4
- Rear Panel on page 6
- Side Panel on page 7

Front Panel

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

Figure 2: 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 states.

Table 3: Power LED 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 is getting lower than the required maximum power from the PoE++ switch. It means the AP is getting 802.3at instead of 802.3bt.
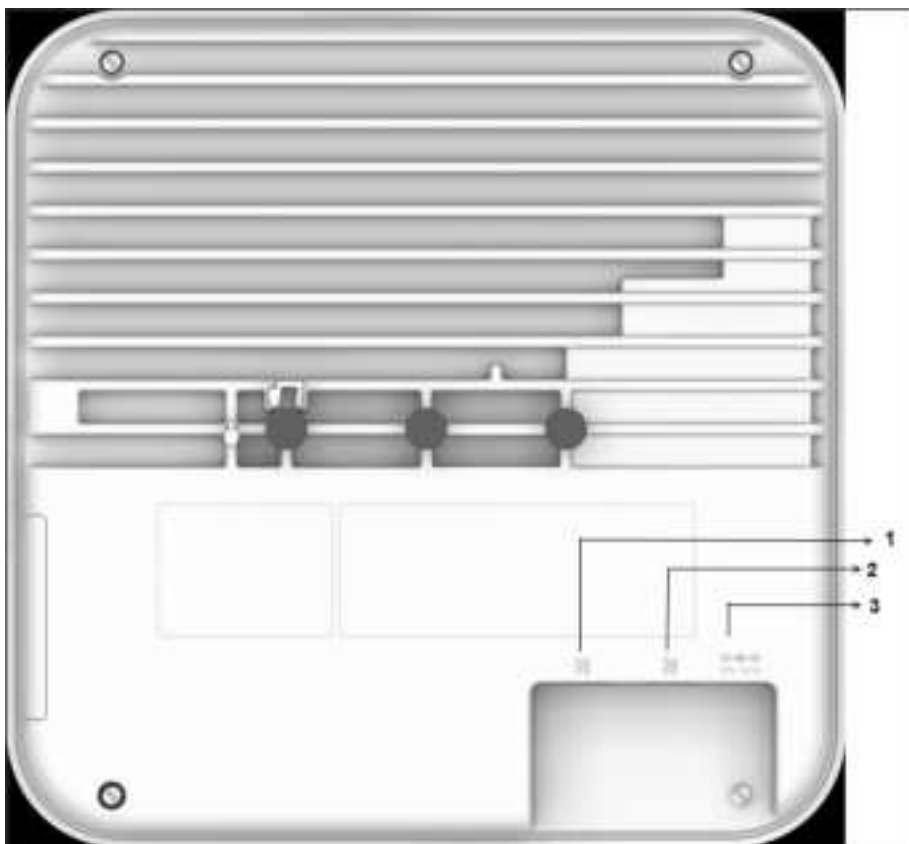
LAN1 LED: ON when the corresponding interface is up.

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

Radio LEDs: ON when the corresponding radio is operational.

Rear Panel

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

Figure 3: 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/4.0A	5.5 mm overall diameter / 2.1 mm center pinhole	N/A
LAN 1	10 Gigabit Ethernet with 802.3bt compliant PoE	RJ-45	11.5/8.6/1.4 Gbps Ethernet
LAN 2	10 Gigabit Ethernet with 802.3bt compliant PoE	RJ-45	11.5/8.6/1.4 Gbps Ethernet

Side Panel

The side panel of the AP has a reset pinhole, USB port, and console port.
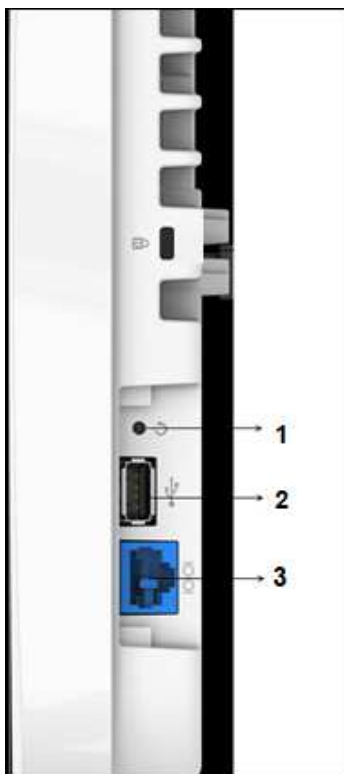
Figure 4: Side Panel

Table 6: Labels: Side Panel

Label	Description
1	Reset
2	USB
3	Console

Port	Description	Connector Type	Speed/Protocol

Console	Establish 'config shell' terminal session via serial connection	RJ-45	• RS 232 Serial (115200 bits per second) • Data bits:8; Stop bits: 1 • Parity: None • Flow Control: None
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	N/A

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

- Config shell password is reset to **config**.
- Server discovery value is erased and changed to the default, **redirector.online.spectraguard.net** (primary) and **wifi-security-server** (secondary).
- All the VLAN configurations are lost.
- If a static IP is configured on the AP, the IP address is erased and DHCP mode is set. The factory default IP address of the AP is 169.254.11.74.

Install the Access Point

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

Zero-Configuration of the Access Point

Zero-configuration is supported under the following conditions:

- The device is in AP mode with background scanning on and no SSID configured.
- A DNS entry **wifi-security-server** is set up on all the DNS servers. This entry should point to the IP address of the server. By default, the AP looks for the DNS entry **wifi-security-server**.
- The AP is on a subnet that is DHCP enabled.

> ❗ **Important:** If the AP is on a network segment that is separated from the server by a firewall, you must first open port 3851 for bidirectional User Datagram Protocol (UDP) and Transport Control Protocol (TCP) traffic on that firewall. This port number is assigned to Arista Networks. Zero-configuration cannot work if multiple APs are set up to connect to multiple servers. In this case, the APs must be configured manually. For details on how to configure an AP manually, see the Access Point Configuration Guide on our website at https://www.arista.com/en/support/product-documentation .

Take a configured AP; that is, ensure that a static IP is assigned to the AP or the settings have been changed for DHCP. Note the MAC address and the IP address of the AP in a safe place before it is installed in a hard-to-reach location. The MAC address of the AP is printed on a label at the bottom of the product.

The steps to install the AP with no configuration (zero-configuration) are as follows:

1. Ceiling Mount the Access Point on page 9 or Wall Mount the Access Point on page 9
2. Connect the Access Point to the Network on page 10
3. Power the Access Point On on page 10

Ceiling Mount the Access Point

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

1. **Affix the bracket to the T -grid:** Use the mounting bracket to install the AP on the ceiling. Fix the bracket to the T-grid and rotate the bracket so that it snaps on the T-grid. The bracket is now parallel to an arm of the T-grid. Ensure that the bracket is properly snapped to the T-grid, as shown below.
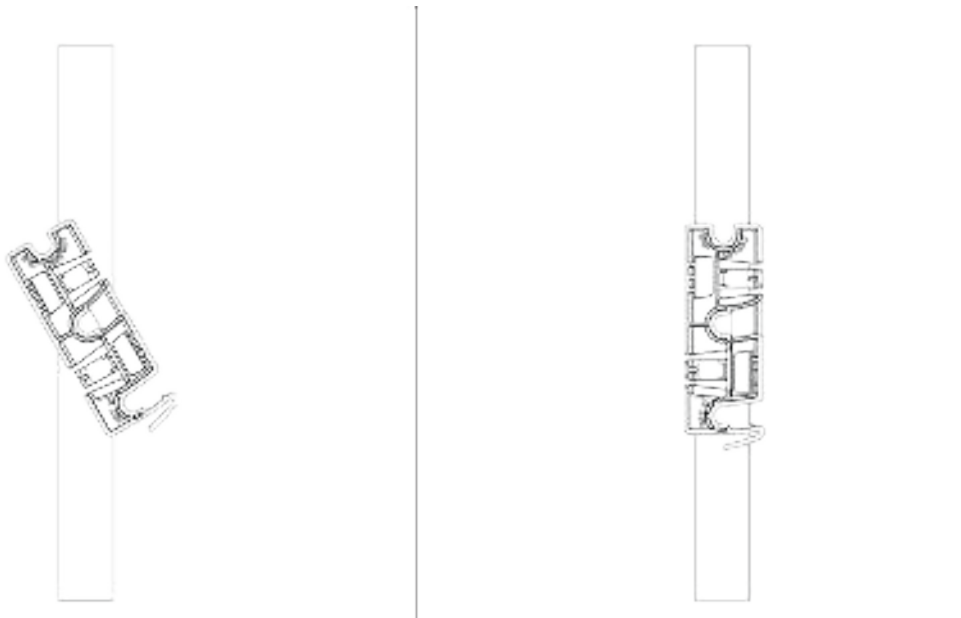
2. **Mounting the AP on the bracket:** Place the first mounting post on the rear-side of the AP on to the lower notch of the bracket. Rotate the AP such that the center mounting post fits in to the center notch on the bracket. Ensure that all the mounting posts on the rear-side of the AP are snapped in to the respective notches on the bracket. The mounting posts now properly fit in the respective notches of the bracket and the AP is mounted properly.

Mounting Instructions using the Silhouette/Interlude Bracket Mount: The Silhouette/Interlude mounting bracket is not a part of the standard package and must be procured separately. The mounting instructions for the Silhouette/Interlude Bracket Mount are similar to 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.

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.

Power the Access Point On

You can power the access point (AP) on by plugging one end of the Ethernet cable into the PoE++ switch or injector and the other end into the Ethernet/PoE++ port on the AP. Ensure the PoE ++ source you are using is turned on.

As an alternative to PoE++, you can insert a compatible power adaptor plug into an AC power outlet and the other end into the power input port on the AP.

Note: If you are not using PoE++, ensure that you use only an AC power adaptor supported by the AP.

Using the Access Point with Power Adapter

Use a compatible power adapter (Arista SKU: PWR-AP-W5) to power the AP.

Warning: The C-460 AP is intended to be supplied with a UL-listed PoE power source suitable for use at 45ºC. The power output should meet LPS requirements or PS2, with a rating of 48V DC (1A minimum). The current supplied by PoE++ should be 850mA. If you are not using PoE++, ensure that you use only an AC power adapter supported by the AP. The power adapter should be suitable for use at 45ºC. This product is intended to be supplied by a Listed Direct Plug-In Power Unit marked as Class 2, Listed Power Adapter, or DC power source marked L.P.S. (or Limited Power Source) and rated from 12 V DC, 4A minimum.

The power source must be placed at an altitude of 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 is ready. Refer to the LED status table.

Connect the Access Point to the Network

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

1. Ensure that a DHCP server is available on the network to enable network configuration of the AP.
2. Add the DNS entry **wifi-security-server** on all DNS servers. This entry must point to the IP address of the server.
3. Ensure that DHCP is running on the subnet to which the AP is connected.
4. Check the LEDs on the AP to ensure that it is connected to the server.
5. Log on to the server using ssh and run the `get sensor list` command.

   You will see a list of all Arista devices that are recognized by the server. Single Sign-On users can go to the **Monitor** tab in CloudVision Cognitive Unified Edge and check whether the access point is visible under the **Monitor** tab.

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

Important: If DHCP is not enabled on a subnet, the AP cannot connect to that subnet with zero-configuration. If the DNS entry is not present on the DNS servers, or if you do not have the DHCP server running on the subnet, you must manually configure the AP. For details on configuring an AP manually, see the Access Point Configuration guide on our website at https://www.arista.com/en/support/product-documentation .

Connect the Access Point using PoE

If you are using a PoE injector, make sure the data connection is plugged into a suitable switch port with proper network connectivity.

For PoE port details, see the Rear Panel on page 6 section.

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.	Ensure that the DHCP server is on and available on the VLAN/subnet to which the AP is connected. If the AP still fails to get a valid IP address, you can reboot it to see if the problem is resolved.
Unable to connect to the server.	• Ensure that the server is running and is reachable from the network to which the AP is connected. If a firewall or a router has Access Control Lists (ACLs) enabled between the AP and the server, ensure that traffic on UDP port 3851 is allowed. • Use the IP-based server discovery method and ensure that you have correctly entered the DNS name, **wifi-security-server** , on the DNS server. • Ensure that the DNS server IP addresses are either correctly configured, or are provided by the DHCP server. • The AP might fail to authenticate with the server. In this case, an 'Authentication failed ' event is raised on the server. Refer to the event for recommended action.
The AP has encountered a problem.	• If you are using Arista Cloud Services, then open the TCP port 443 (SSL). If you have an on-premises installation, then open UDP port 3851 and port 80. • If you are 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. • If your configuration requires you to specify an exact IP address or IP range for Arista Cloud Services, please contact support-campus@arista.com.