AP5060D and AP5060U Installation Guide

Setup, Maintenance, and Best Practices

9039548-00 Rev AA
March 2026

Legal Notice

Extreme Networks, Inc. reserves the right to make changes in specifications and other information contained in this document and its website without prior notice. The reader should in all cases consult representatives of Extreme Networks to determine whether any such changes have been made.

The hardware, firmware, software or any specifications described or referred to in this document are subject to change without notice.

Trademarks

Extreme Networks and the Extreme Networks logo are trademarks or registered trademarks of Extreme Networks, Inc. in the United States and/or other countries.

All other names (including any product names) mentioned in this document are the property of their respective owners and may be trademarks or registered trademarks of their respective companies/owners.

For additional information on Extreme Networks trademarks, see: https://www.extremenetworks.com/about-extreme-networks/company/legal/trademarks

Open Source Declarations

Some software files have been licensed under certain open source or third-party licenses. End-user license agreements and open source declarations can be found at: https://www.extremenetworks.com/support/policies/open-source-declaration/

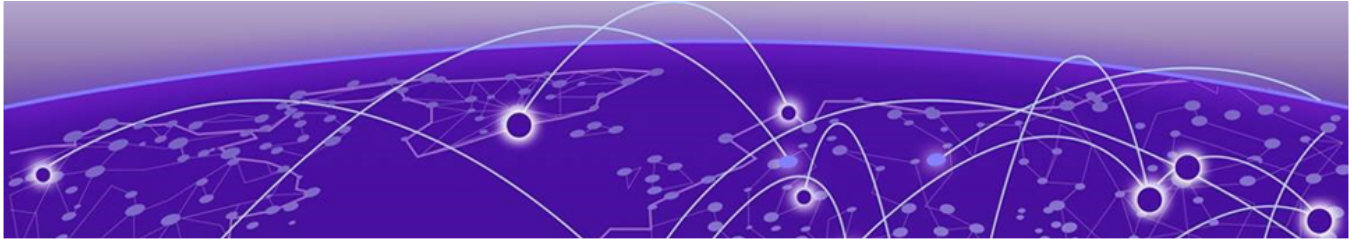
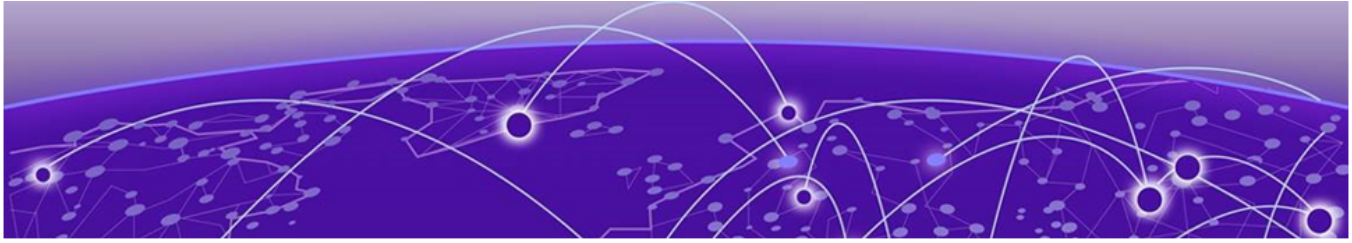


Table of Contents



Abstract

This installation guide for ExtremeWireless AP5060D and AP5060U (revision 9039548 00 Rev AA, February 2026) provides comprehensive technical specifications, mounting procedures, and regulatory compliance information for these outdoor 802.11be (Wi Fi 7) access points designed for stadium and harsh high density environments. It summarizes the quad radio architecture, IoT and sensor capabilities, AFC enabled 6 GHz Standard Power operation, environmental and power specifications, and multi gigabit Ethernet support. The guide outlines approved pole, wall, Unistrut, and under seat mounting methods; Horizon Rule RF power requirements; onboarding workflows; and FCC/IC/CE regulatory obligations, including 6 GHz operational restrictions. It also details torque values, IP67 cable sealing components, grounding practices, and pressure washing limits for safe and compliant outdoor deployment.

Preface

Read the following topics to learn about:

- The meanings of text formats used in this document.
- Where you can find additional information and help.
- How to reach us with questions and comments.

Text Conventions

Unless otherwise noted, information in this document applies to all supported environments for the products in question. Exceptions, like command keywords associated with a specific software version, are identified in the text.

When a feature, function, or operation pertains to a specific hardware product, the product name is used. When features, functions, and operations are the same across an entire product family, such as Extreme Networks switches, the product is referred to as *the switch*.

Table 1: Notes and warnings

Icon	Notice type	Alerts you to...
	Tip	Helpful tips and notices for using the product
	Note	Useful information or instructions
	Important	Important features or instructions
	Caution	Risk of personal injury, system damage, or loss of data
	Warning	Risk of severe personal injury

Table 2: Text

Convention	Description
`screen displays`	This typeface indicates command syntax, or represents information as it is displayed on the screen.
The words *enter* and *type*	When you see the word *enter* in this guide, you must type something, and then press the Return or Enter key. Do not press the Return or Enter key when an instruction simply says *type*.
Key names	Key names are written in boldface, for example **Ctrl** or **Esc**. If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press **Ctrl**+**Alt**+**Del**
Words in italicized type	Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles.
NEW!	New information. In a PDF, this is searchable text.

Table 3: Command syntax

Convention	Description
bold text	Bold text indicates command names, keywords, and command options.
italic text	Italic text indicates variable content.
`[ ]`	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
`{ x | y | z }`	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
x | **y**	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, such as passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, *member*[*member*...].
\	In command examples, the backslash indicates a “soft” line break. When a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

Documentation and Training

Find Extreme Networks product information at the following locations:

Current Product Documentation
Release Notes
Hardware and Software Compatibility for Extreme Networks products
Extreme Optics Compatibility
Other Resources such as articles, white papers, and case studies

Open Source Declarations

Some software files have been licensed under certain open source licenses. Information is available on the Open Source Declaration page.

Training

Extreme Networks offers product training courses, both online and in person, as well as specialized certifications. For details, visit the Extreme Networks Training page.

Help and Support

If you require assistance, contact Extreme Networks using one of the following methods:

Extreme Portal

Search the GTAC (Global Technical Assistance Center) knowledge base; manage support cases and service contracts; download software; and obtain product licensing, training, and certifications.

The Hub

A forum for Extreme Networks customers to connect with one another, answer questions, and share ideas and feedback. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.

Call GTAC

For immediate support: (800) 998 2408 (toll-free in U.S. and Canada) or 1 (408) 579 2800. For the support phone number in your country, visit www.extremenetworks.com/support/contact.

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number, or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any actions already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

Subscribe to Product Announcements

You can subscribe to email notifications for product and software release announcements, Field Notices, and Vulnerability Notices.

1. Go to The Hub.
2. In the list of categories, expand the **Product Announcements** list.
3. Select a product for which you would like to receive notifications.
4. Select **Subscribe**.
5. To select additional products, return to the **Product Announcements** list and repeat steps 3 and 4.

You can modify your product selections or unsubscribe at any time.

Send Feedback

The User Enablement team at Extreme Networks has made every effort to ensure that this document is accurate, complete, and easy to use. We strive to improve our documentation to help you in your work, so we want to hear from you. We welcome all feedback, but we especially want to know about:

- Content errors, or confusing or conflicting information.
- Improvements that would help you find relevant information.
- Broken links or usability issues.

To send feedback, email us at Product-Documentation@extremenetworks.com.

Provide as much detail as possible including the publication title, topic heading, and page number (if applicable), along with your comments and suggestions for improvement.

Overview

Figure 1: AP5060D and AP5060U

The AP5060D and AP5060U and purpose-built 802.11be (Wi-Fi 7) access points designed for stadiums and other harsh high-density environments. Engineered to support more users and IoT devices with greater performance and efficiency, these APs deliver next-generation wireless connectivity in the harshest environments. Both APs have a quad radio design with 2.4 GHz (4x4:4), 5 GHz (4x4:4), 6 GHz (4x4:4) and a

2x2 dedicated sensor radio. They also have two IoT radios with Bluetooth, Zigbee, and Thread capabilities.

Note
The AP5060D and AP5060U supports Standard Power operation on the 6 GHz band in the United States and Canada, using Automated Frequency Coordination (AFC). Certification requirements vary by country.

The following figure shows the AP5060D on the left and the AP5060U on the right.

Purchase Order Information

Use the information below when you order your AP.

Table 4: AP5060D and AP5060U SKUs

SKU	Description
AP5060D-WW	Weatherized Quad Radio Wi-Fi 7 (4x4:4): 2.4 GHz, 5 GHz, 6 GHz & dedicated full time sensor, Dual IOT, Dual 5 GHz, Dual 6 GHz, Multi-Rate Port, Directional Antennas: 20 or 70 degrees. Mounting sold separately. Domain: World Sku
AP5060D-WW-TAA	Weatherized Quad Radio Wi-Fi 7 (4x4:4): 2.4 GHz, 5 GHz, 6 GHz & dedicated full time sensor, Dual IOT, Dual 5 GHz, Dual 6 GHz, Multi-Rate Port, Directional Antennas: 20 or 70 degrees. Mounting sold separately. Domain: World Sku TAA Compliant
AP5060U-WW	Weatherized Quad Radio Wi-Fi 7 (4x4:4): 2.4 GHz, 5 GHz, 6 GHz & dedicated full time sensor, Dual IOT, Dual 5 GHz, Dual 6 GHz, Multi-Rate Port, Internal antennas. Mounting sold separately. Domain: World Sku
AP5060U-WW-TAA	Weatherized Quad Radio Wi-Fi 7 (4x4:4): 2.4 GHz, 5 GHz, 6 GHz & dedicated full time sensor, Dual IOT, Dual 5 GHz, Dual 6 GHz, Multi-Rate Port, Internal antennas. Mounting sold separately. Domain: World Sku TAA Compliant

Technical Specifications

Physical Specifications

The AP5060D has the following dimensions and weight:

- Dimensions: 288 mm x 483 mm x 87 mm (11.3in. x 19.0in. x 3.4in.)
- Weight: 4.6 kg (10.27 lbs)

AP5060U has the following dimensions and weight:

- Dimensions: 288 mm x 254 mm x 75 mm (11.34 in. x 10.0in. x 2.95in.)
- Weight: 3.48 kg (7.69 lbs)

Environmental Specifications

The following list shows the environmental operating conditions for the AP5060D and AP5060U:

- Operating: -40°C to 60°C (-40°F to 140°F) w/ solar load
- Storage/Transportation: -40°C to 70°C (-40°F to 158°F)
- Humidity: 0% to 95% (non-condensing)
- Wind rating: 241 Km/h (150 Mph) sustained wind; 266 Km/h (165 Mph) wind gusts

Antenna Gain

Table 5: AP5060U Max Antenna Gain

Software Mode	Radio 1	Radio 2	Radio 3	Scan Radio	IoT Radio 1	IoT Radio 2
1	2.4GHz - 2.1dBi	5GHz - 6.8dBi	6GHz - 6.7dBi	2.4GHz - 2.9dBi 5GHz - 7dBi 6GHz - 6.9dBi	5.4dBi	4dBi
2	5GHz - 5.4dBi	5GHz - 6.8dBi	6GHz - 6.7dBi	2.4GHz - 2.9dBi 5GHz - 7dBi 6GHz - 6.9dBi	5.4dBi	4dBi
3	6GHz - 6dBi	5GHz - 6.8dBi	6GHz - 6.7dBi	2.4GHz - 2.9dBi 5GHz - 7dBi 6GHz - 6.9dBi	5.4dBi	4dBi

Table 6: AP5060D Max Antenna Gain: 20 Degrees (Default)

Software Mode	Radio 1	Radio 2	Radio 3	Scan Radio	IoT Radio 1	IoT Radio 2
1	2.4GHz - 7.9dBi	5GHz - 10.2dBi	6GHz - 11.1dBi	2.4GHz - 8.2dBi 5GHz - 8.1dBi 6GHz - 8.8dBi	4.8dBi	5.3dBi
2	5GHz - 10.8dBi	5GHz - 10.2dBi	6GHz - 11.1dBi	2.4GHz - 8.2dBi 5GHz - 8.1dBi 6GHz - 8.8dBi	4.8dBi	5.3dBi
3	6GHz - 11dBi	5GHz - 10.2dBi	6GHz - 11.1dBi	2.4GHz - 8.2dBi 5GHz - 8.1dBi 6GHz - 8.8dBi	4.8dBi	5.3dBi

Table 7: AP5060D Max Antenna Gain: 70 Degrees

Software Mode	Radio 1	Radio 2	Radio 3	Scan Radio	IoT Radio 1	IoT Radio 2
1	2.4GHz - 7.9dBi	5GHz - 7.6dBi	6GHz - 6.1dBi	2.4GHz - 8.2dBi 5GHz - 8.1dBi 6GHz - 8.8dBi	4.8dBi	5.3dBi
2	5GHz - 7.7dBi	5GHz - 7.6dBi	6GHz - 6.1dBi	2.4GHz - 8.2dBi 5GHz - 8.1dBi 6GHz - 8.8dBi	4.8dBi	5.3dBi
3	6GHz - 7.5dBi	5GHz - 7.6dBi	6GHz - 6.1dBi	2.4GHz - 8.2dBi 5GHz - 8.1dBi 6GHz - 8.8dBi	4.8dBi	5.3dBi

Radiation Patterns

Use the following radiation patterns to assist you as you deploy your AP.

AP5060D Antenna Radiation Patterns

2.4 GHz Radiation Patterns

The following diagrams illustrate the radiation patterns for the AP5060D 2.4 GHz internal antenna.

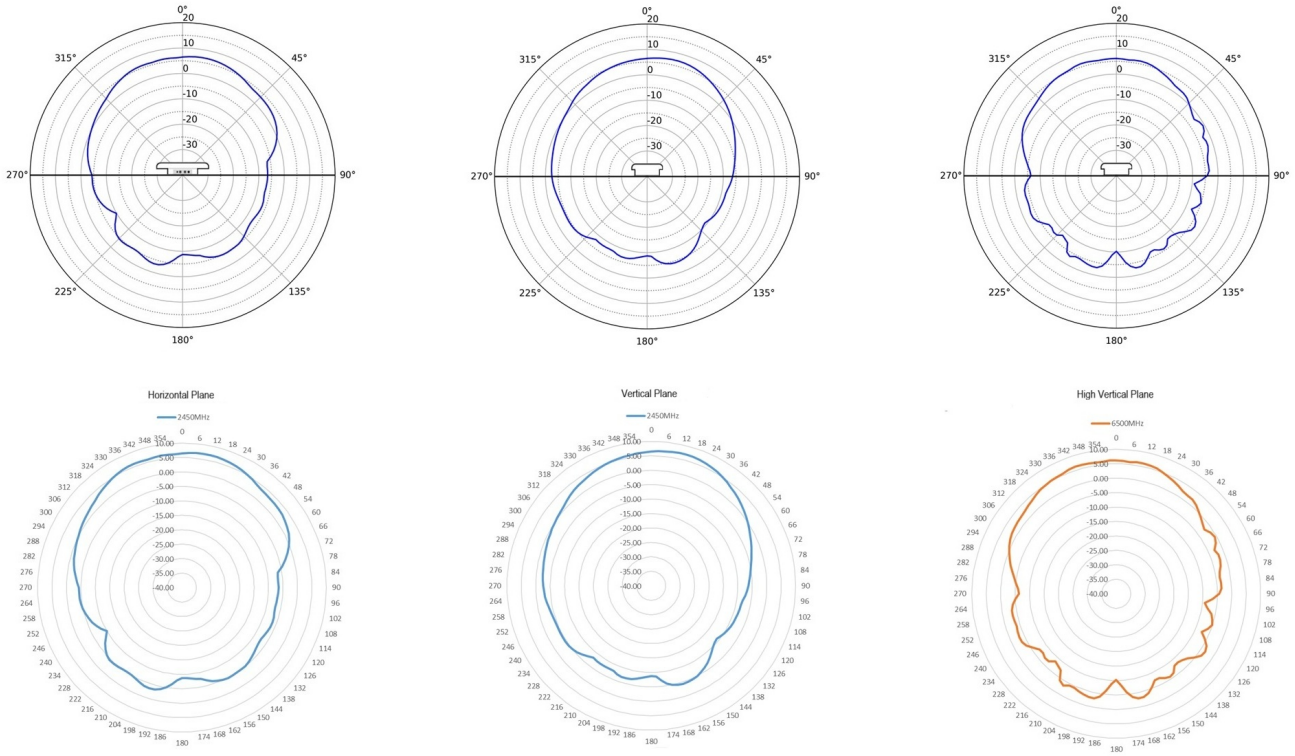


Figure 2: 2.4 GHz Horizontal, Vertical, and High Vertical Radiation Patterns

5 GHz Radiation Patterns

The following diagrams illustrate the radiation patterns for the AP5060D 5 GHz internal antenna.

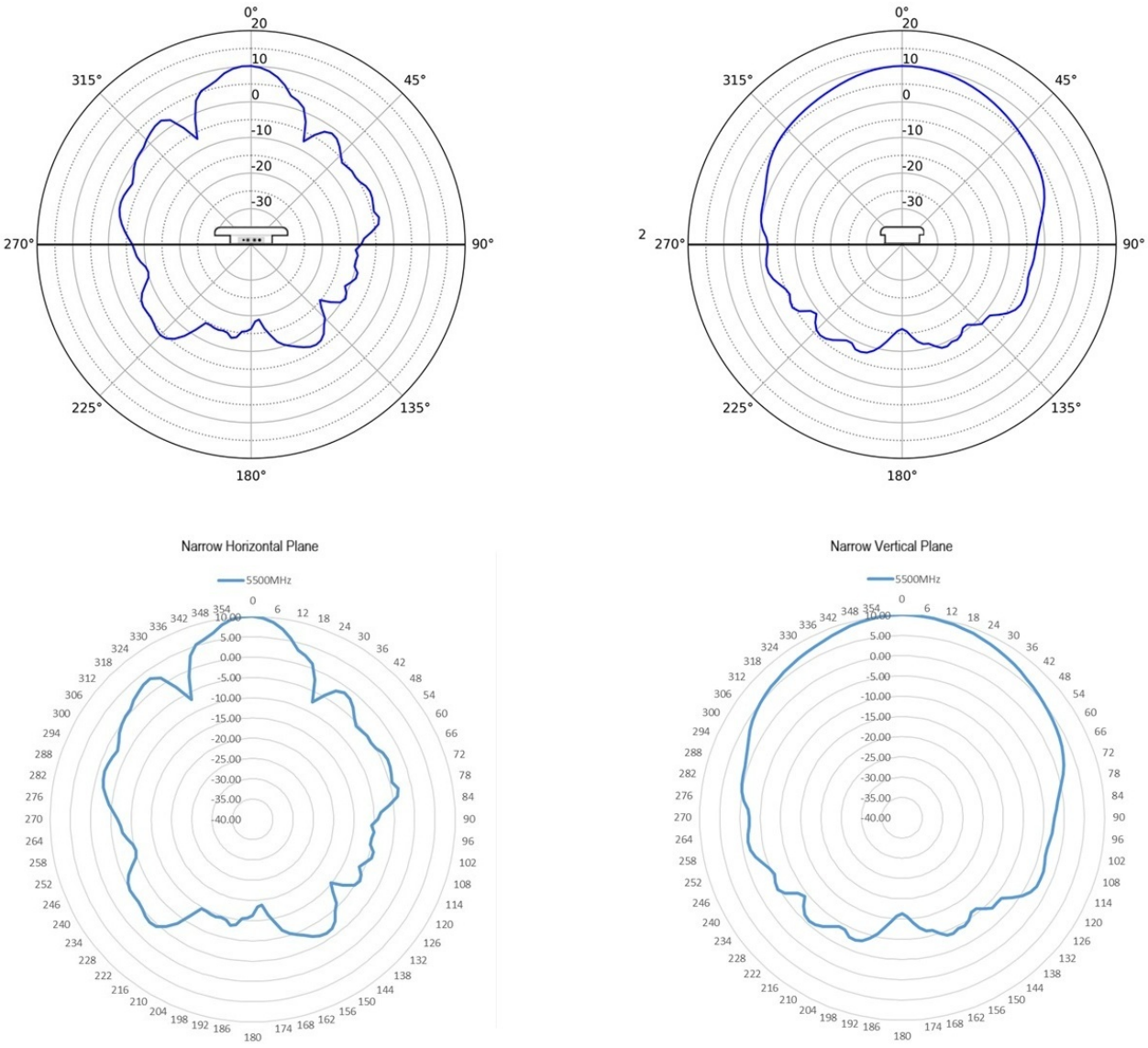


Figure 3: 5 GHz Narrow Radiation Patterns

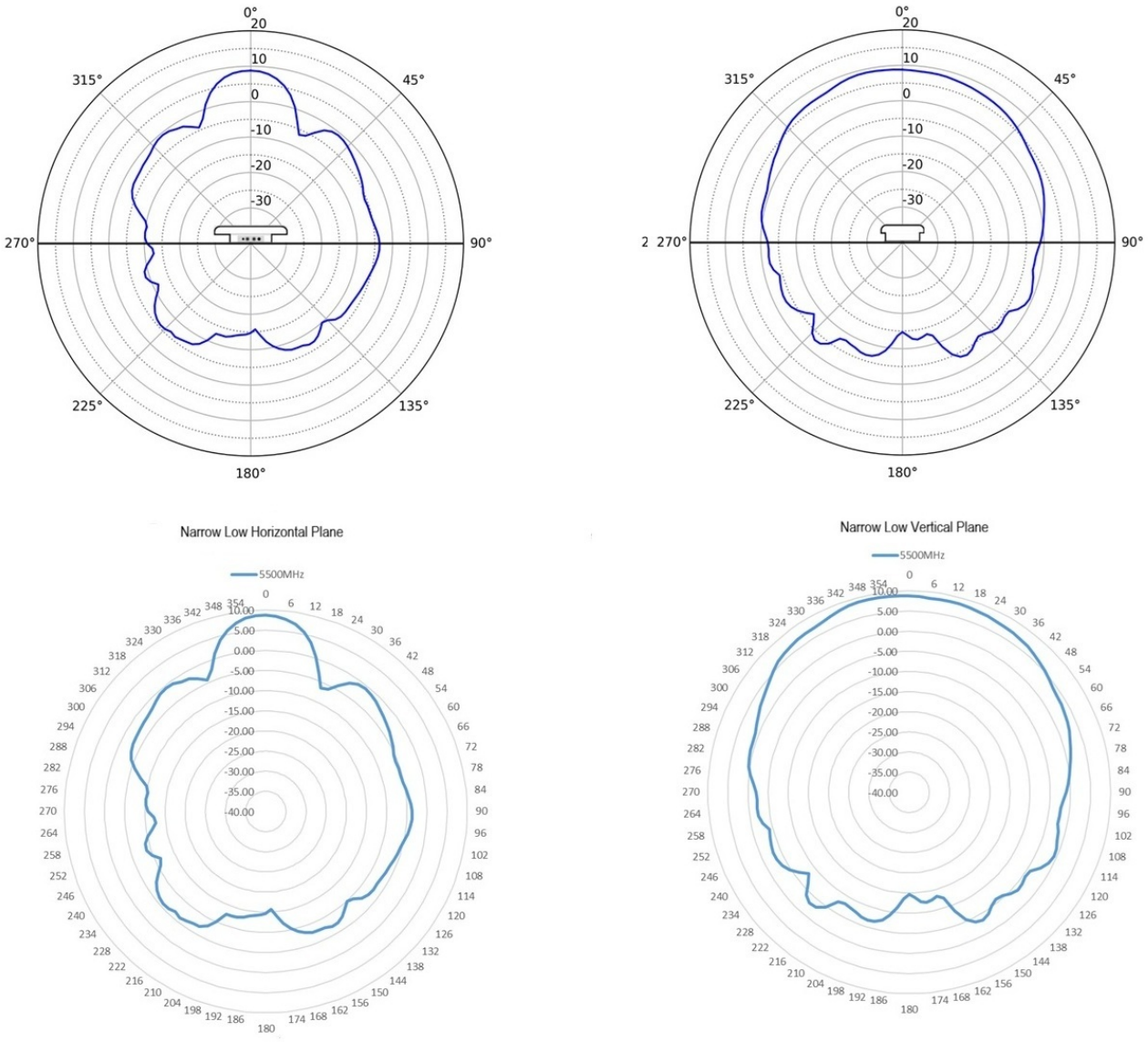


Figure 4: 5 GHz Narrow Low Radiation Patterns

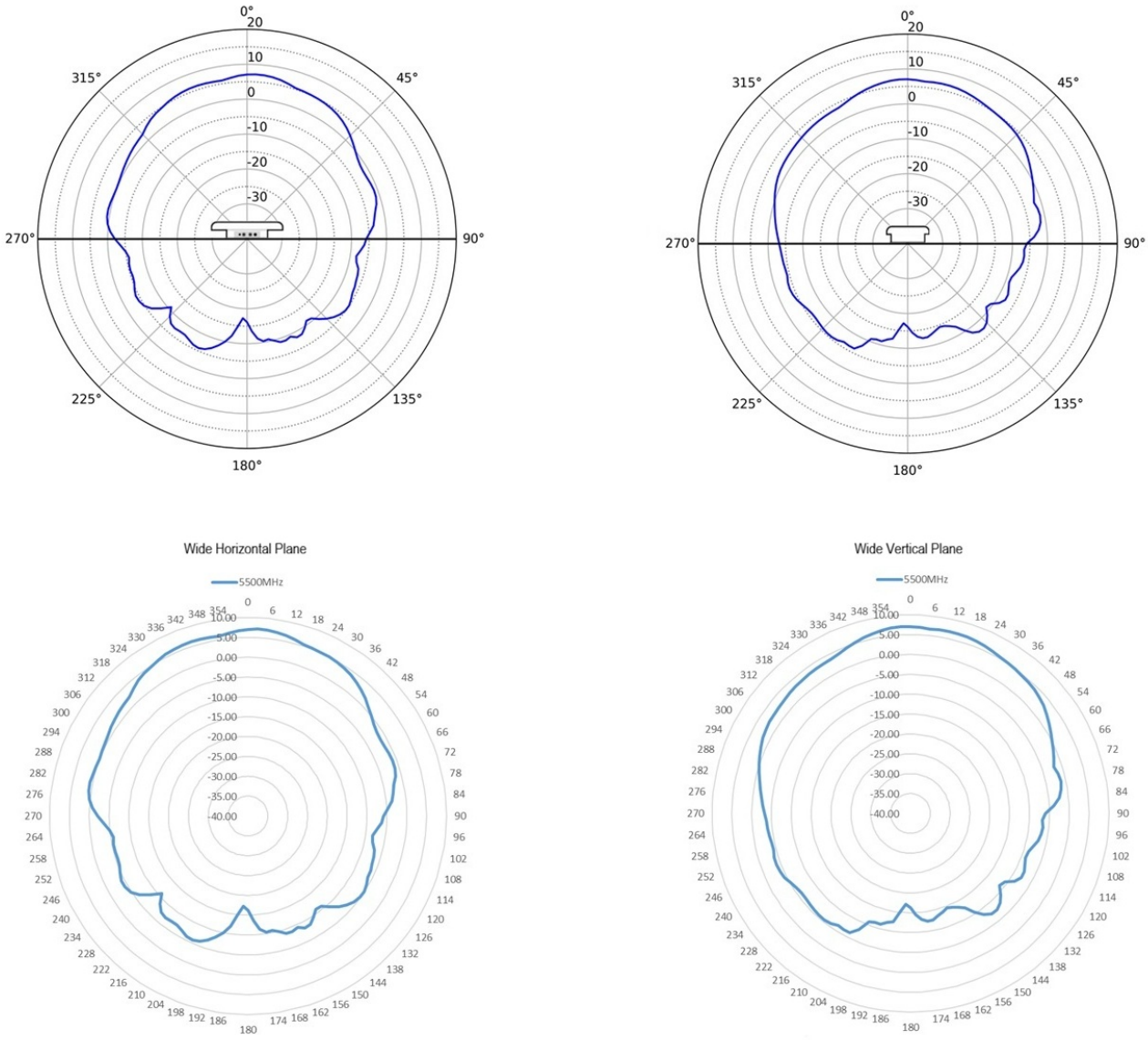


Figure 5: 5 GHz Wide Radiation Patterns

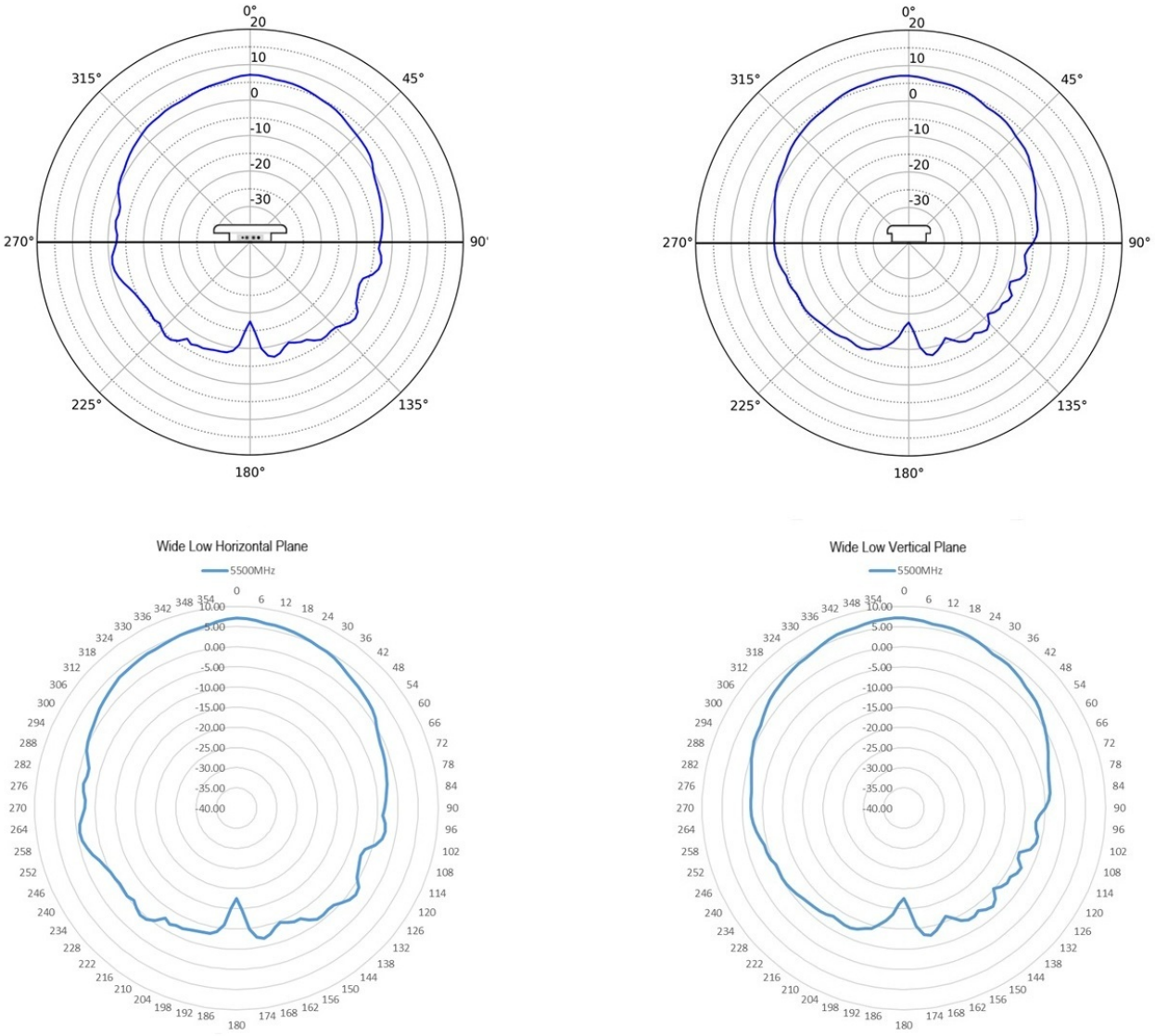


Figure 6: 5 GHz Wide Low Radiation Patterns

6 GHz Radiation Patterns

The following diagrams illustrate the radiation patterns for the AP5060D 6 GHz internal antenna.

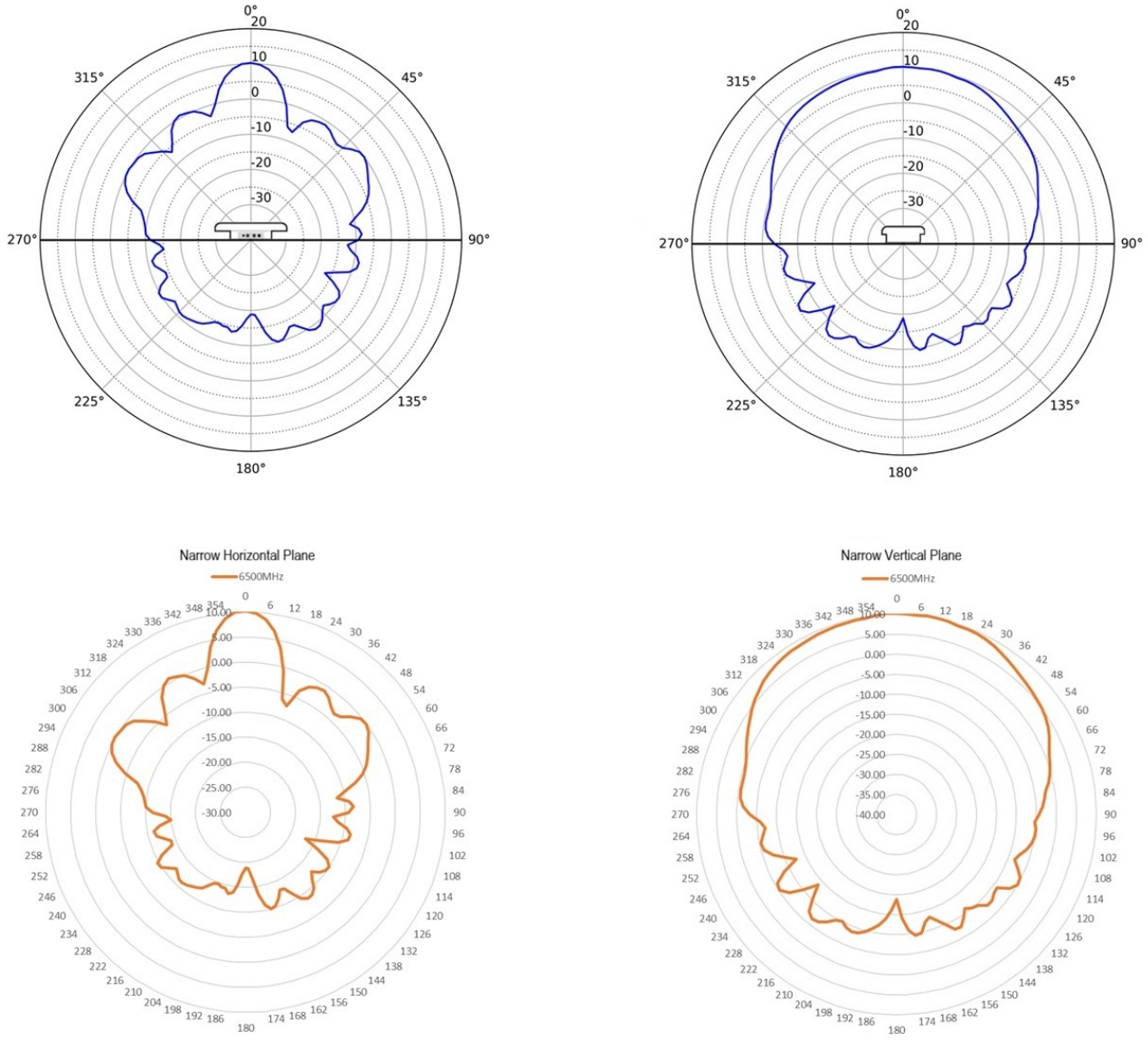


Figure 7: 6 GHz Narrow Radiation Patterns

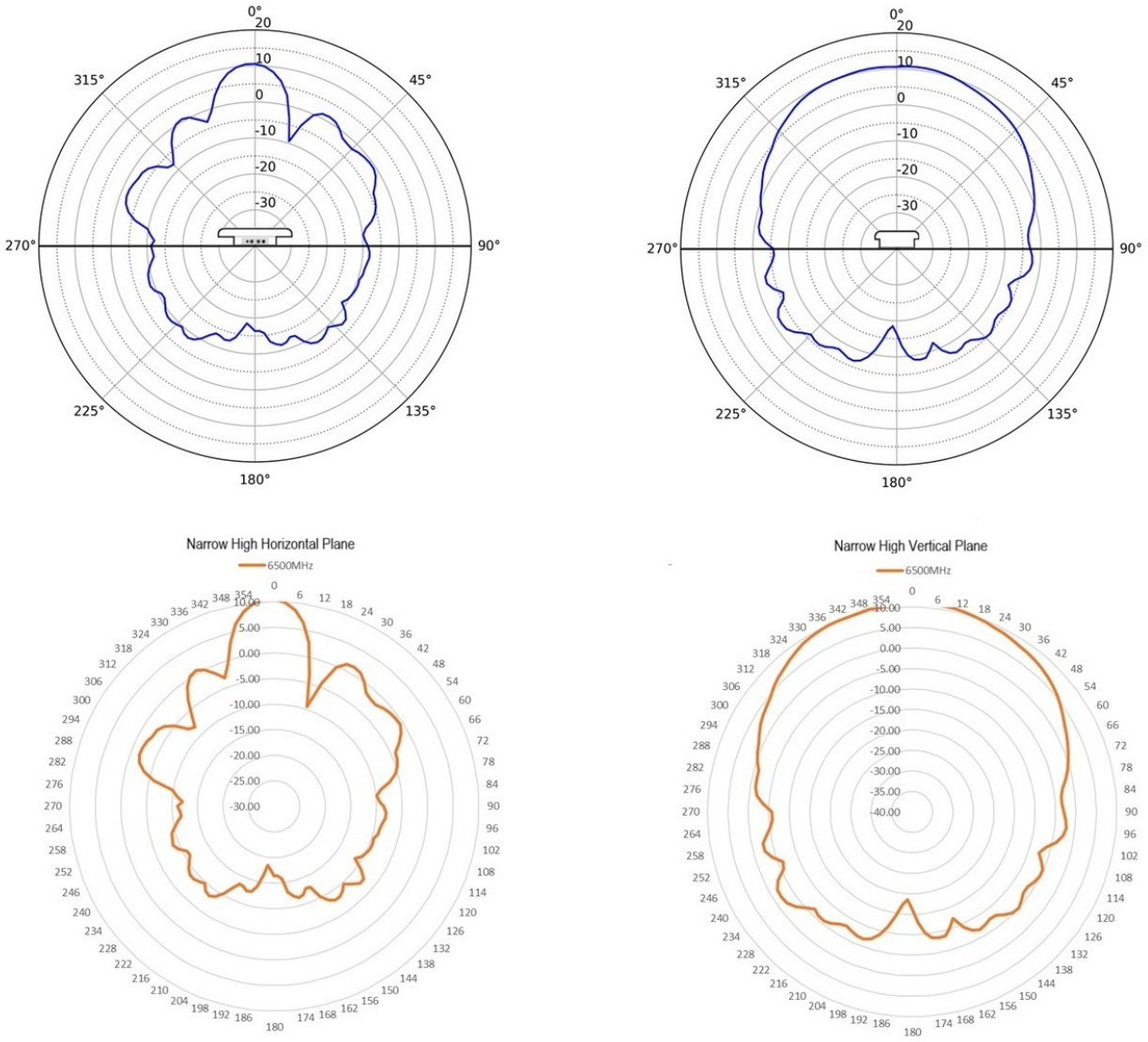


Figure 8: 6 GHz Narrow High Radiation Patterns

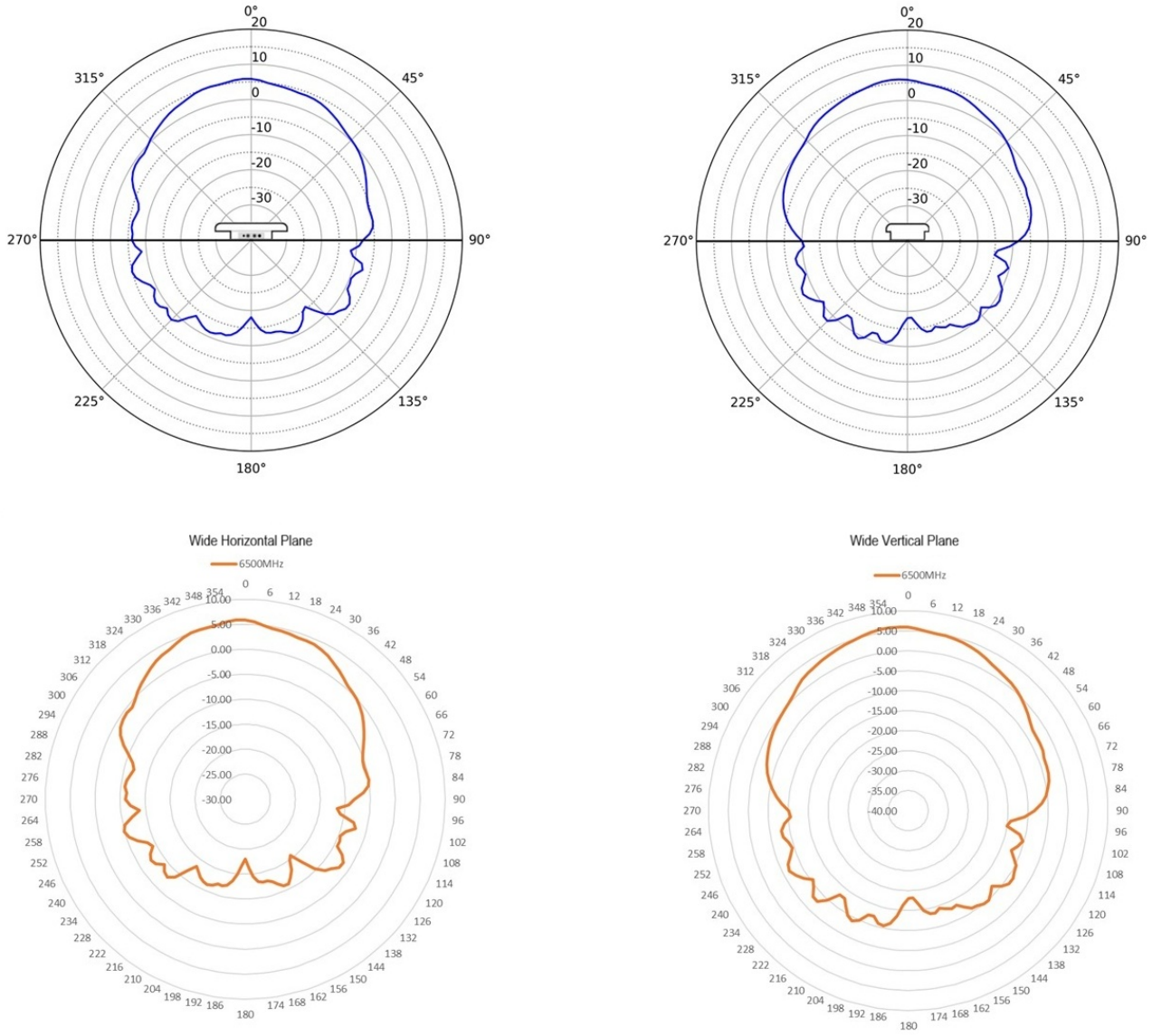


Figure 9: 6 GHz Wide Radiation Patterns

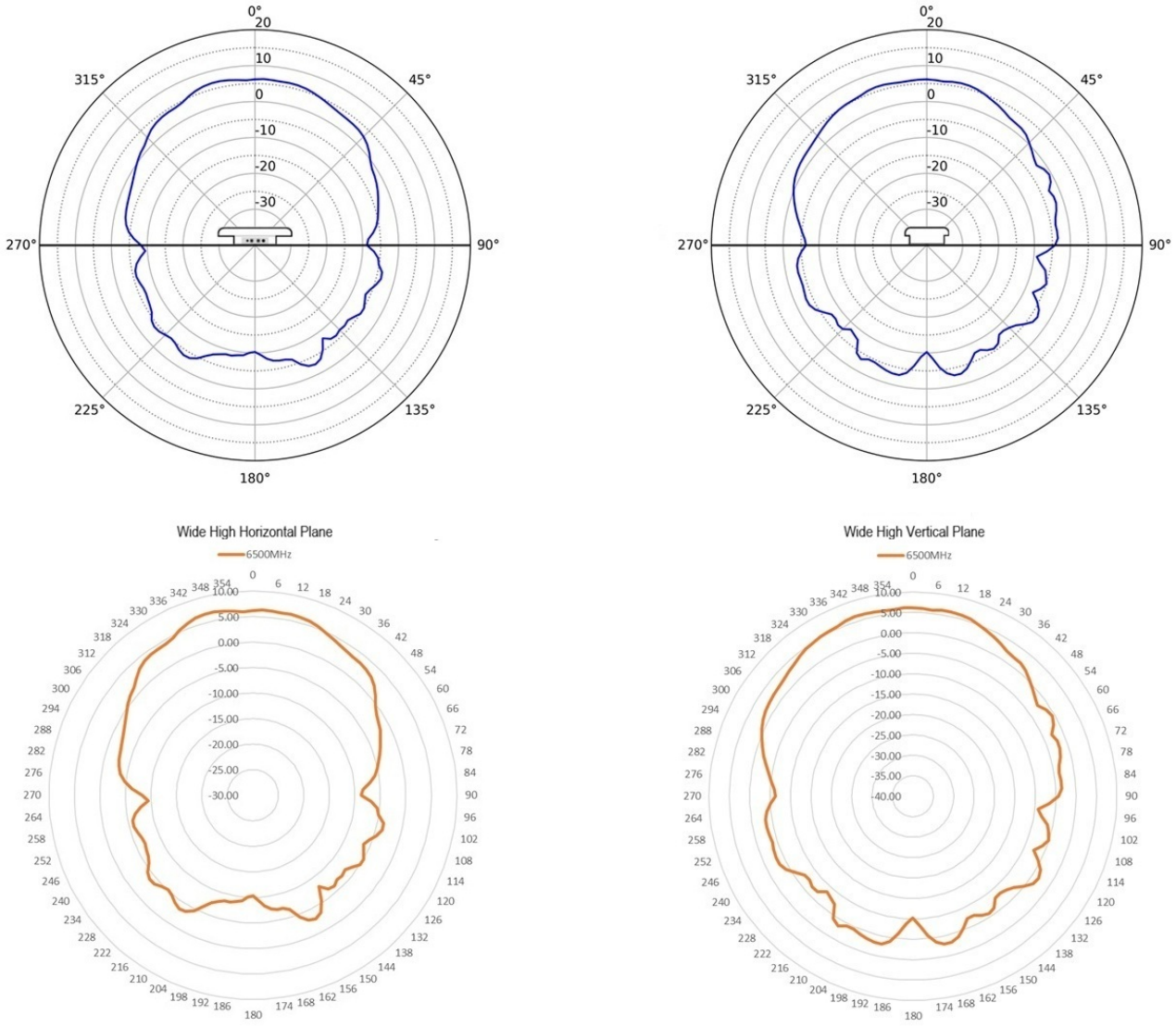


Figure 10: 6 GHz Wide High Radiation Patterns

AP5060D Sensor Radiation Patterns

2.4 GHz, 5 GHz, and 6 GHz Sensor Radiation Patterns For AP5060D

The following diagrams illustrate the radiation patterns for the sensor on the AP5060D.

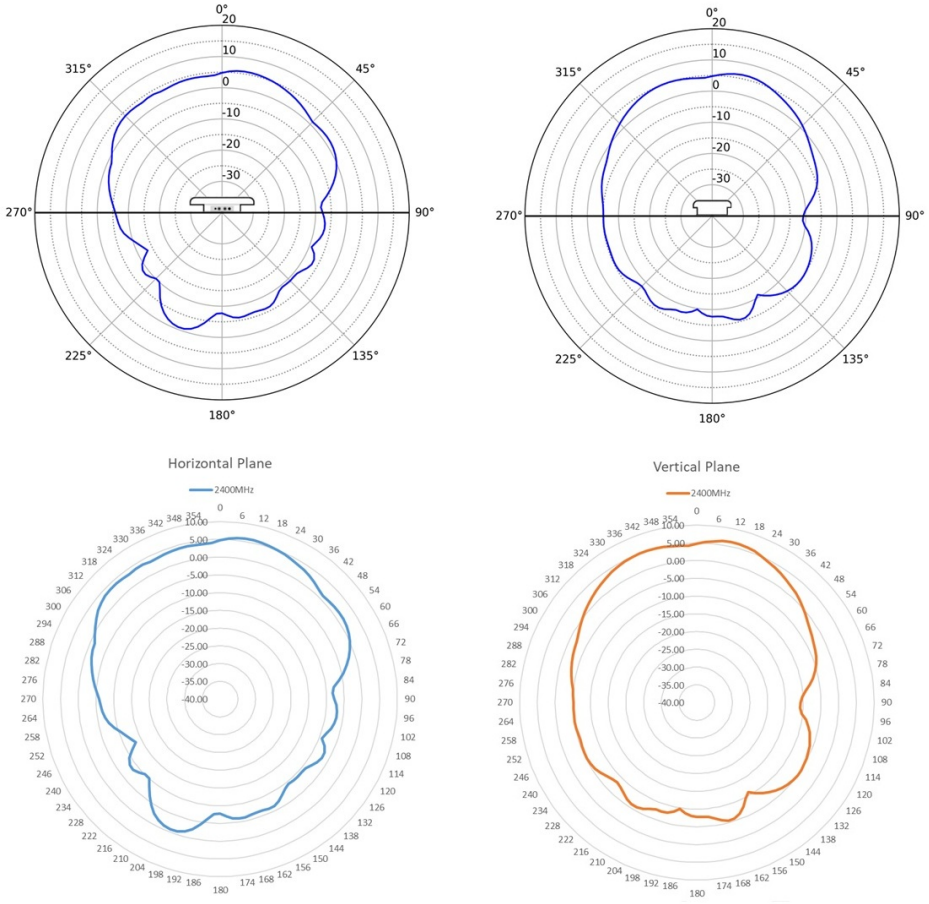


Figure 11: 2.4 GHz Sensor Radiation Patterns

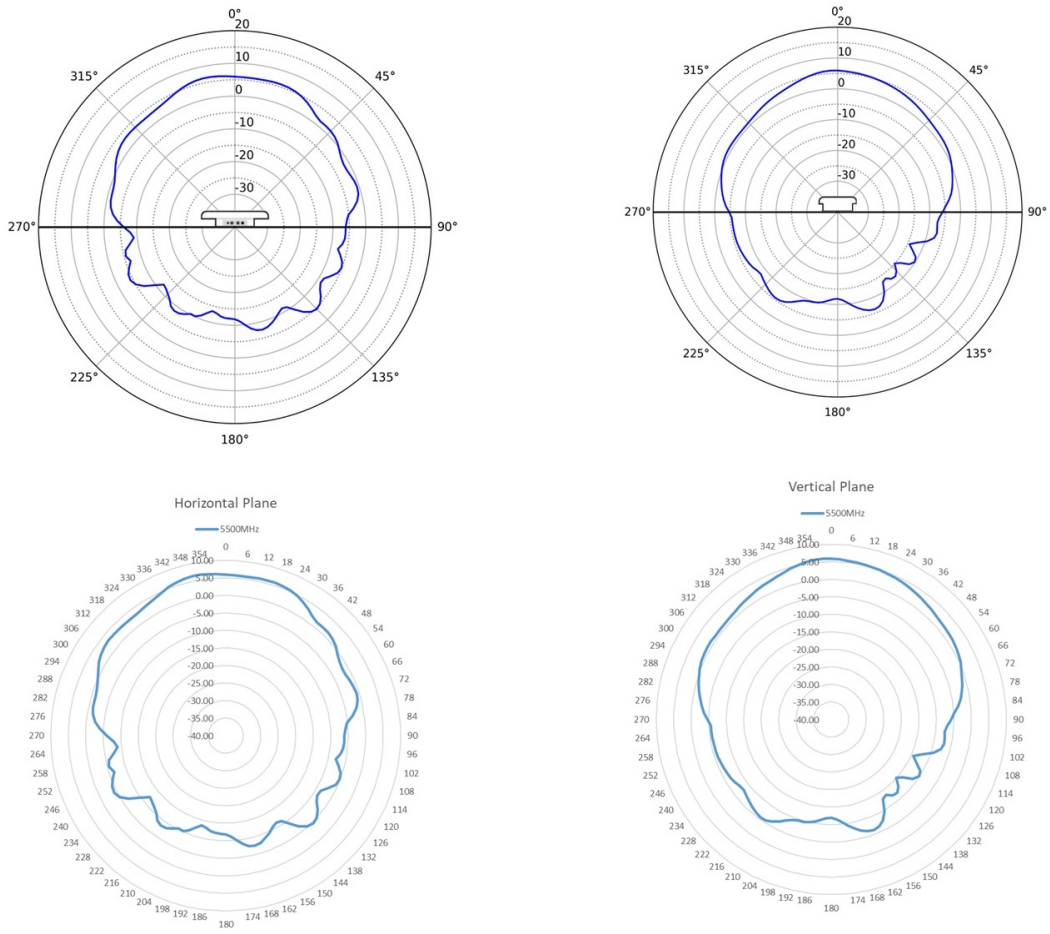


Figure 12: 5 GHz Sensor Radiation Patterns

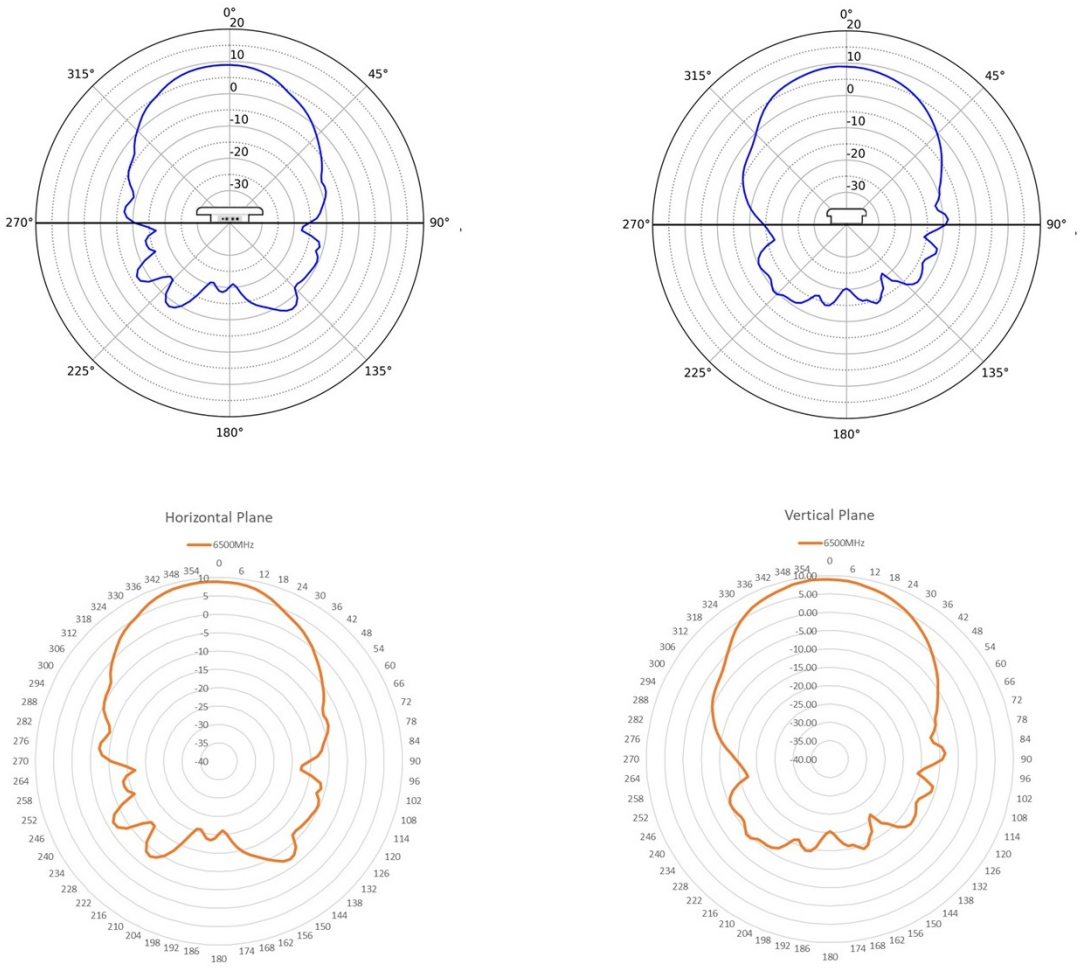


Figure 13: 6 GHz Sensor Radiation Patterns

AP5060D Blue Tooth Low Energy Radiation Patterns

Radio 1 and Radio 2 BLE Radiation Patterns For AP5060D

The following diagrams illustrate the radiation patterns for Blue Tooth Low Energy (BLE) on AP5060D.

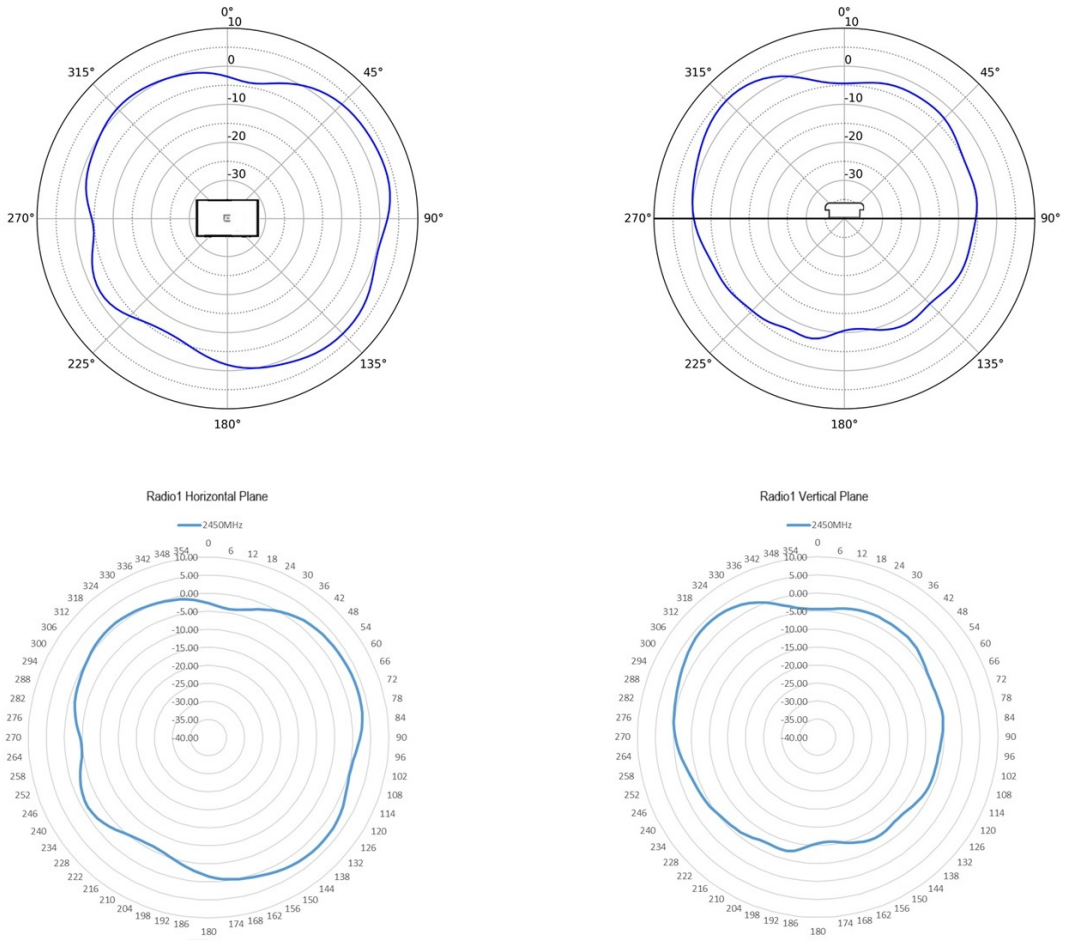


Figure 14: BLE Radio 1 Radiation Patterns

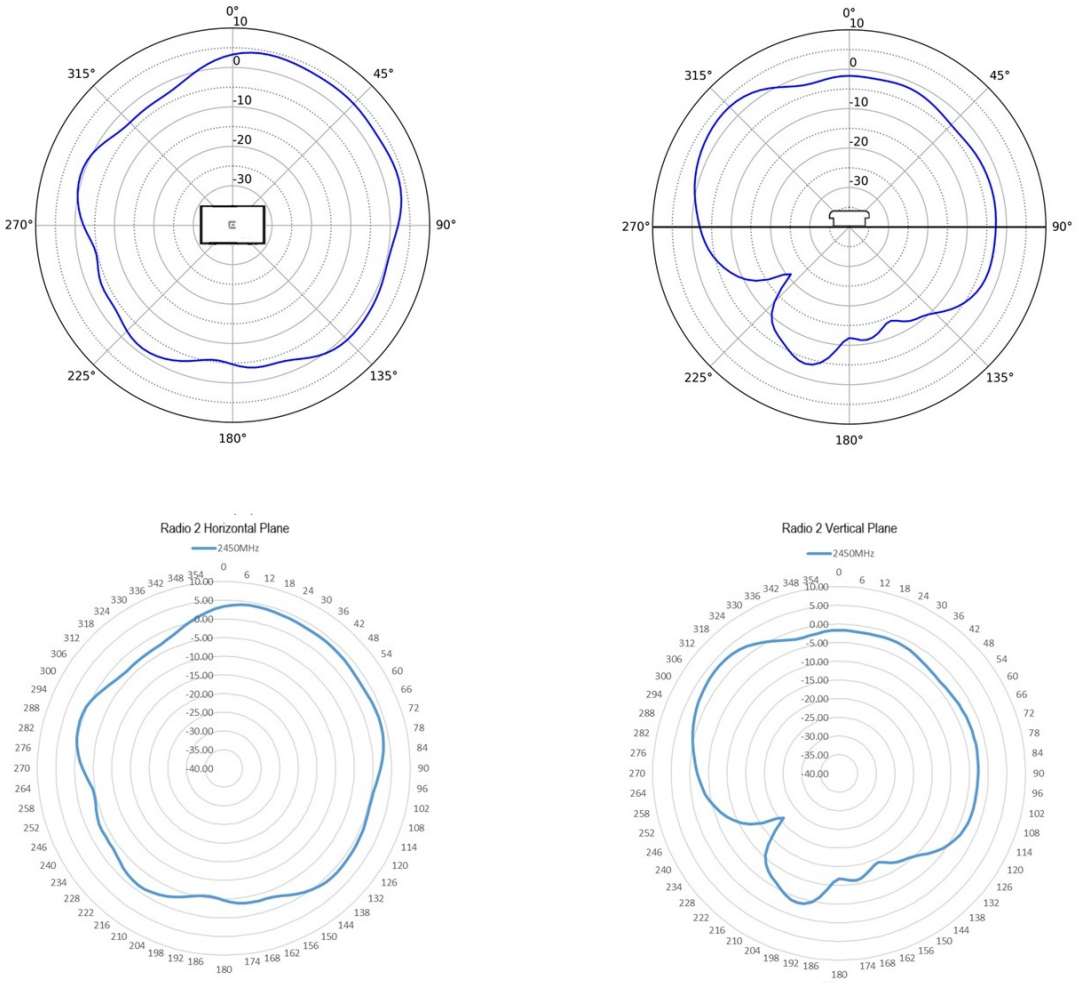


Figure 15: BLE Radio 2 Radiation Patterns

AP5060U Antenna Radiation Patterns

2.4 GHz Radiation Patterns

The following diagrams illustrate the radiation patterns for the AP5060U 2 GHz internal antenna.

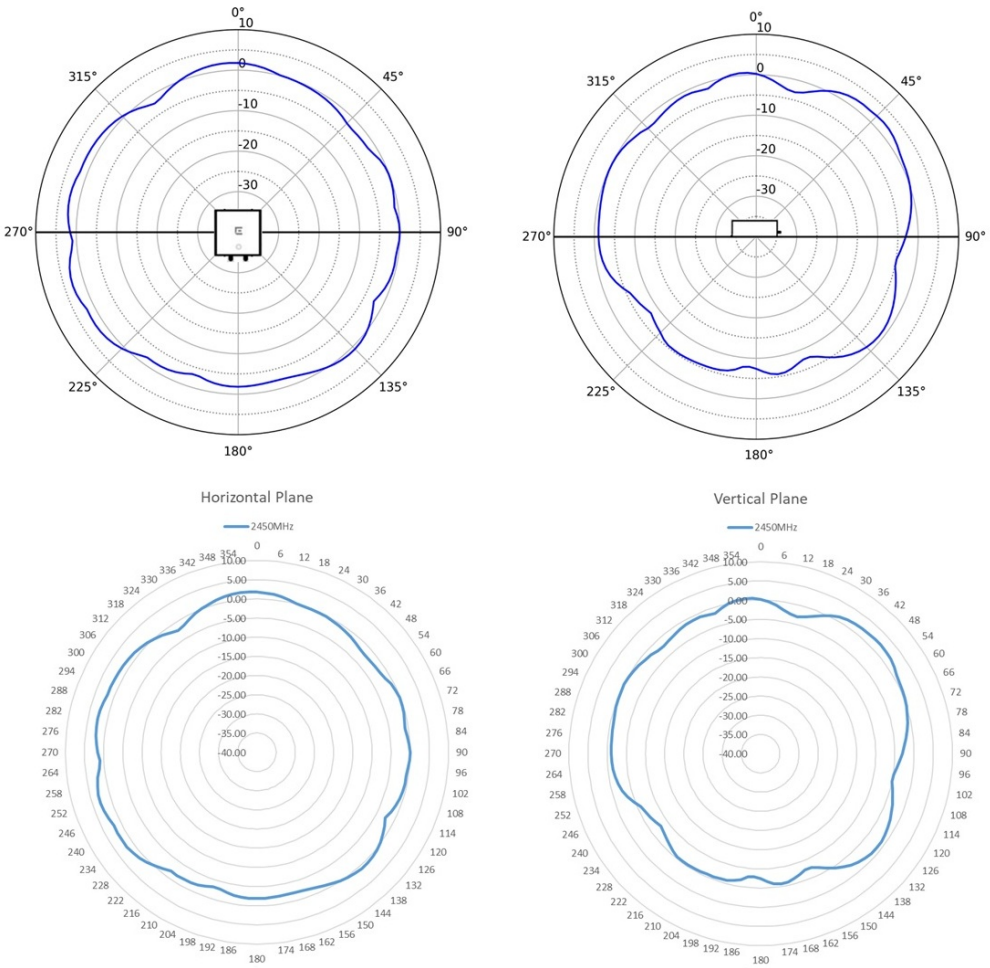


Figure 16: 2.4 GHz Horizontal and Vertical Radiation Patterns

5 GHz Radiation Patterns

The following diagrams illustrate the radiation patterns for the AP5060U 5 GHz internal antenna.

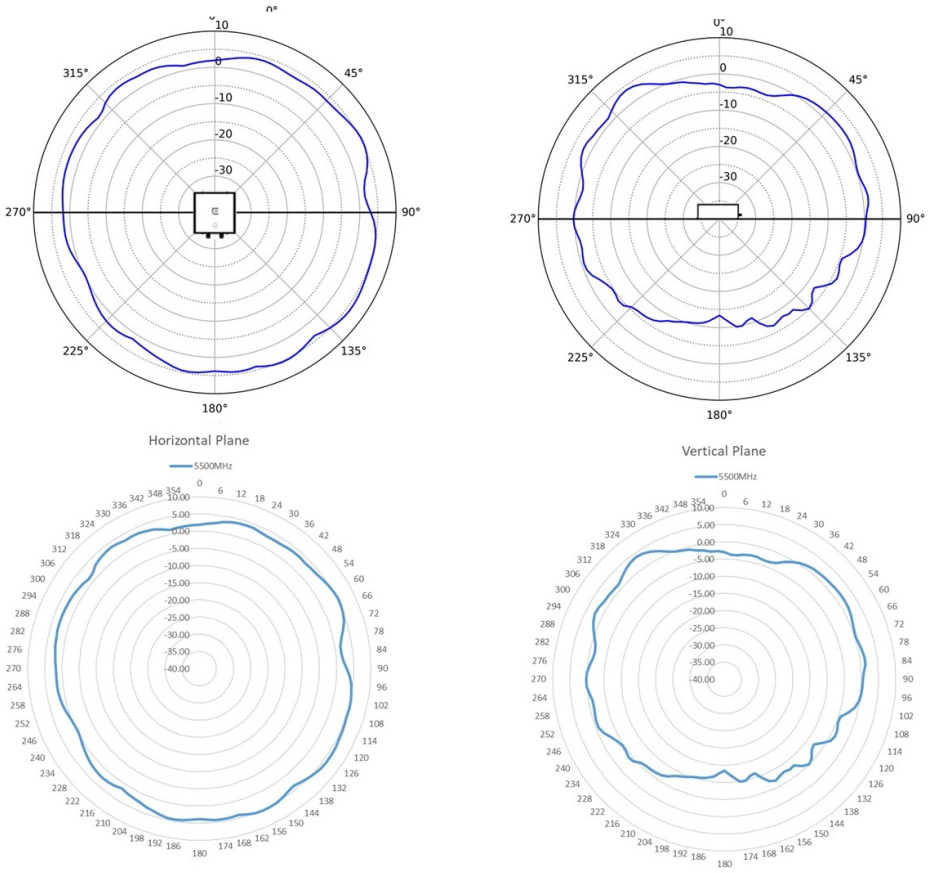


Figure 17: 5 GHz Horizontal and Vertical Radiation Patterns

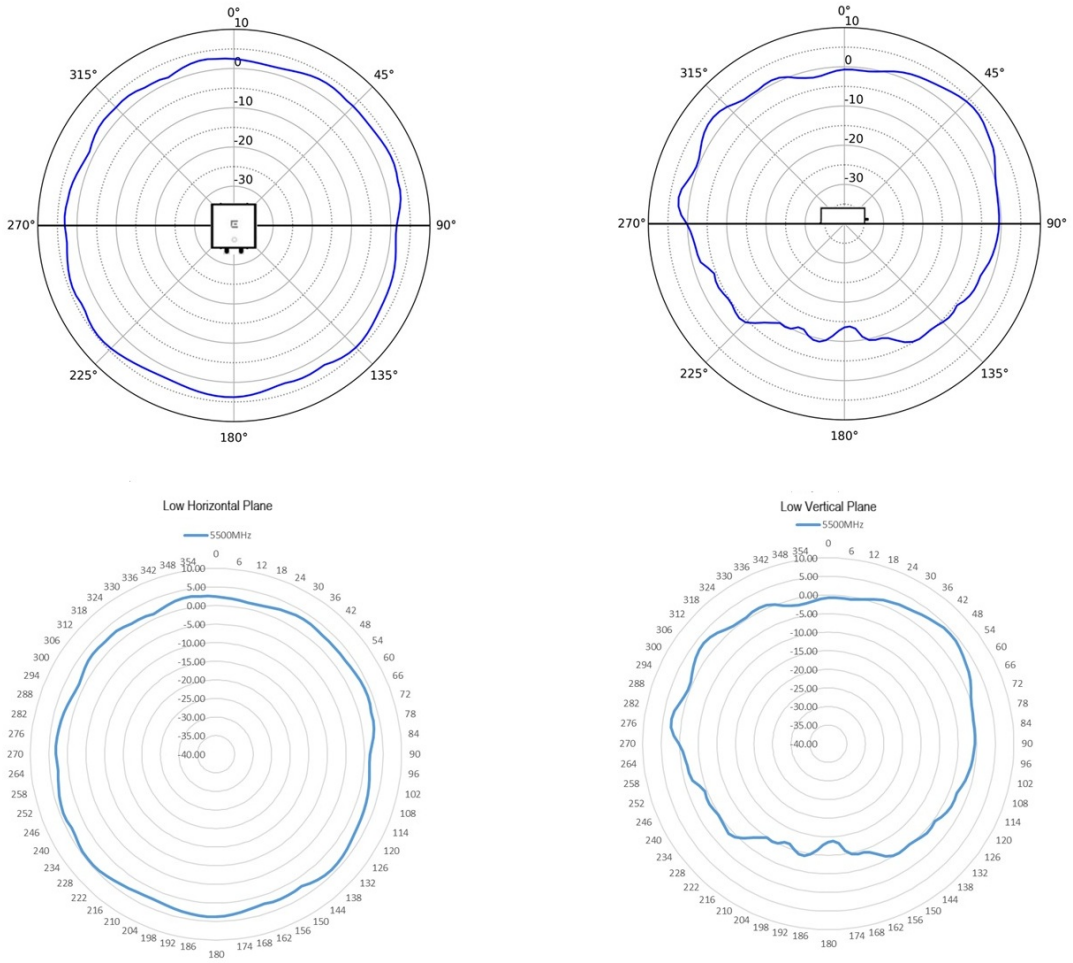


Figure 18: 5 GHz Low Radiation Patterns

6 GHz Radiation Patterns

The following diagrams illustrate the radiation patterns for the AP5060U 6 GHz internal antenna.

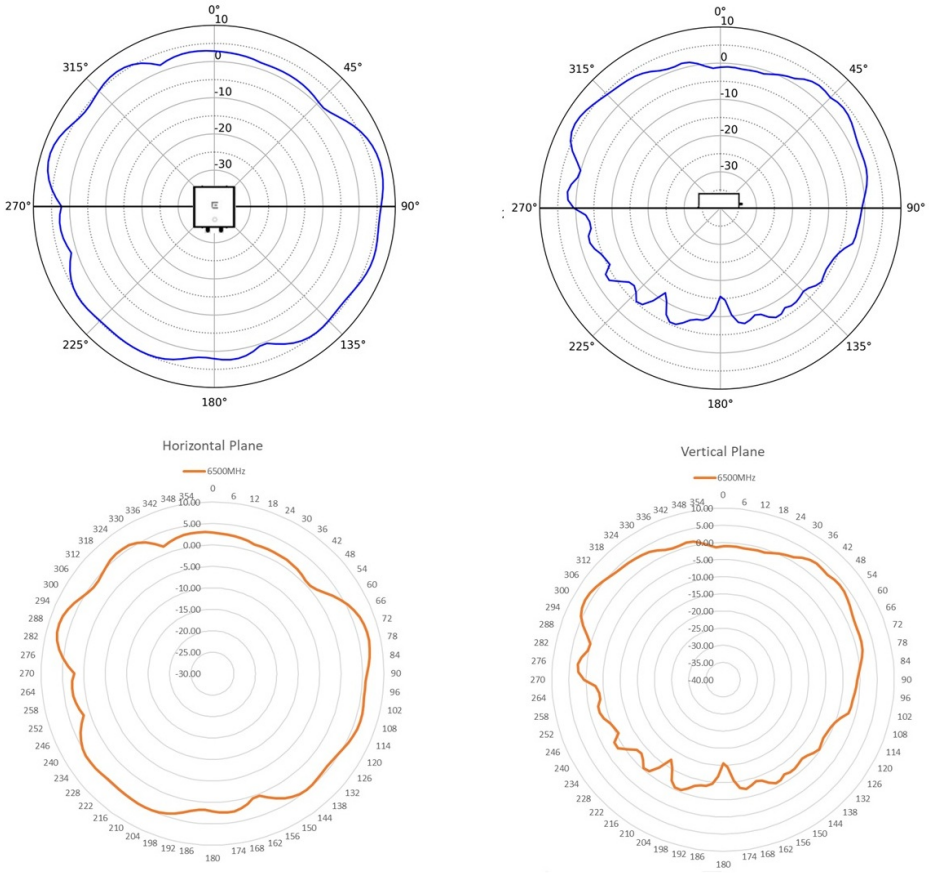


Figure 19: 6 GHz Horizontal and Vertical Radiation Patterns

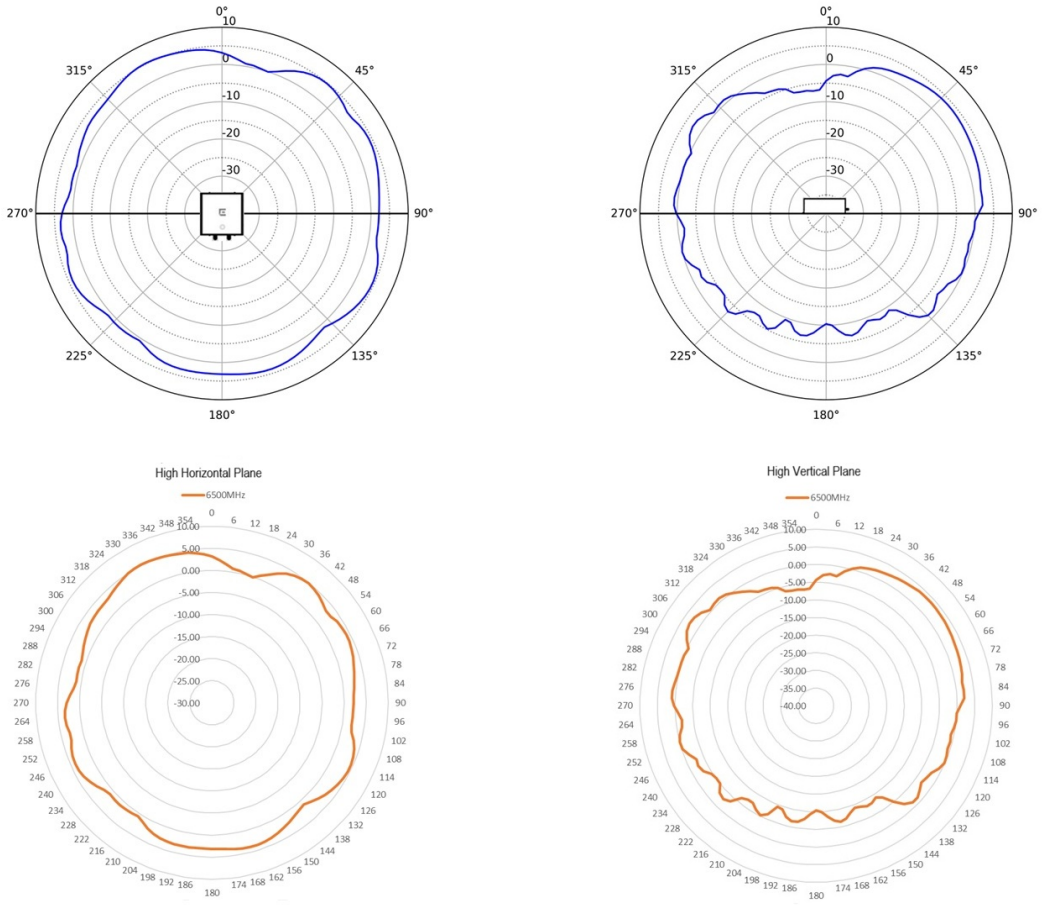


Figure 20: 6 GHz High Radiation Patterns

AP5060U Sensor Radiation Patterns

2.4 GHz, 5 GHz and 6 GHz Sensor Radiation Patterns For AP5060U

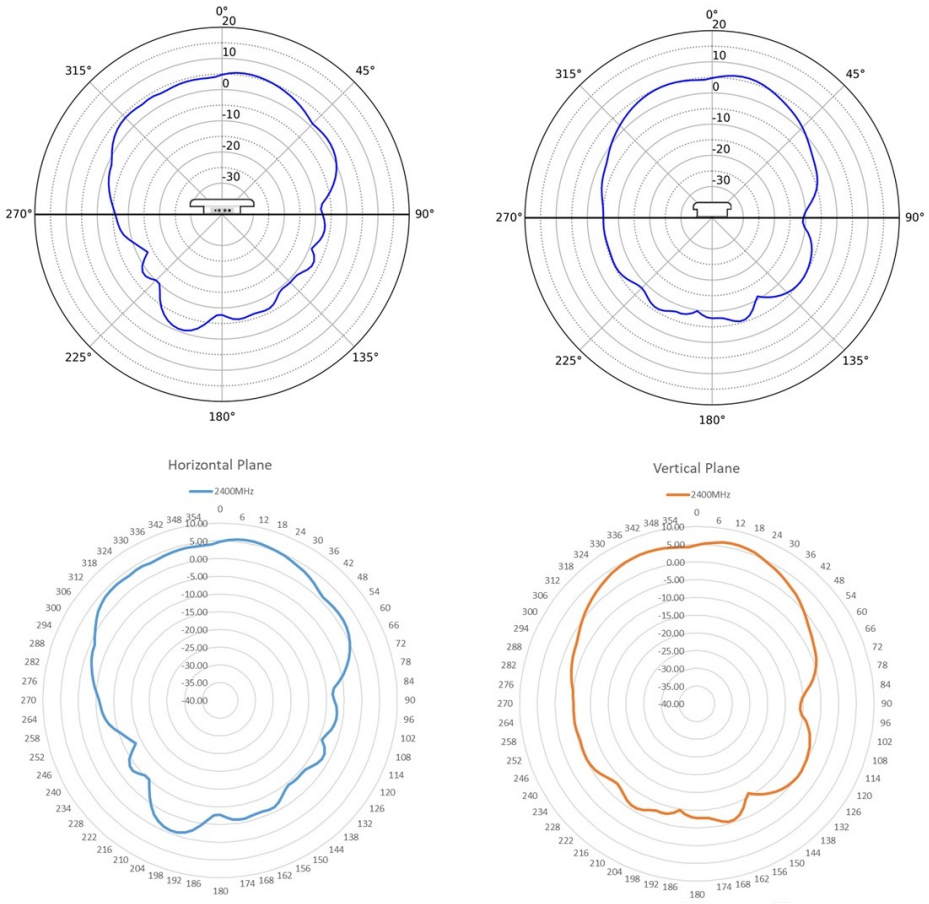


Figure 21: 2.4 GHz Sensor Radiation Patterns

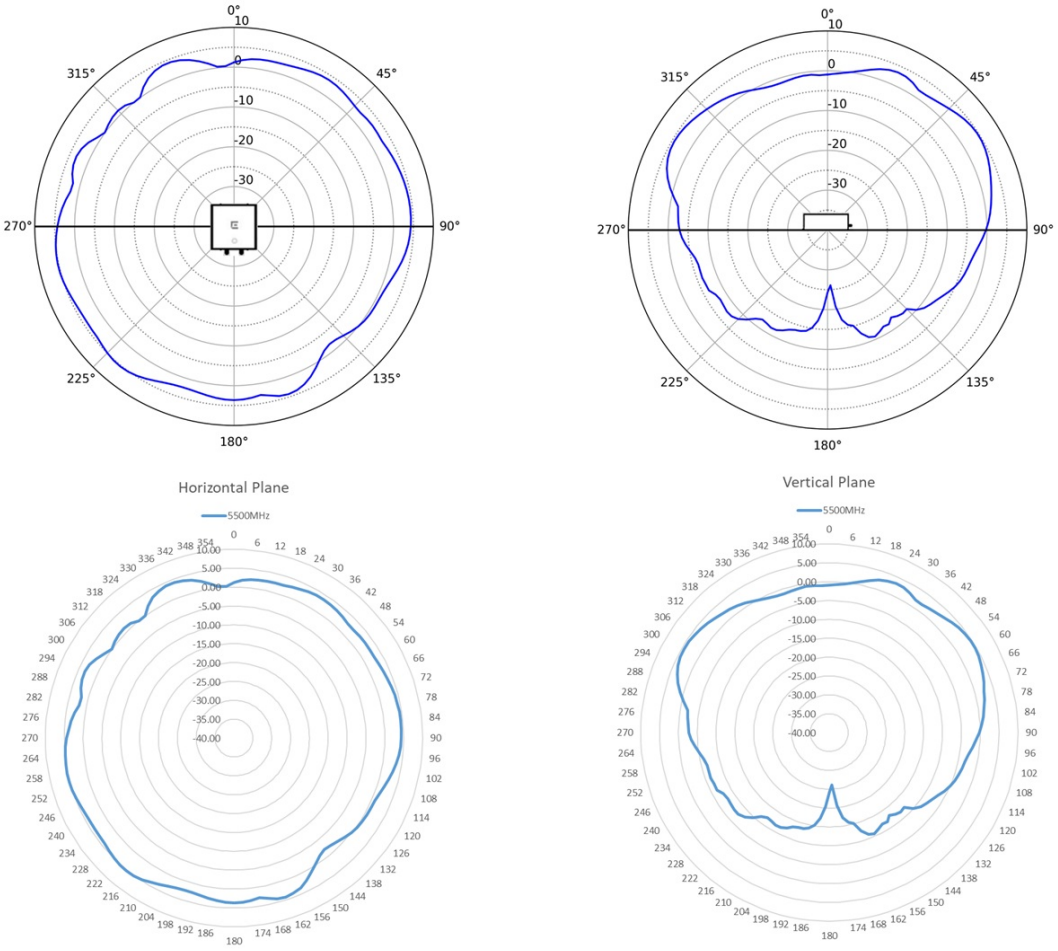


Figure 22: 5 GHz Sensor Radiation Patterns

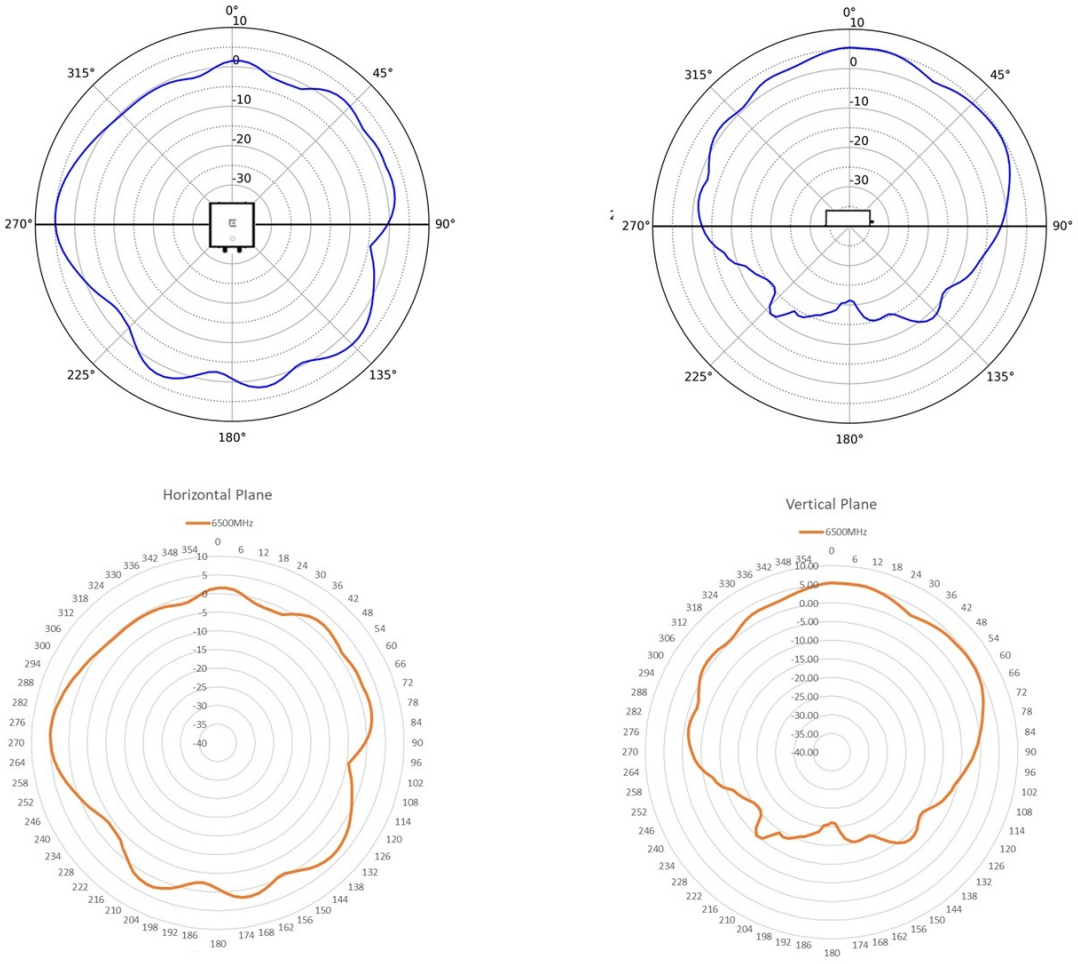


Figure 23: 6 GHz Sensor Radiation Patterns

AP5060U Blue Tooth Low Energy Radiation Patterns

Radio 1 and Radio 2 BLE Radiation Patterns For AP5060U

The following diagrams illustrate the radiation patterns for Blue Tooth Low Energy (BLE) on AP5060U.

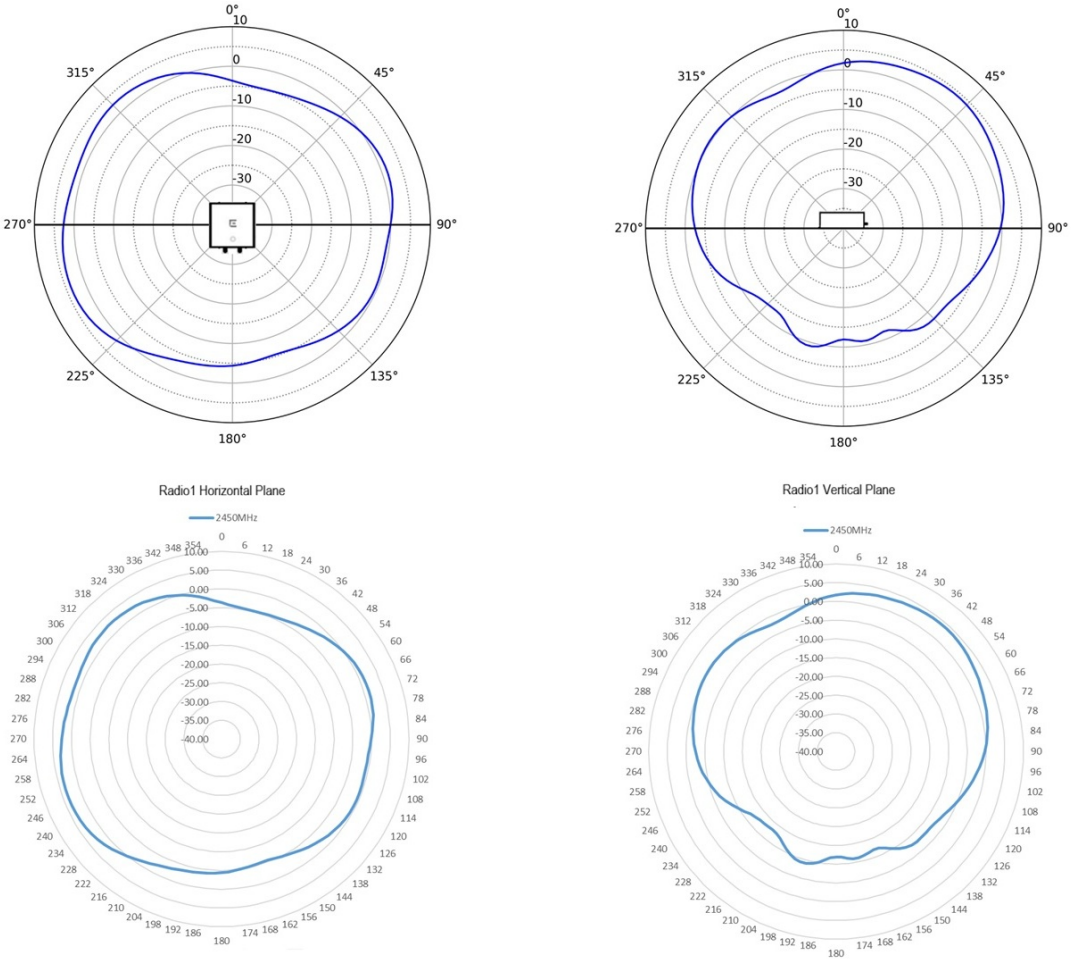


Figure 24: BLE Radio1 Radiation Patterns

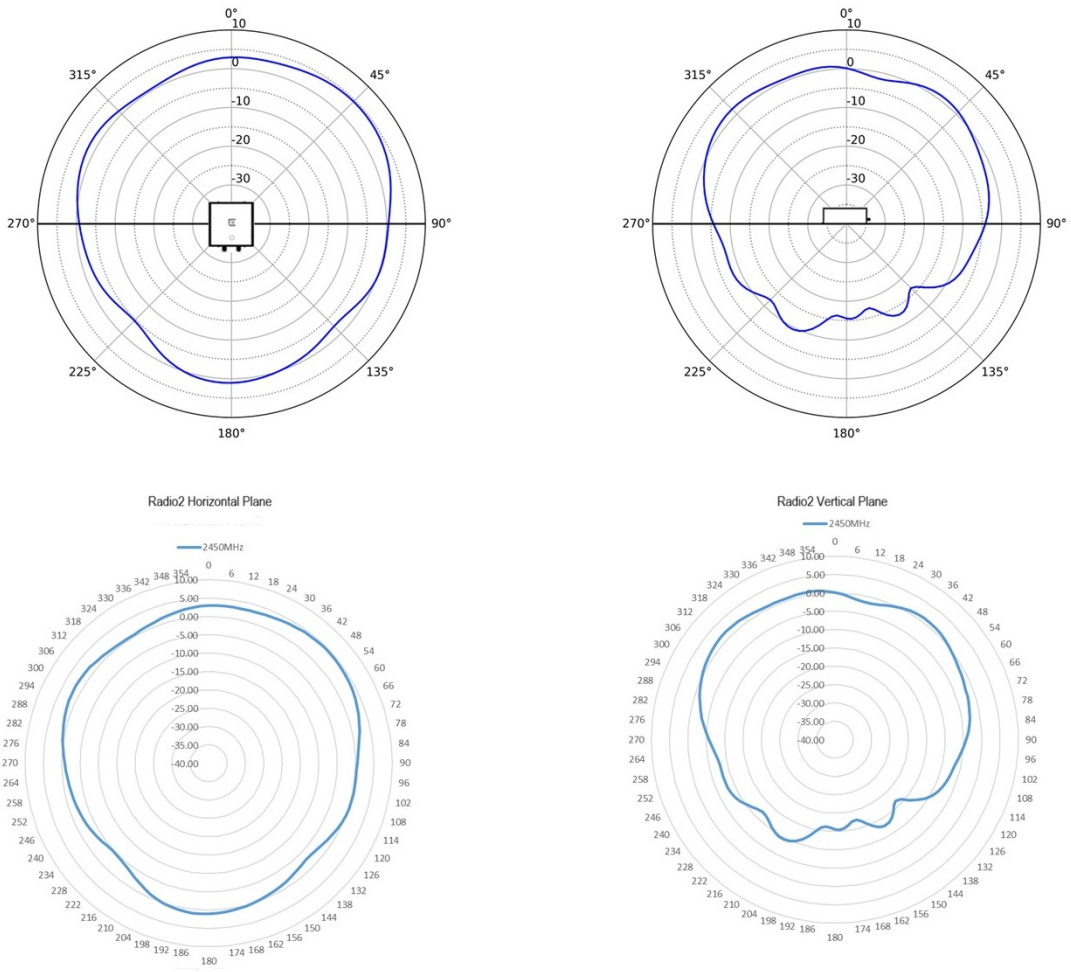


Figure 25: BLE Radio 2 Radiation Patterns

Ports, Connectors, and Hardware Features

The AP5060D and AP5060U have the following Ethernet ports:

- ETH0, ETH1: (2) wired Ethernet ports (RJ45).
- ETH0: 100/1000/2500/5000/10000 Mbps auto-sensing link speed Ethernet port, PoE PD.
- ETH1: 100/1000/2500/5000/10000 Mbps auto-sensing link speed Ethernet port, PoE, PD in or 15.4W PSE out mode (requires 802.3bt on ETH0).
- 802.3az Energy-Efficient Ethernet (EEE).

In addition both APs have the following:

- A ground terminal for circuit protection.
- A console port for troubleshooting.
- One safety hanger.

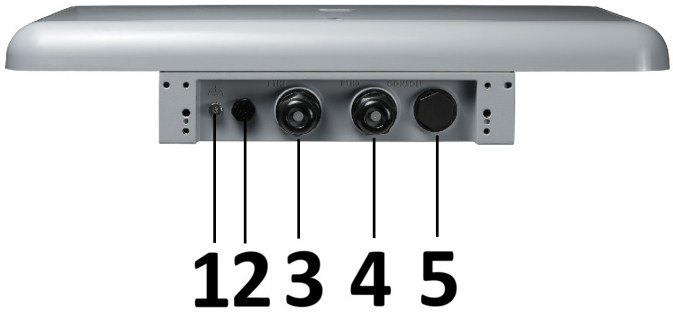


Figure 26: AP5060D and AP5060U Ports and Connectors

Table 8: Ports and Connectors

Number	Label	Description
1	Ground	A ground terminal for lightning protection.
2	Vent	
3	ETH1	Ethernet port.
4	ETH0	Ethernet port.
5	Console	Micro USB console port for a serial connection between your management system and the access point. Use the port when you troubleshoot the AP. **Tip:** The best practice is to use the Extreme Networks micro USB cable (ACC-WIFI-MICRO-USB). When you connect to the device, the management station must have a VT100 emulation program, such as the terminal emulator TeraTerm Pro or Hilgraeve HyperTerminal. Set your baud rate to 115200. **Note:** The console port can only be used with the Extreme Networks console cable. You could damage the AP if you use another cable.

LED Descriptions

The LED status light shows the AP's operating status. A solid white means that the AP is working normally. A solid or blinking amber indicates an issue.

The following table shows the LED states based on your firmware platform.

Table 9: ExtremeCloud IQ LED Activity

Status	Activity
Dark	Power is off.
Solid white	The device power is on and the AP is ready to use. The device has successfully established a Control And Provisioning of Wireless Access Points (CAPWAP) connection to ExtremeCloud IQ and is operating normally.
Solid amber	The power is on and the AP is in boot up mode, or is running without a CAPWAP connection.
Fast-blinking amber	The IQ Engine firmware is updating.

Table 10: ExtremeCloud IQ Controller LED Activity

Status	Activity
Dark	Power is off or the AP is taken over by the controller. Configuration pushes down to AP from controller to turn off the LED.
Solid white	The AP is starting up or is already taken over by the controller.
Flashing fading white	Configuration pushes down to AP from controller helping the user locate the AP by sight.
Solid amber	A firmware upgrade is occurring
Fast-blinking amber	The AP is acquiring the DHCP IP.

Radios

The AP5060D and AP5060U have an outdoor quad-radio design with three 4x4:4 radios (2.4 GHz, 5 GHz, and 6 GHz bands), a dedicated sensor, and two IoT radios (5 GHz and 6 GHz).

Note
6GHz is country dependent.

Software radio modes:

- Mode 1: 2.4 GHz/5 GHz/6 GHz and tri-band sensor
- Mode 2: Dual 5 GHz, 6 GHz Data Radios and tri-band sensor
- Mode 3: 5 GHz, Dual 6 GHz Data Radios and tri-band sensor

Power Profiles

The following tables show the AP5060D and AP5060U power profiles for the radio modes. Use this information to plan for power consumption as you deploy your APs.

Table 11: 802.3at Power Profile With Scan

Radio Operational Mode	Radio 1	Radio 2	Radio 3	Scan 2x2	IoT	PSE	Function
Mode 1							
2.4/5/6 GHz 802.3at	2.4 GHz 16dBm 2x2	5 GHz - Full 17dBm 3x3 40MHz	6 GHz 16dBm 3x3 80MHz	Yes	Yes	No	Tri-band Radio + Scan, IoT
Mode 2							
5L/5H/6 GHz 802.3at	5 GHz Low 16dBm 2x2 40MHz	5 GHz High 16dBm 2x2 40MHz	6 GHz 16dBm 3x3 80MHz	Yes	Yes	No	Dual 5 GHz w/6 GHz + Scan, Iot
Mode 3							
5/6L/6H GHz 802.3at	6 GHz High 16dBm 2x2 80MHz	5 GHz 16dBm 3x3 40MHz	6 GHz Low 16dBm 2x2 80MHz	Yes	Yes	No	Dual 6 GHz w/5 GHz + Scan, Iot

Table 12: 802.3at Power Profile Without Scan

Radio Operational Mode	Radio 1	Radio 2	Radio 3	Scan 2x2	IoT	PSE	Function
Mode 1							
802.3at	2.4 GHz 14dBm 2x2	5 GHz - Full 14dBm 4x4 40MHz	6 GHz 14dBm 4x4 80MHz	No	Yes	No	Tri-band Radio + IoT
Mode 2							
802.3at	5 GHz Low 14dBm 3x3 40MHz	5 GHz High 14dBm 3x3 40MHz	6 GHz 14dBm 3x3 80MHz	No	Yes	No	Dual 5 GHz w/6 GHz + Iot

Table 12: 802.3at Power Profile Without Scan (continued)

Radio Operational Mode	Radio 1	Radio 2	Radio 3	Scan 2x2	IoT	PSE	Function
Mode 3							
802.3at	6 GHz High 14dBm 3x3 80MHz	5 GHz High 14dBm 3x3 40MHz	6 GHz Low 14dBm 3x3 80MHz	No	Yes	No	Dual 6 GHz w/5 GHz + Iot

Table 13: 802.3bt Power Profile

Radio Operational Mode	Radio 1	Radio 2	Radio 3	Scan 2x2	IoT	PSE	Function
Mode 1							
802.3bt	2.4 GHz 18dBm 4x4	5 GHz - Full 18dBm 4x4	6 GHz 18dBm 4x4	Yes	Yes	Yes	Tri-band Radio + Scan, IoT, PSE
Mode 2							
802.3bt	5 GHz Low 18dBm 4x4	5 GHz High 18dBm 4x4	6 GHz 18dBm 4x4	Yes	Yes	Yes	Dual 5 GHz w/6 GHz + Scan, Iot, PSE
Mode 3							
802.3bt	6 GHz High 18dBm 4x4	6 GHz Low 18dBm 4x4	5 GHz 18dBm 4x4	Yes	Yes	Yes	Dual 6 GHz w/5 GHz + Scan, Iot, PSE

Power Options

The AP5060D and AP5060U supports the following power options:

- Power Draw: 802.3at PoE: Typical 21W; Max: 25.5W (802.3at profile) w/o PoE out
- Power Draw: 802.3bt: PoE: Typical 25W; Max 30W w/o PoE out
- ETH0 PoE 10Gbps Ethernet port RJ45

Enclosure

The AP5060D and AP5060U have a plastic top with an aluminum bottom.

Security

The AP5060D and AP5060U supports Wi-Fi Alliance WPA3 security certifications. Use Extreme Fabric Attach for provisioning and deployment to a Fabric Connect-enabled switch.

The access point also supports the following security features:

- A L2-L7 DPI firewall
- Tri-frequency security
- Private Pre-Shared Key (PPSK) for Cloud deployment
- Location analytics sensor

You can physically secure and lock the access point with the safety hanger.

Accessories

The following accessories are supported on the AP5060D and AP5060U.

Table 14: Supported Accessories

Accessory	Access Point	Description	Comment
ACC-ODS-CAT6A-LAN-GSKT	AP5060D AP5060U	A black LAN cable gasket.	For use with a CAT6A LAN cables. **Note:** When ordering, do not confuse the **ACC-ODS-CAT6A-LAN-GSKT** for use on the WiFi7 APs with the ACC-CAT6-LAN-GSKT. Ensure you order the **ODS-CAT6A** gasket.
ACC-WIFI-MICRO-USB	AP5060D AP5060U	Micro-USB to USB Console Adapter Cable for Extreme Wireless Access Points	Used for troubleshooting.
AH-ACC-STRP- MRN	AP5060D AP5060U	Weatherized Access Point stainless steel strap for 3 inches to 7 inches diameter pole	Used for mounting to a pole; ships in quantities of 2 straps.
EIO-03-SP	AP5060U	A wireless AP service panel.	Protects the LAN gland side of the access point.
EIO-04	AP5060U	Under-seat mounting solution with pass-through.	-
EIO-GASKET	AP5060U	EIO-GASKET silicone rubber kit.	Stops large objects from getting wedged behind or under the EIO-04 slope.

Table 14: Supported Accessories (continued)

Accessory	Access Point	Description	Comment
KT-147407-02	AP5060D AP5060U	Outdoor mounting hardware kit for outdoor access points - Stainless steel for harsh environments.	Use this bracket for outdoor use.
KT-150173-01	AP5060D AP5060U	Outdoor AP 12-inch extension arm for mounting kit (aluminum)	Use this arm when a standoff distance is required. It provides a minimum standoff distance of twelve inches and helps avoid interference with the antennas.
MBO-ART03	AP5060U	2-Axis rotational variable extension mounting bracket for outdoor APs.	+/-80 degree tilt on 2-axis and an adjustable 7.5", 9" or 10.5" extension capability; Use this bracket for wall mounts and Unistrut brackets. It can also be used for mounting on a pole with the pole section from KT-147407-02.

MAC Address

The media access control address (MAC address) is located on the bottom of the access point. You can record the address for your company's records by scanning the code.

Power or Pressure Washing Guidelines

Before You Begin

Ensure that your pressure washing equipment fulfills the following specifications:

- Pressure washer Pounds per Square Inch (PSI) must be less than 4000.
- Do not use a nozzle with less than 15-degree washer tip.
- The pressure washing nozzle must be at least 24 in. away from the access point.

Cleaning solution specifications:

- Use only commercially available cleaning agents and solvents to clean the access point.
- Use only commercially available ice-melt products.

- Do not use cleaning agents, solvents, and ice-melt products that are flammable, contain polycarbonate or rubber dissolving ingredients, uses refined petrochemical materials, and any other materials that can damage a concrete surface.

Warning
Do not use cleaning agents, solvents, and ice-melt products that are flammable, contain polycarbonate or rubber dissolving ingredients, uses refined petrochemical materials, and any other materials that can damage a concrete surface.

Warning
Do not use the power washing equipment near power lines. Wear safety goggles with complete eye protection when using the power washing equipment.

About This Task

You can pressure wash the access point and the surface under a seat or a slope around the access point to remove dirt and debris.

Tip
The best practice is to follow the pressure washing guidelines for longevity of the access point parts.

Procedure

1. Use a prescribed pressure washing nozzle to wash the access point and the surface around it.
2. Keep the pressure washing nozzle at least 24 in. away from the access point.

Installation

The AP5060D and AP5060U are a cloud-ready, stadium-optimized access points that can be installed on a wall or a pole. For more information about selecting the right access point bracket and accessory for your installation needs, see the *Extreme Networks 11.ax Access Points Accessories Guide*.

Installation Workflow

Access points are automatically added to your network when the DHCP and DNS prerequisites have been met. But you can save time and configure the AP before you

install it with the pre-provision mode. You can revert the AP to production mode when you are ready for deployment.

Note

Confirm that Domain Name System (DNS), Network Time Protocol (NTP), and the firewall ports are configured and available before deployment. Create a firewall rule to allow outbound traffic from Extreme Networks devices. For more information about firewalls, see Firewall Configuration Guides.

You should configure the DHCP options on your DHCP server to assign an allowed NTP server to Extreme Networks devices. Both DNS and NTP are critical for country and region detection and certificate validation.

For more information on deployment, see ExtremeCloud IQ Controller documentation and the IQ Engine documentation.

Use the information in the following table to help you install your access point.

Table 15: Installation Work flow

Steps	Action	Purpose
1	Verify the box contents.	Confirm that your AP and accessories arrived complete and undamaged.
2	Install the access point to one of the following: **Install the AP on a pole** • Install the Access Point on a Pole Using KT-147407-02 Bracket Parts • Install the Access Point on a Pole Using KT-147407-02 Bracket Parts and KT-150173-01 Extension Arm • Install the Access Point on a Pole with the MBO-ART03 and KT-147407-02 Brackets **Install the AP on a Unistrut:** • Install the Access Point on a Unistrut Structure Using the MBO-ART03 Bracket **Install the AP on a wall:** • Install the Access Point on a Wall or Flat Surface Using the KT-147407-02 Bracket Parts • Install the Access Point on a Wall With the MBO-ART03 Bracket • Install the Access Point Using KT-147407-02 Bracket Parts and KT-150173-01 Extension Arm • Install the Access Point Using KT-150173-01 Extension Arm **Install the AP5060U under a seat:** • Install the AP5060U Under a Seat	Install the AP on a ceiling or wall, and connect the network cable. If you use Power over Ethernet (PoE), then the AP powers up. The AP begins a discovery process to determine its own IP address and the IP address of the controller. When the discovery process is successful, the AP registers with the controller. For more information, see the following articles: • Access points failing the Wireless Controller discovery process • How to Onboard, Switch, and Troubleshoot the Universal AP modes between IQE (ExtremeCloud IQ Engine) and WiNG modes

Table 15: Installation Work flow (continued)

Steps	Action	Purpose
4	Connect the AP to your network.	Connect the AP to your network using a network cable and one of the Ethernet ports. Ensure that the other end of the network cable connects to a network Power Sourcing Equipment (PSE). Login to ExtremeCloud IQ Controller and set the operating system (OS) and region. See the "Onboarding Universal APs — ExtremeCloud IQ" section of the ExtremeCloud IQ Controller Deployment Guide. **Note:** Universal APs are configured for cloud management by default. If you want to manage these APs locally, you must specify Local Management when onboarding the APs in ExtremeCloud IQ.
5	(Optional) Onboard the AP with the ExtremeCloud IQ Mobile Onboarding application.	Scan the QR code or bar code on the back of the device and begin the onboarding process.
6	Confirm that the LED is white.	A white LED indicates that your AP has powered up and registered with the Cloud. An amber light indicates a technical issue that requires a resolution. See the Led Descriptions section in the "Overview" chapter for an explanation of the LED states.
7	(Optional) Secure the Access Point.	Secure the AP and prevent it from falling.

Box Contents

Your Extreme Networks AP ships with everything that you need for a basic installation. All optional brackets and accessories are sold separately.

Confirm that you have received the following items before you install your device.

Table 16: Hardware

Quantity	Item
1	Extreme AP5060D or AP5060U.
1	Regulatory document for your access point.
1	Hardware bag with grounding lug and star washer (1 ea.).
1	Bag with 2 Cat6A LAN gaskets.
1	RJ45 removal tool for Cat5 and Cat5E plugs.
1	AP5060D only - Hardware box for service panel parts.

Pre-Installation Tasks

Extreme Networks access points have been designed for a quick and easy deployment. But you can make the process even easier with a little preparation.

Site Survey

Before you install your AP, do a site survey and coverage map so you have identified and addressed any potential issues. Here are a few issues that you should consider before you install the AP.

Ask yourself the following questions:

- What is the WLAN's purpose?
- What applications will be used over the WLAN?
- Who will use the WLAN?
- What devices will be connecting to the WLAN?
- Are there any mounting or aesthetic restrictions?

Consider the following items as you plan your deployment:

- Capacity and coverage requirements.
- Existing issues such as RF interference and dead zones
- Existing networks or devices that can interfere with your network. There could be interference from floors above and below, or from outside sources such as nearby office buildings.
- Antenna radiation patterns. Consider the patterns as you decide where to place your APs, their orientation, and their configuration.

For more information on site surveys, see the Knowledge Base article What is Wireless Site Survey and why is it important?

Other

Perform the following tasks:

- Document the switch and ports used by the AP with LLDP protocol.
- Confirm cables meet or exceed the required specifications.
- Check that the AP power ups correctly.

Configuration for Horizon Rule

Horizon Rule Compliance Requirements

For outdoor deployments, if the AP points above the horizon then you must transmit at a lower RF power. This requirement is to ensure that no emissions exceed 21 dBm Effective Isotropic Radiated Power (EIRP) at or above 30 degrees elevation.

This is commonly called the Horizon Rule and it applies to the Unlicensed National Information Infrastructure (U-NII) -1 range of the 5 GHz band and the entire 6GHz band.

Warning
This device is Professional Install only. It is the responsibility of the installer to ensure that the proper antenna, antenna setting and environmental setting are employed so that the applicable FCC compliance limits are not exceeded. Manufacturer is not responsible for non-compliance due to unauthorized installations without the use of an authorized professional installer.

Confirm that the AP is correctly installed before you power up the access point and the radios start transmitting.

ExtremeCloud IQ Configuration

Configuration parameters for the Horizon Rule will be available in a future release. Note the following:

- **Outdoor deployments** - If the AP5060D or AP5060U point above the horizon, then you must transmit at a lower RF power. This requirement is to ensure that no emissions exceed 21 dBm EIRP at or above 30 degrees elevation. This restriction applies to the U-NII-1 range of the 5 GHz band and the entire 6GHz band.
- **Indoor deployments** - The Horizon rule does not apply to indoor deployments. You may transmit at any RF power or angle appropriate to your needs.

ExtremeCloud IQ Controller Configuration

Configure the following Professional Install settings for the Horizon Rule compliance requirements:

- **Environment** - Select the appropriate environment from the pull down list.

The following tables show the required parameters. Use this information during deployment. For more information, see *ExtremeCloud IQ Controller User Guide*.

Table 17: Environment Parameters for ExtremeCloud IQ Controller

Outdoor/Indoor	AP Mounting Scenario	Select this Environment parameter	Description
Outdoor Deployments	AP points at or below the horizon.	Select **Outdoor** (default setting).	You assign a higher RF power to the AP.
	AP points above the horizon.	Select **Outdoor upwards**.	You assign a lower RF power to the AP. If you do not select this setting, you will not be compliant.
Indoor Deployments	Any direction	Select **Indoor**.	Not applicable.

Install the Access Point on a Unistrut Structure Using the MBO-ART03 Bracket

Before You Begin

The following hardware is required to install the MBO-ART03 bracket on a Unistrut structure:

- One MBO-ART03 bracket

  The MBO-ART03 bracket ships with the following hardware:
  - Two long screws
  - Four short screws
  - Four nuts

> **Note**
> For unistrut installations, discard two of the short screws and nuts. Provide two M12 stainless steel bolts, hex nuts, and split washers.

About This Task

The MBO-ART03 bracket has +/- 80-degree (in 10-degree increments) 2-axis tilt and variable 7 inches to 10 inches extension. The bracket comes installed with M6 pivot screws.

It can be used on a wall, unistrut bracket or pole.

On the MBO-ART03 bracket's flat surface, there are three large holes for interfacing with the Unistrut metal frame. There are two smaller holes for M6 bolts for mounting to the KT brackets or a wall also. Each metal bracket on either end of the ART03 bracket has two bent sections with two pivot holes and serrated lock positions.

The length on the bent sections can be adjusted, if desired. Move the pivot points to increase the MBO-ART03 bracket's extension lengths to 7.5 in. to 9.0 in., or 10.5 in.

To adjust the MBO-ART03 bracket's extension:

1. Remove the pivot screw and nut.
2. Move the MBO-ART03 bracket arm's center hole to the other pivot hole on the bracket.
3. Insert the pivot screw through the bracket and the arm.
4. Attach the pivot nut to the screw.

   Use a crescent wrench or a 13 mm tool to tighten the pivot screws and nuts.
5. Torque the screws and nuts to finger tightness.

Adjust the MBO-ART03 bracket's angular position

1. The horizontal and vertical adjustments can be made in 10 degree increments.

The increments are marked on the MBO-ART03 bracket.

Note
The access point glands should point downward to prevent water entry.

2. Rotate the arm to the desired position.
3. When the lock screw hole lines up with the appropriate serrated screw hole, insert the long M6 screw and fasten with a hex nut.
4. Torque the lock screws and nuts to 45 inch-lbs.
5. Torque the pivot screws and nuts to 60 inch-lbs.

The left to right adjustment can be made to any angle, with the access point having at least 1 in. clearance from another object.

Tip
The best practice is to make the vertical adjustment before attaching the access point to the MBO-ART03 bracket.

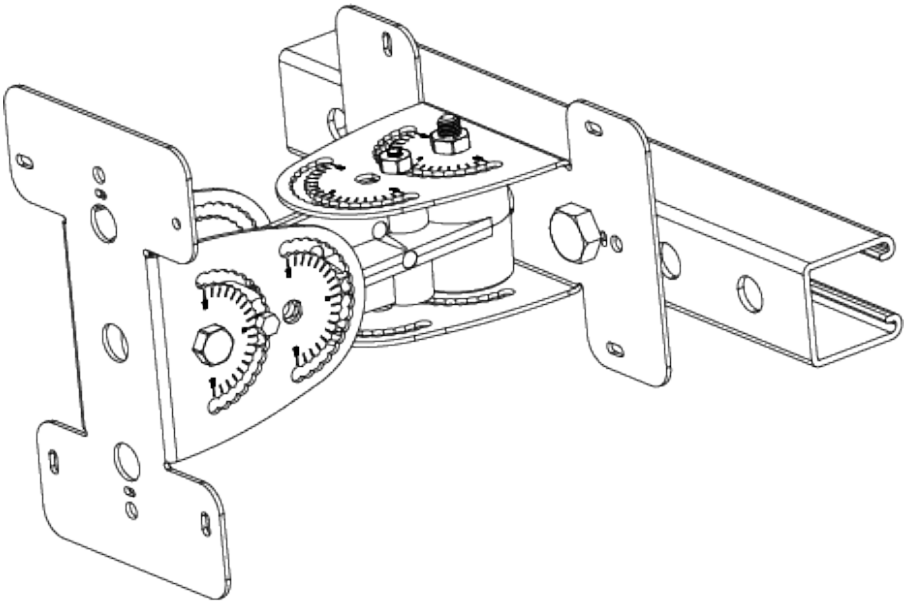


Figure 27: MBO-ART03 Bracket Angular Adjustments

Procedure

1. Using the M12 bolts, split washers, and hex nuts, attach the MBO-ART03 bracket to the Unistrut structure.

   The MBO-ART03 bracket's metal plate can be in a vertical or horizontal position.

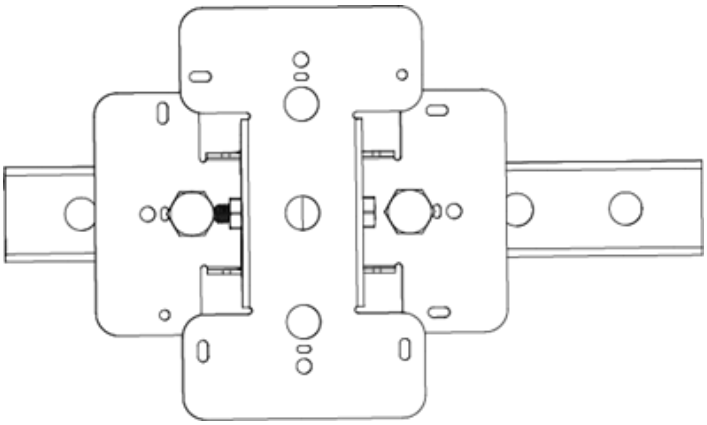


Figure 28: MBO-ART03 Bracket Attached to the Unistrut Structure

2. Torque the bolts and nuts to 60 in-lbs.

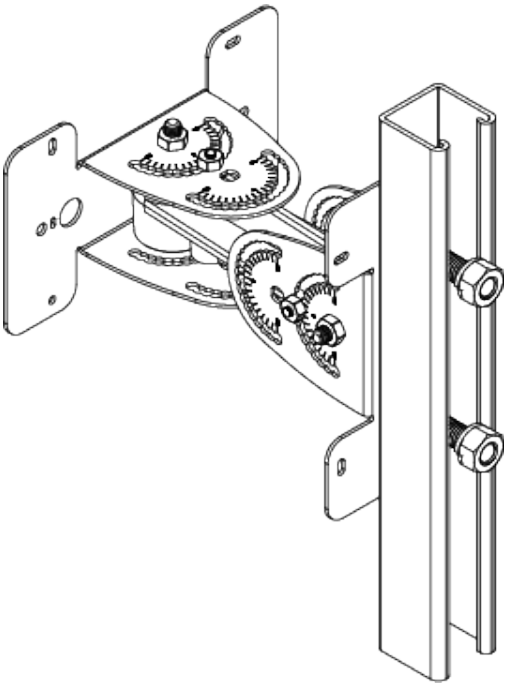


Figure 29: MBO-ART03 Torque Position on the Unistrut Structure

3. Using the two short M6 screws, attach the access point with the glands facing the ground.

   There are four holes on the access point and only two holes are used for attaching to the MBO-ART03 bracket.
4. Tighten the M6 screws to 45 in-lbs.

5. Attach the LAN cables to the access point.
6. To adjust the MBO-ART03 bracket's angular position, remove the long M6 degree locking screw and adjust the bracket axis to the desired angle.
7. Insert the degree adjustment locking screw and attach the locking nut until hand tight.

   Repeat the angular position adjustment process on the other axis, if desired.
8. Tighten the long bolts to the following values:
   - M6 degree locking bolts at 50 in-lbs.
   - M8 pivot bolts at 90 in-lbs.

Pole Installations

The access point is used with the KT-147407-02 bracket parts and KT-150173-01 extension arm for pole installation. You have three options for pole mounting:

1. Install the AP on a pole using KT-147407-02 bracket parts.
2. Install the AP on a pole with the MBO-ART03 and KT-147407-02 brackets
3. Install the AP on a pole using KT-147407-02 bracket parts and KT-150173-01 extension arm.

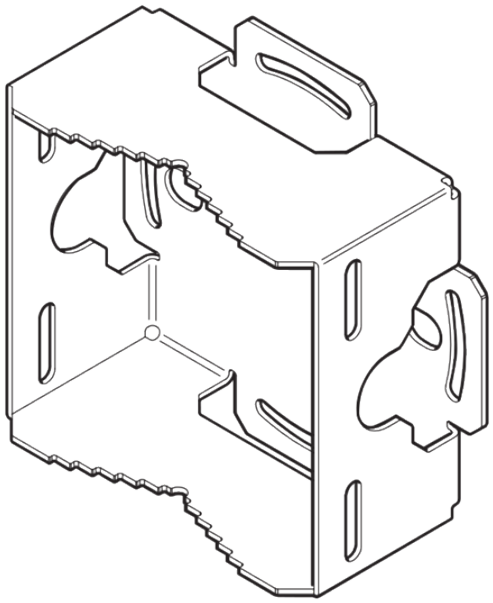
Install the Access Point on a Pole Using KT-147407-02 Bracket Parts

Before You Begin

The following hardware is required for pole installation using KT-147407-02 bracket parts:

- All three parts of the KT-147407-02 bracket
- Four M6 screws
- Two hex-head M12 stainless-steel screws
- Two hex-head M12 stainless-steel nuts
- One AP

Cable clamps must be ordered separately.



About This Task

Use the following information to install the AP on a pole with the KT-147407-02 Bracket.

Procedure

1. Attach the KT-147407-02 flat part and 1-axis tilt part to the access point.

   For instructions on how to attach the bracket parts, see Install the Access Point on a Pole Using KT-147407-02 Bracket Parts and KT-150173-01 Extension Arm on page 57.
2. Attach the KT-147407-02 pole part to the 1-axis tilt bracket using two M12 bolts through the large bracket holes on the 1-axis tilt bracket and the pole bracket.

3. Fasten the bolts using two M12 hex nuts.

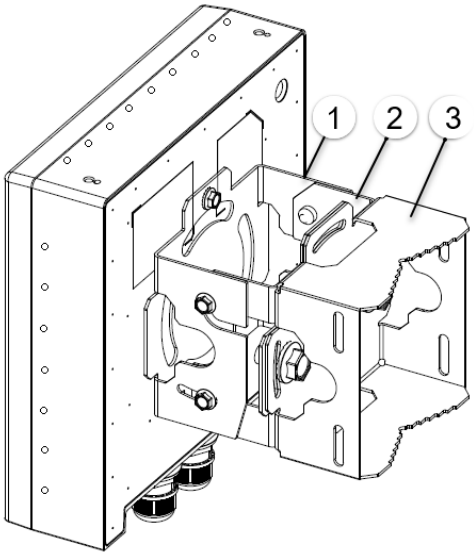


Figure 30: AP5060D with KT-147407-02 Bracket Parts

Call out	Description
1	Flat part of the KT-147407-02 bracket, with two holes on the metal surface
2	1-axis tilt bracket, with large holes on the surface
3	Pole bracket

4. Insert the stainless-steel cable clamp through the long slots on the pole bracket. Repeat for both clamps.
5. Position the cable clamps on the pole bracket around a pole and attach the pole bracket
6. Insert the ends of the cable clamps around the pole and tighten the clamp screws to a torque of 15 in-lbs.

Install the Access Point on a Pole Using KT-147407-02 Bracket Parts and KT-150173-01 Extension Arm

Before You Begin

The following hardware is required for pole installation using KT-147407-02 bracket parts and KT-150173-01 extension arm:

- All parts of the KT-147407-02 bracket
- KT-150173-01 extension arm
- Six M6 screws
- Four hex-head M12 stainless-steel screws
- Four hex-head M12 stainless-steel nuts
- One AP

Cable clamps must be ordered separately.

About This Task

Install the access point on a pole with all three KT-147407-02 bracket parts and KT-150173-01 extension arm.

Procedure

1. Attach the flat part and the 1-axis tilt part of the KT-147407-02 bracket to the access point.

   For instructions on how to attach the bracket parts, see Install the Access Point on a Pole Using KT-147407-02 Bracket Parts and KT-150173-01 Extension Arm on page 57.
2. Align the circular holes on one end of the KT-150173-01 extension arm against the large holes on the 1-axis tilt bracket.
3. Attach the KT-150173-01 extension arm to the 1-axis tilt bracket by using two hex-head M12 stainless-steel screws and two hex-head M12 stainless-steel nuts.
4. Attach the KT-147407-02 pole part to the other end of the KT-150173-01 extension arm using two M12 screws and M12 hex-nuts.

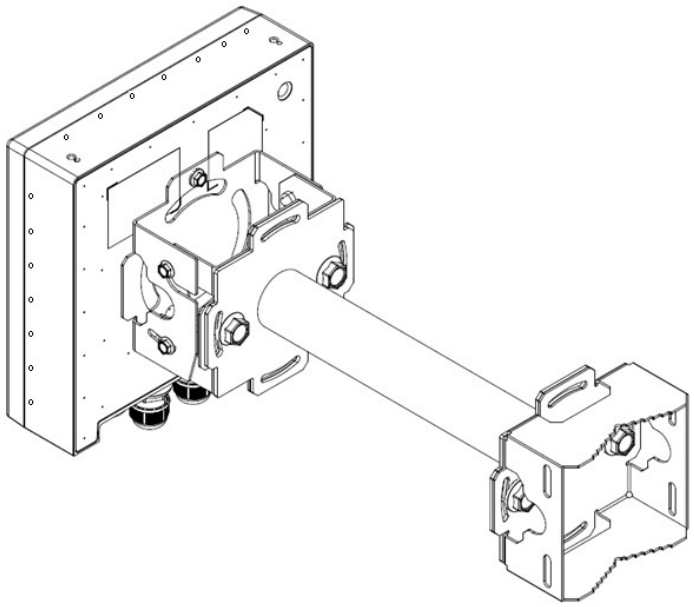


Figure 31: Attach the KT-150173-01 extension arm to the 1-axis tilt part of the KT-147407-02 bracket

5. Insert 0.5 in. stainless-steel cable clamps through the KT-147407-02 pole part long slots.
6. Position the cable clamps around a pole and attach the pole bracket to a pole.
7. Insert the ends of the cable clamps around the pole and tighten the clamp screws to a torque of 15 in-lbs.

Install the Access Point on a Pole with the MBO-ART03 and KT-147407-02 Brackets

Before You Begin

The following hardware is required to install your access point to a pole with the MBO-ART03 and KT-147407-02 brackets.

Table 18: Hardware Requirements

Quantity	Item
1	Access Point.
1	KT-147407-02 bracket.
1	MBO-ART03 articulating mounting bracket.
2	M6 hex-head screws to attach the MBO-ART03 to the access point.
2	M6 screws with nuts and washers to attach KT-147407-02 to the MBO-ART03.
2	Long M6 Hex hex screws and nuts for providing an angular lock for each axis.
2	Cable clamps with a band of 0.5 in. (12.7 mm). Cable clamps must be purchased separately as they are not included.
1	Torque wrench with sockets.
1	Flat head screwdriver.

About This Task

You can install your access point to a pole if you do not want to drill into a concrete wall. With a pole, the access point coverage area can be greater because a pole is often higher than a wall.

Procedure

1. Attach the KT-147407-02 pole part to the MBO-ART03 with two M6 screws, nuts, and washers.
2. Attach both cable clamps to the KT-147407-02 bracket.
   You open the cable clamp by inserting the head of the flat head screwdriver into the retaining screw and turning the screw counterclockwise. Then insert the non-clamp end into the KT-147407-02 through the holes.
3. Attach the two brackets to the pole.
4. Tighten the cable clamp screws around the pole by turning the screws clockwise with a flathead screwdriver.
5. Attach the access point to the MBO-ART03 with two M6 hex-head screws.
6. Adjust the two pivot points until you are satisfied.
7. Insert the locking bolts into the bracket and arm locking hole.
8. Attach the nuts and torque to 45 inch-pounds.
9. Tighten the pivot screws and nuts to 60 inch-pounds.
10. Attach the safety hanger strap as per the local code.
11. Adjust the LAN cable so the access point glands have a drip loop in each cable.
    The LAN cable must be located on the lower side of the AP.

Wall Installations

The access point can be attached to a wall or flat surface with:

- KT-147407-02 (+/-15 degree tilt)
- KT-150173-01 (12 inch extension)
- KT-147407-02 plus KT-150173-01 (12 inch extension plus +/-15 degree tilt)
- MBO-ART03 (7.5", 9" or 10.5" extension plus 2 axis +/-80 degree tilt)

Note
The M6 hex-head screws and screw-in anchors must be provided by the installer.

The following hardware is required when installing the access point on a flat surface using the KT-147407-02 bracket:

- One access point
- Flat part of the KT-147407-02 bracket with two holes on the metal surface.
- 1-axis tilt bracket.
- KT-150173-01 extension arm and associated M12 hardware. (optional)
- Six M6 screws for KT-147407-02 bracket, and bracket to AP, assembly.
- Four M6 hex-head screws
- Screw-in anchors if the access point is being mounted on a wood wall or a concrete surface.

Note
The M6 hex-head screws and screw-in anchors must be provided by the installer.

If you install the access point to the wall using the ART03 bracket, use the following hardware:

- One access point
- MBO-ART03 articulating mounting bracket
- Four M6 hex-head screws
  - Two M6 hex-head screws to attach the bracket to the access point
  - Two M6 hex-head screws to attach the bracket to the wall or a flat surface.

Note
The cable glands should face down when you install the access point on a wall.

Install the Access Point on a Wall or Flat Surface Using the KT-147407-02 Bracket Parts

Before You Begin

Obtain the following items:

- Flat part of the KT-147407-02 bracket
- 1-axis tilt part of the KT-147407-02 bracket
- One access point
- Six M6 screws
- Four M6 head size screws

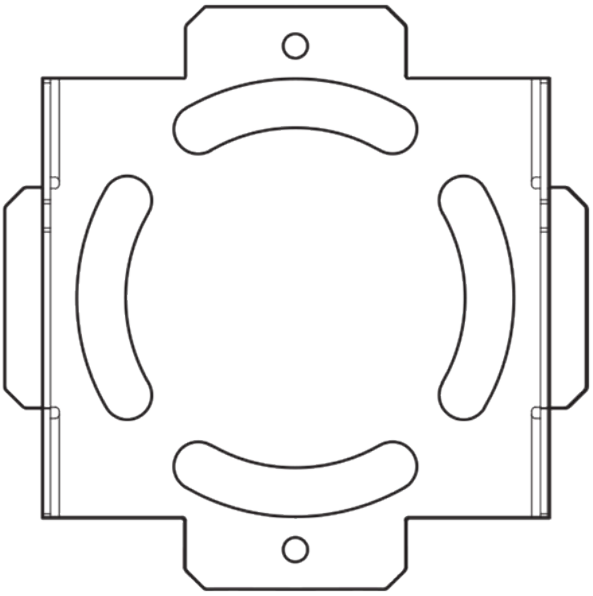


Figure 32: Flat Part of the KT-147407-02 Bracket

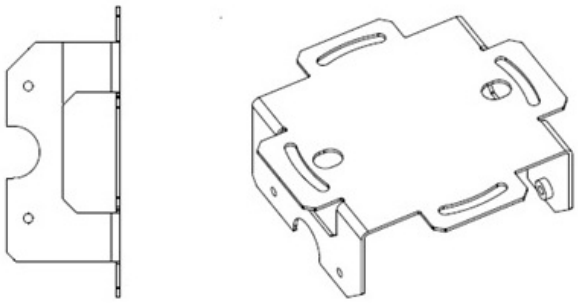


Figure 33: KT-147407-02 Bracket Side View

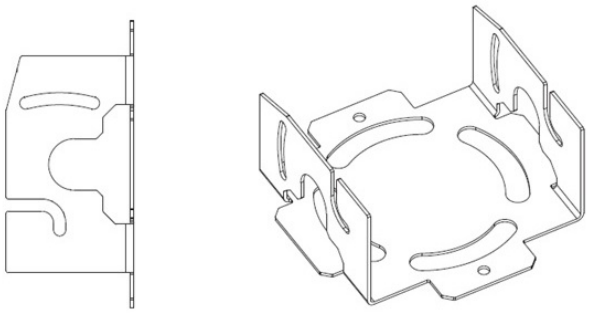


Figure 34: KT-147407-02 Tilt Parts

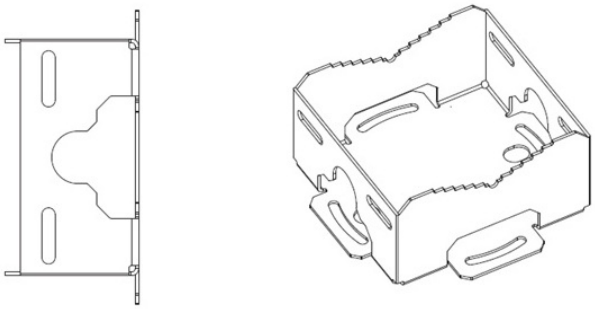


Figure 35: KT-147407-02 Pole Parts

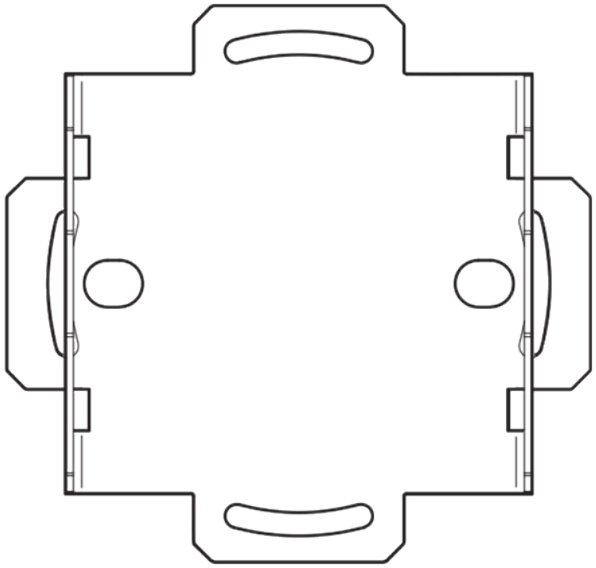


Figure 36: 1-axis Tilt Bracket

About This Task

Use the following information when you install the access point on a wall or flat surface with the KT-147407-02 bracket.

Procedure

1. Attach the flat part of the KT-147407-02 bracket to the access point using two M6 screws.

2. Using the 1-axis tilt bracket as a template, mark and drill four holes on a wall or on a flat surface.
3. Attach the 1-axis tilt bracket to a wall or flat surface using four M6 headsize screws.
4. Align the 1-axis tilt bracket part inside the flat part of the KT-147407-02 bracket, and attach the flat bracket to the 1-axis tilt bracket using four M6 screws.
5. Tilt the access point to a desired angle and tighten the four M6 screws to a torque of 45 in-lbs.

   The tilt bracket has 15 degrees of downward tilt.

Install the Access Point on a Wall With the MBO-ART03 Bracket

Before You Begin

You need the following items:

- One (1) Access point
- One (1)1MBO-ART03 articulating mounting bracket
- Six (6) M6 hex-head screws.
- Two (2) M6 hex-head screws for attaching the bracket and the access point.
- Four (4) M6 hex-head screws for attaching the bracket to the wall.
- Two (2) long M6 hex screws and nuts to lock each axis.

You also need one (1) Crescent wrench, socket wrench, or channel pliers that matches the nuts for the M6 hex screws.

About This Task

Use the MBO-ART03 bracket if you require a bracket with +/- 80-degree 2-axis tilt.

Note
When using the MBO-ART03 articulating mounting bracket, set the maximum downward tilt to less than 20 degrees to prevent water ingress.

Procedure

1. Mark and drill four holes on the wall.
2. It is recommended that you use one of the bracket ends as a template. You can remove the end from the bracket.
3. Adjust the arm length.
4. The arm is set to a 7.5-inch extension. To increase it to a 9-inch extension, you move 1 pivot and lock screw to the outside holes on 1 bracket. To increase the extension to 10.5-inches, move both pivot and lock screw pairs to the outside holes on each bracket.
5. Attach the bracket to the access point with the M6 hex-head screws.
6. Align the bracket mounting holes with the holes on the wall.
7. Attach the bracket to the wall with the M6 hex-head screws.
8. Insert the locking bolts into the bracket and arm locking hole.
9. Attach the nuts and torque to about 45 inch-pounds.
10. Tighten the pivot screws and nuts to about 60 inch-pounds.

Install the Access Point Using KT-147407-02 Bracket Parts and KT-150173-01 Extension Arm

Before You Begin

The hardware required for installation:

- Flat part of the KT-147407-02 bracket
- 1-axis tilt part of the KT-147407-02 bracket
- KT-150173-01 extension arm
- One access point

About This Task

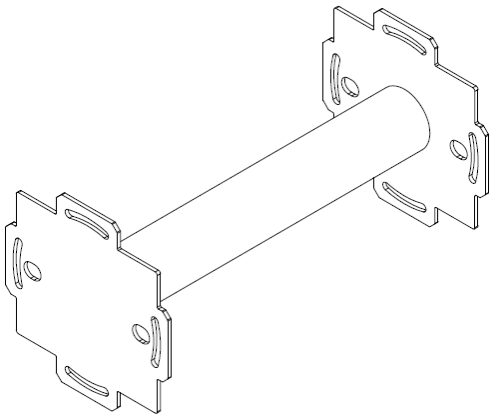


Figure 37: KT-150173-01 Extension Arm

The KT-150173-01 extension arm is used in combination with the wall and pole bracket parts of the KT-147407-02 bracket.

Procedure

1. Attach the flat part of the KT-147407-02 bracket to the access point using two M6 screws.
2. Using the KT-150173-01 extension arm as a template, mark and drill four hole centers on a flat surface.

   The holes must be within the circular cuts in the end of the flange.
3. Place the flat part of the KT-147407-02 bracket inside the 1-axis tilt bracket, and attach the 1-axis tilt bracket to the flat bracket using four M6 screws.
4. Attach one end of the KT-150173-01 extension arm to the 1-axis tilt bracket using two hex-head M12 stainless-steel screws and two hex-head M12 stainless-steel nuts through the two large circular holes on the KT-150173- 01 extension arm.
5. Attach the KT-150173-01 extension arm, that now has the access point mounted on the other end, to a flat surface using four M6 size hex-head screws.

   Use screw-in anchors with the four M6 hex-head screws when you mount the bracket on a wood surface and use concrete anchors for concrete surface.

Install the Access Point Using KT-150173-01 Extension Arm

Before You Begin

Obtain the following hardware:

- KT-150173-01 extension arm
- Four M6 screws
- Four M6 hex-head screws
- One access point

About This Task

Install your access point with an extension arm if a standoff distance - but no tilt - is required. The KT-150173-01 extension arm provides a minimum standoff distance of twelve inches and helps avoid interference with the antennas.

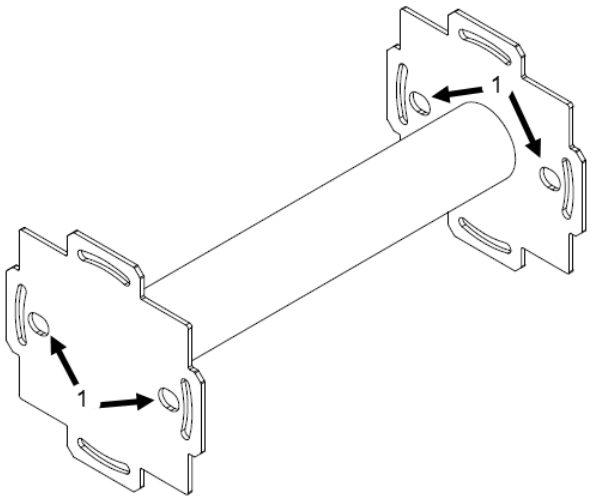


Figure 38: KT-1501730-01 Extension Arm Attachment Holes

Callout	Description
1	Extension arm attachment holes

Procedure

1. Using the KT-150173-01 extension arm as a template, mark and drill four hole centers on a flat surface.

   The holes must be within the circular cuts in the end of the flange. See the diagram above.
2. Attach one end of the KT-150173-01 extension arm to the access point using four M6 screws.
3. Attach the other end of the KT-150173-01 extension arm to the wall using four M6 hex-head screws.

   Use screw-in anchors with the four M6 hex-head screws when you mount the bracket on a wood surface and use concrete anchors for concrete surface.

Install the AP5060U Under a Seat

The AP5060U is used with the EIO-04 mounting kit for underseat installation.

The EIO-04 under-seat mounting kit can be installed on a:

- Slope
- Flat horizontal surface such as stadium floor
- Flat vertical surface such as stadium riser

Note

For stadium riser installations, note the following items:

- If the service panel base extends above the stadium riser, seal or cover the EIO-03-SP Service panel openings to prevent material from entering.
- Leave approximately 1-inch between the outdoor access point bottom and the floor. The gap will ensure that water that on the exterior surface drips away.
- When you mount the AP on a riser with the metal "L" bracket only and not with a large metal sloping bracket, it is recommended that you add a 3mm-thick stainless steel washer between the "L" brackets and the riser on all of the anchors. The washer provides proper drainage during storms

Install the EIO-04 Underseat Slope Bracket and the Access Point

Before You Begin

Obtain the items shown in the following table.

Note

When you mount the AP on a riser with the metal "L" bracket only and not with a large metal sloping bracket, it is recommended that you add a 3mm-thick stainless steel washer between the "L" brackets and the riser on all of the anchors. The washer provides proper drainage during storms.

Table 19: Hardware Requirements for Slope Installation

Item Quantity	Description
1	AP5060U
6	10mm long M6 screws with integral washers
4	75 mm service panel shoulder screws
2	Anchor posts
4	3mm stainless steel washer to be used as a spacer for drainage.
2	Flat washers for anchors
2	Lock washers for anchors
1	Metal "L" bracket
1	Plastic service panel base

Table 19: Hardware Requirements for Slope Installation (continued)

Item Quantity	Description
1	Plastic service panel top with captive screw
1	Metal sloping bracket
4	Service Panel metal Conduit Coupler plates, two blanks, one ¾-inch NPT, and one ½-inch NPT
4	Slope metal Conduit Coupler plates, two blanks, two ¾-inch NPT, and two ½-inch NPT

Attach the metal sloping bracket on a slope:

1. Using the metal sloping bracket as a template, mark and drill two holes in the concrete.
2. Insert the anchors without the nuts and washers.
3. If using EIO-GASKETs, install the two EIO-GASKETs on the left and right side of the access point. The two gaskets keep the area under the access point free of debris and large objects.
4. Place the metal sloping bracket, attach the nuts and washers to the exposed threads, and torque them to 60 in-lbs.

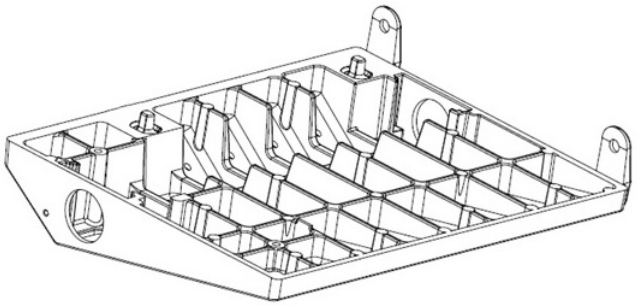


Figure 39: Metal Slope Bracket

About This Task

Attach the conduit cable through the conduit holes on the metal sloping bracket, then attach the metal L bracket to the access point, and install the access point on a surface.

Procedure

1. Attach the conduit couplers to the conduit.
2. Remove the locking nut.

3. Insert a blank conduit cover over the conduit hole in the slope for the conduit hole that is not used.

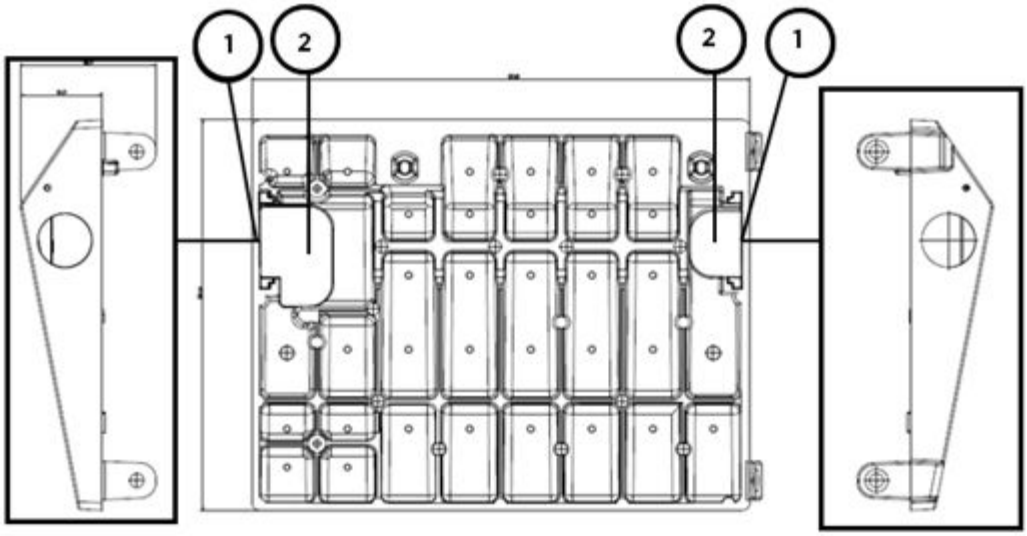


Figure 40: Metal Sloping Bracket Conduit Holes

Table 20: Conduit Holes

Callout	Description
1	Conduit holes on either sides of the metal sloping bracket.
2	Conduit cable holes in the slope.

4. If you are using the left side conduit hole on the metal sloping bracket, attach the correct size conduit cover to the conduit hole.

   You can use an 1-inch NPT, 3/4-inch NPT, or 1/2-inch NPT on the EIO-04.

   Note
   If you are using a 3/4 inch NPT or 1/2 inch NPT, use the conduit cover that comes with the unit to cover the conduit hole. If you are using 1 inch NPT conduit, a conduit tab is not required.

5. Tighten the locking nut.
6. If you are using the conduit hole in the slope, attach the conduit coupler and the locking nut directly to the slope conduit hole.

   Note
   The conduit must be 1 in. in diameter to attach the conduit coupler and the nut directly in the slope.

7. Repeat Step 4 for the right side if you are using the right side conduit hole in the slope.

8. Run the cable through the conduit and add the RJ45 connectors to the wires.

   Note
   The cable should have a minimum of 1-inch bend radius and be accessible to the glands on the AP5060U.

   For more information about the LAN cables refer to Connect the ETH1 or ETH0 cable topic.
9. Attach the metal L bracket to the access point:
   a. Attach the metal “L” bracket to the gland side of the access point using two M6 screws.
   b. Torque the screws to 35 in-lbs.

   Note
   When installing the access point flat against a surface in a location that uses ice melt, the best practice is to apply an anti-seize material to the screws before attaching them to the access point metal base.

   When you mount the AP on a riser with the metal "L" bracket only and not with a large metal sloping bracket, it is recommended that you add a 3mm-thick stainless steel washer between the "L" brackets and the riser on all of the anchors. The washer provides proper drainage during storms.

10. Install the access point on the slope:
    a. Align and center the alignment holes of the access point and the right side tab holes, and attach the access point to the tabs using two M6 screws.
    b. Attach the gland side of the access point, that has the “L” bracket to the metal sloping bracket using two M6 screws.
    c. Push the access point to the rear as far as it will go.
    d. Torque the screws to 35 in-lbs.

Install the Access Point on a Flat Surface Using EIO-04 Bracket

Before You Begin

Note
When installing the access point flat against a surface in a location that uses ice melt, the best practice is to apply an anti-seize material to all screw threads before attaching them to the access point metal base.

Obtain the items shown in the following table.

Table 21: Hardware Requirements for Flat Surface Installation

Item Quantity	Description
1	AP5060U
4	M6 screws with integral washers
4	75 mm service panel shoulder screws

Table 21: Hardware Requirements for Flat Surface Installation (continued)

Item Quantity	Description
2	Metal "L" bracket
1	Plastic service panel base
1	Plastic service panel top with one captive screw
4	Concrete anchors with nuts, washers, anchor posts, and anchor sleeves

Procedure

1. Attach an EIO-04 metal “L” bracket on each side of the AP5060U access point using two M6 screws for each bracket.
2. Torque the M6 screws to 35 in-lbs.
3. Use the metal “L” brackets as a template, mark four hole centers, and drill in the concrete.
4. Insert four concrete anchors into the holes without the washers and nuts.
5. Place the metal “L” bracket over the threaded anchor posts and put on the flat-washer, the spring washer, and the nut on each anchor.
6. Torque the nuts that go into the concrete anchors to 60 in-lbs.

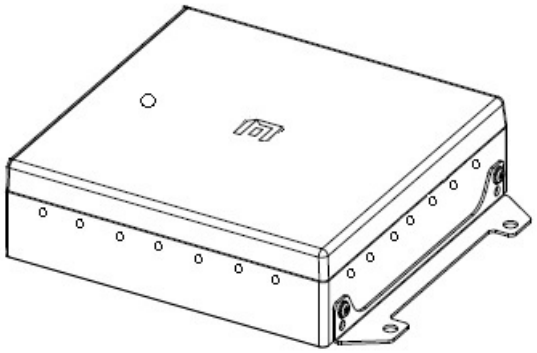


Figure 41: Flat Surface Installation with Metal “L” Brackets

Ground the Access Point

About This Task

Ground the outdoor access point for outdoor installations. A ground terminal is provided for lightning protection. Ground connection is not required for under seat or indoor deployments. The ground connector on the access point is not a protective earth ground.

To add ground connection to the access point:

Procedure

1. Attach the ring terminal to the ground wire.

2. Insert the ring terminal on the ground screw.
3. Thread the ground screw into the access point hole below the ground symbol.

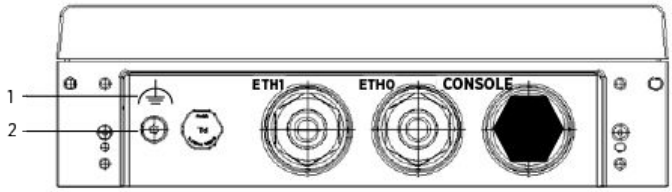


Figure 42: Ground port hole

Callout	Description
1	Ground symbol
2	Ground screw hole

4. Tighten the ground screw to 12 in-lbs.

Connect the ETH1 or ETH0 Cable to the Access Point

About This Task

The following hardware is required to attach the ETH1 or ETH0 cable through a conduit hole:

- ETH1 or ETH0 cable
- Two blank conduit covers to cover the front and the rear holes on the side of the service panel base

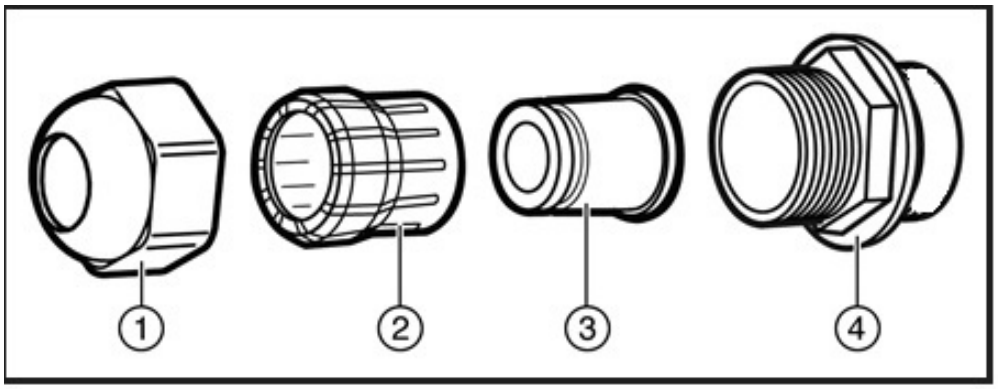


Figure 43: Cable Glands

Table 22: Cable Gland Descriptions

Number	Item	Description
1	Gland cap	Compresses the gland gasket and provides a water seal around the LAN cable when you insert a LAN cable into the access point. This part is removable.
2	Gland cage	The gland cap pushes against the gland cage and compresses the LAN cable gasket. This part is removable.
3	Gland LAN cable gasket	The gasket has two halves for fitting the gasket around the LAN cable. It compresses around the cable and against the gland body so there is an IP67 or water seal around the cable. This gasket is removable. **Note:** The access point ships with two types of LAN cable gaskets - gray gaskets and black gaskets: • If the LAN cable is unshielded CAT5, CAT5E or CAT6 then use the gray LAN cable gasket that is on the gland • If the LAN cable is shielded CAT6 or CAT6A then use the black LAN cable gaskets that shipped in the bag marked ACC-ODS-CAT6A-LAN-GSKT. **Korea and Brazil**: Users in Korea and Brazil must use a shielded CAT6 cable to remain compliant with regulations in your country.
4	Gland body	Provides a IP67 or water seal to the access point. **Note:** Do not touch the gland body as you can damage the water seal.

Procedure

1. Attach the ground wire to the access point.
2. Remove the ETH0 port gland cap, plastic cage, and gasket.
3. Connect the ETH0 cable through the ETH0 gland port until it clicks into place.
4. If there is a ETH1 connection, insert the cable through the ETH1 gland port until it locks into place.

5. Slide the plastic cage over the gland and into the gland body, and then secure it with the gland cap.
6. Torque the gland cap to at least 17-in lbs.

Connect the Service Panel Base and ETH1 or ETH0 Cable

About This Task

The ETH1 or ETH0 cable is connected through the side or bottom holes on the service panel. It is recommended that you run the ETH cables through the service panel before you connect the panel to the AP.

The following hardware is required to attach the ETH1 or ETH0 cable through a hole on the service panel:

- ETH1 or ETH0 cable
- One blank conduit cover to cover the front hole on the side of the service panel
- One 3/4 in. or 1/2 in. conduit cover, depending on the circumference of the ETH1 or ETH0 conduit
- Service panel
- Service panel top
- ACC-CAT6-LAN-GSKT
- RJ-45 Plugs
- Four flat head long M4 screws to hold the service panel to the access point

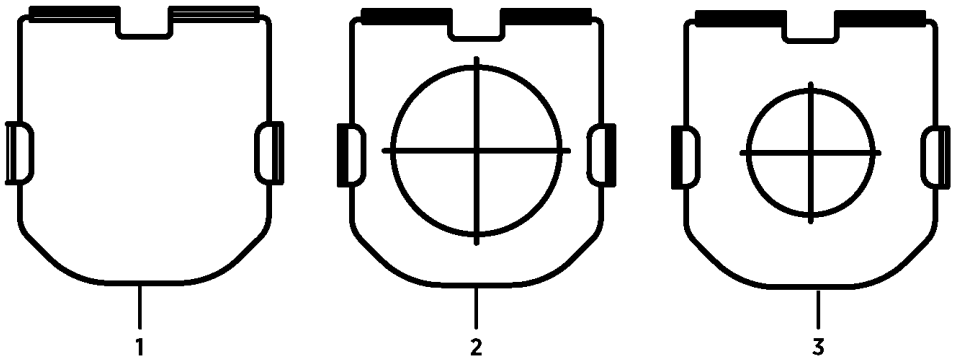


Figure 44: Metal Conduit Covers

Callout	Description
1	Blank conduit cover to cover the front hole on the side of the service panel base
2	¾ in. conduit cover
3	½ in. conduit cover

Procedure

1. Using the blank conduit cover, cover the front hole of the service panel.
2. Attach either the ½ in. conduit cover or the ¾ in. conduit cover to the rear hole of the service panel.
3. Run the ETH1 or ETH0 cable, and the ground wire through the rear side hole of the service panel.
4. Loosely align the service panel next to the metal sloping bracket, thereby leaving enough space to attach the ETH1 or ETH0 cable to the access point. Attach the ground wire to the access point.
5. Remove the gland caps, plastic cage, and the gasket from the ETH0 port.

   Note
   Put the removed parts onto the LAN cable to be attached to the access point later.

6. Insert the cap, cage and the LAN gasket onto the LAN cable.

7. Connect the ETH0 LAN cable through the ETH0 gland port until it clicks into place in the ETH0 port.

   If there is a ETH1 connection, repeat step 5 for the ETH1 cable and insert the cable through the ETH1 gland until it locks into place in to the ETH1 port.
8. Torque the gland cap to 17-in lbs.
9. Fold and arrange the ETH cable into the gap of the metal sloping bracket and the service panel base.

   The LAN cables should have 1 in. bend radius.

Install the Plastic Service Panel on the Access Point

About This Task

A service panel must be installed when the access point is installed under-bench or on a riser.

When a service panel is installed on an access point that is mounted on a riser, the service panel bottom must be closed. Keeping the service panel bottom open will enable debris to fill up, that can shorten the life of the service panel.

Note
The service panel bottom opening should be closed and glued in place when not needed. The openings can be covered with at least 0.050 inches thick plastic or metal coverings. The best practice is to use one part clear super glue and two parts epoxy to hold the service panel cover in place. This helps provide some resistance during pressure washing.

When installing the access point flat against a surface in a location that uses ice melt, the best practice is to apply an anti-seize material to the screws before attaching them to the access point metal base.

Procedure

1. Attach the plastic service panel base to the access point using four, 75 mm service panel shoulder screws.

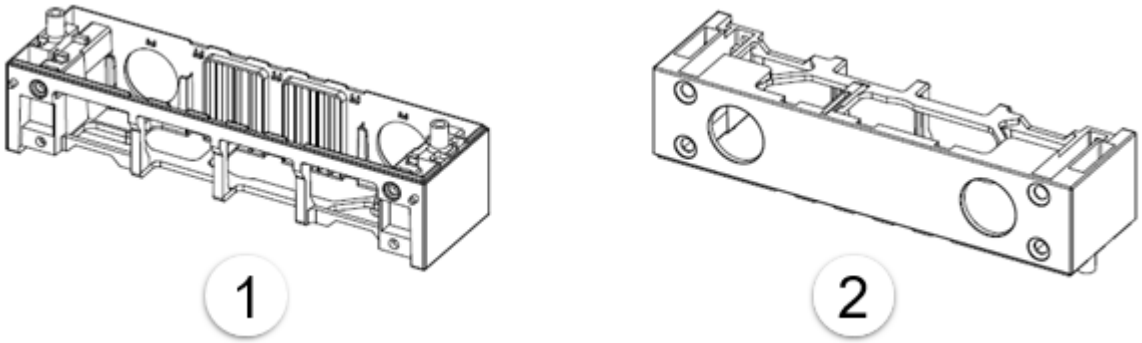


Figure 45: Plastic Service Panel Base Views

Callout	Description
1	Plastic service panel base
2	Side view of plastic service panel base

2. Torque the screws to 13 in-lbs.
3. Place the service panel top over the service panel base and lock it into place using the captive screw.

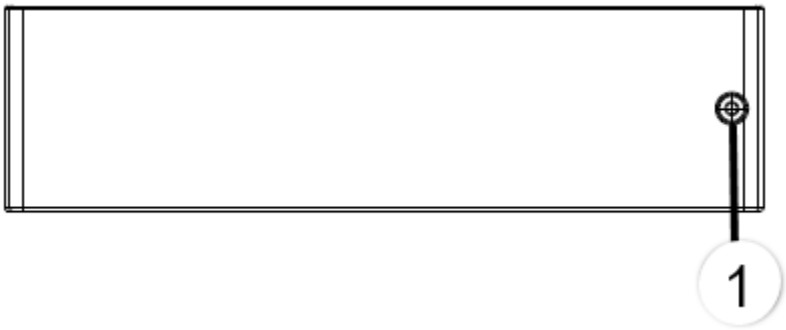


Figure 46: Plastic Service Panel Top Captive Screw

Callout	Description
1	Plastic service panel top captive screw

4. Torque the screw to 4 1/2 in-lbs.

Secure the Access Point after Installation

Before You Begin

The following hardware must be supplied by the user for safety cable installation:

- A 3 mm diameter security cable
- Lock to secure the ends of the security cable

About This Task

You can secure the access point to the mounting environment using a 3 mm diameter safety cable. The safety cable is used to enhance the physical security of the access point after installation.

Procedure

1. Insert the safety cable through the security cable hole on the metal base of the access point.
2. Push the cable through the security hole until you see it come out on the other side of the metal base. Tie a knot in the cable to act as a stopper, preventing the cable from slipping through security hole.
3. Insert a lock through the looped ends of the cable and lock it in place.

Onboard the Access Point with the ExtremeCloud IQ Mobile Onboarding App

Before You Begin

You can download the ExtremeCloud IQ Mobile Onboarding application to your mobile device from the Google application store or from the Apple application store.

You require administrator login privileges. Contact your network administrator if you need login credentials.

About This Task

You can use the ExtremeCloud IQ Mobile Onboarding application to quickly onboard, monitor and troubleshoot access points.

Procedure

1. Open the ExtremeCloud IQ Mobile Onboarding application.
2. Enter your login information.
3. Tap **Add a Device**.
4. Scan the QR code or bar code on the back of the AP with your mobile device camera.
5. Verify the AP model and serial number
6. Select the location.
7. Choose any configured network policies for the AP.

Troubleshoot the AP

Use the information in the following sections to troubleshoot your AP.

Reset the AP

You can solve common, temporary issues by performing a reboot or factory reset on the AP. It is important to know the difference between the two before you perform a reset or reboot.

See LED Descriptions for an explanation of LED display.

The **Reset** button is accessed by removing the console port cap. See Ports, Connectors, and Hardware Features on page 38.

Reboot the AP

A reboot - also called a power cycle - deletes the logs, but preserves all of the configuration settings. It also applies firmware upgrades and is often done to clear minor issues such as software issues or if the AP is not responding.

There are two ways to reboot the AP:

- With a hardware reboot - either by disconnecting the power adapter or the PoE cable, or by pressing and immediately releasing the **Reset** button.

  Important
  When you perform a hardware reboot, press and release the Reset button. Do not hold the **Reset** button. If you hold the **Reset** button then you will start a Factory Reset.

- With ExtremeCloud IQ Controller and ExtremeCloud IQ. See ExtremeCloud IQ Controller User Guide or ExtremeCloud IQ User Guide. This is often done after installation or if the AP cannot be easily accessed.

Factory Reset

A factory reset deletes your configuration settings and restores the AP to the original factory settings.

Note
A factory reset should only be done if you intend to restore AP to the original factory configurations.

There are two ways to factory reset the AP:

- With a hardware reset - press and hold the **Reset** button for at least 10 seconds.
- With ExtremeCloud IQ Controller and ExtremeCloud IQ. See ExtremeCloud IQ Controller User Guide or ExtremeCloud IQ User Guide.

Micro USB Console Port Information

Use the micro-USB console port to make a serial connection between your management system and the access point. You can order a micro USB console adapter for your access point using the part number ACC-WIFI-MICRO-USB.

For more information, see Hardware Ports.

Note
When you connect to the Micro USB console port, the management station from which you connect to the device must have a VT100 emulation program, such as TeraTerm Pro (a free terminal emulator) or Hilgraeve HyperTerminal (provided with Windows operating systems from XP forward).

Note
The console port can only be used with the Extreme Networks console cable. You could damage the AP if you use another cable.

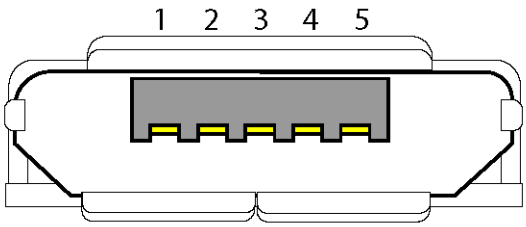
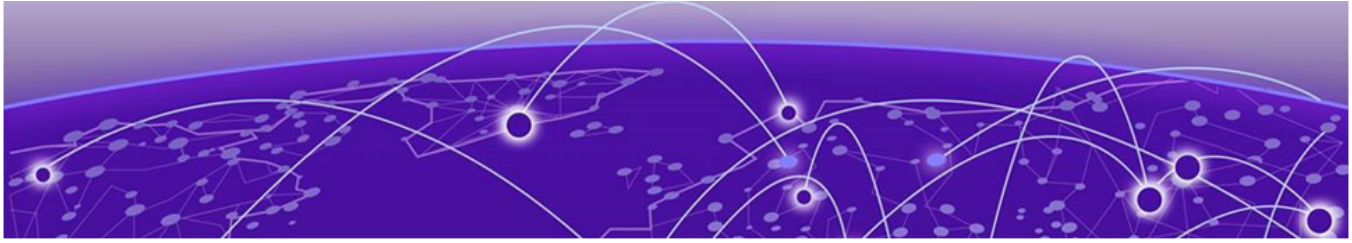


Figure 47: Micro-B model Console Port Pin Information

Table 23: Micro-B USB Pin Information

Pin Number	Pin Name and Description
1	NC
2	R×D (input to access point)
3	T×D (output to terminal)
4	Signal (GND)
5	Signal (GND)



Regulatory and Compliance

The following sections outline the regulatory and compliance information for the AP5060D and AP5060U.

Country of Manufacture

Vietnam

Manufacturer: WNC VIETNAM CO., LTD.

Address: Land Lot CN01, Dong Van III Industrial Zone, Dong Van Ward, Ninh Binh Province, Vietnam

Taiwan

Manufacturer: WNC Corporation (S1 manufacturing site)

Address: 5 Lihsin Rd. VI, Hsinchu Science Park, Hsinchu 300, Taiwan

Professional Installation Instructions

Installation personnel

This product is designed for specific application and needs to be installed by a qualified personnel who has RF and related rule knowledge. The general user shall not attempt to install or change the setting.

Installation location

The product shall be installed at a location where the radiating antenna can be kept 36 cm from nearby person in normal operation condition to meet regulatory RF exposure requirement.

External antenna

Use only the antennas which have been approved by the applicant. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC/IC limit and is prohibited.

Installation procedure

Refer to the installation instructions for details.

Warning
Select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to serious federal penalty.

Installation

Ce produit est destine a un usage specifique et doit etre installe par un personnel qualifie maitrisant les radiofrequences et les regles s'y rapportant. L'installation et les reglages ne doivent pas etre modifies par l'utilisateur final.

Emplacement d'installation

En usage normal, afin de respecter les exigences reglementaires concernant l'exposition aux radiofrequences, ce produit doit etre installe de facon a respecter une distance de 36 cm entre l'antenne emettrice et les personnes.

Antenne externe

Utiliser uniquement les antennes approuvees par le fabricant. L'utilisation d'autres antennes peut conduire a un niveau de rayonnement essentiel ou non essentiel depassant les niveaux limites definis par FCC/IC, ce qui est interdit.

Procedure d'installation

Consulter le manuel d'utilisation.

Warning
Avertissement: Choisir avec soin la position d'installation et s'assurer que la puissance de sortie ne depasse pas les limites en vigueur. La violation de cette regle peut conduire a de serieuses penalites federales.

Safety Guidelines

The following safety guidelines are intended to protect your personal safety and prevent damage to the equipment.

Important
Only qualified personnel must perform installation procedures. Within the context of the safety notes in this documentation, qualified persons are defined as persons who are authorized to commission grounding, label devices, systems, and circuits in accordance with established safety practices and standards. A qualified person understands the requirements and risks involved with installing outdoor electrical equipment in accordance with national codes.

CE Marking and European Area (EEA)

Warning
This is a class B product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Energy-related Products (ErP) Notice

This equipment has been tested and is found to comply with the limits of Ecodesign Directive 2009/125/EC. Under the directive, this device may be considered a "networked equipment with high network availability" (HiNA equipment).

The communication protocol used is IEEE 802.11 b/g/n/a/ac/ax/be.

Wi-Fi functions can be controlled by ExtremeCloud IQ.

FCC Notice (Part 15 - Class B)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, it 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 the one 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.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules

For 5925-7125 MHz transmitter operation in Low Power Indoor mode:

1. FCC regulations restrict the operation of this device to indoor use only.
2. The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet in the 5.925-6.425 GHz band.
3. Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

For operation in Standard power access point mode and standard client:

1. The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft.
2. Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

FCC Radiation Exposure Statement

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device meets all the other requirements specified in Part15C, Section 247 and Part 15E, Section 15.407 of the FCC Rules.

Warning
FCC Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This device has been tested and meets applicable limits for Radio Frequency (RF) exposure.

This equipment should be installed and operated with minimum distance of:

- **AP5060U** - SAR (underseat installation) 25mm; MPE (pole mount) 40 cm
- **AP5060D** - MPE (pole mount) 40 cm

Always keep the device away from your body to ensure exposure levels remain at or below the tested levels.

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.

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.

Industry Canada Notice

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- This device may not cause interference.
- This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil contient des émetteurs / récepteurs exempts de licence qui sont conformes au (x) RSS (s) exemptés de licence d'Innovation, Sciences et Développement économique Canada. L'opération est soumise aux deux conditions suivantes:

- Cet appareil ne doit pas provoquer d'interférences.
- Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

Pour les produits disponibles aux États-Unis / Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible.

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

Warning

This EUT is compliance with SAR for general population/uncontrolled exposure limits in IC RSS-102 and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528.

Warning

IC Déclaration d'exposition aux radiations: Cet EUT est conforme au SAR pour les limites d'exposition de la population générale / non contrôlée dans IC RSS-102 et a été testé conformément aux méthodes et procédures de mesure spécifiées dans IEEE 1528.

Warning

IC Radiation Exposure Statement: This device has been tested and meets applicable limits for Radio Frequency (RF) exposure. This device was tested with a separation distance of:

- AP5060U - SAR (underseat installation) 25mm; MPE (pole mount) 50cm
- AP5060D - MPE (pole mount) 50cm

Always keep the device away from your body to ensure exposure levels remain at or below the tested levels.

Warning

Cet appareil a été testé et respecte les limites applicables en matière d'exposition aux radiofréquences (RF). Cet appareil a été testé avec une distance de séparation de:

- AP5060U - SAR 25mm; MPE 50 cm
- AP5060D - MPE 50 cm

Gardez toujours l'appareil éloigné de votre corps pour vous assurer que les niveaux d'exposition restent égaux ou inférieurs aux niveaux testés.

Devices shall not be used for control of or communications with unmanned aircraft systems.

Les appareils ne doivent pas être utilisés pour contrôler ou communiquer avec des systèmes d'aéronefs sans pilote.

Devices shall not be used on oil platforms.

Les appareils ne doivent pas être utilisés sur les plates-formes pétrolières.

Devices shall not be used on aircraft, except for the low-power indoor access points, indoor subordinate devices, low-power client devices, and very low-power devices operating in the 5925-6425 MHz band, that may be used on large aircraft as defined in the Canadian Aviation Regulations, while flying above 3,048 metres (10,000 feet).

Les appareils ne doivent pas être utilisés sur les avions, à l'exception des points d'accès intérieure à faible puissance, des dispositifs subordonnés intérieurs, des dispositifs clients de faible puissance et des dispositifs de très faible puissance fonctionnant dans la bande 5925-6425 MHz, qui peut être utilisée sur de grands avions tel que défini dans la réglementation de l'aviation canadienne, tout en volant au-dessus de 3 048 mètres (10 000 pieds).

Devices shall not be used on automobiles.

Les appareils ne doivent pas être utilisés sur les automobiles.

Devices shall not be used on trains.

Les appareils ne doivent pas être utilisés dans les trains.

Devices shall not be used on maritime vessels.

Les appareils ne doivent pas être utilisés sur les navires maritimes.

Operation shall be limited to indoor use only.

Le fonctionnement doit être limité à une utilisation en intérieur uniquement.

The antenna height shall be determined by the installer or operator of the standard-power access point or fixed client device, or by automatic means. This information shall be stored internally in the device. Provision of accurate device information is mandatory.

La hauteur de l'antenne doit être déterminée par l'installateur ou l'opérateur du point d'accès à puissance standard ou de l'appareil client fixe, ou par des moyens automatiques. Ces informations doivent être stockées en interne dans l'appareil. La fourniture d'informations précises sur l'appareil est obligatoire.

Mexico Compliance Statement

La operacion de este equipo esta sujeta a las siguientes dos condiciones:

1. es posible que este equipo o dispositivo no cause interferencia perjudicial y
2. este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operacion no deseada.
3. Se restringe el funcionamiento de este equipo solo para uso en interiores,
4. A este equipo no deben conectarse antenas externas,
5. Este equipo no debe ser resistente a condiciones climáticas adversas, no debe utilizar baterías y la fuente de alimentación debe estar conectada directamente a la toma de corriente eléctrica.

Brazil Agência Nacional De Telecomunicações (Anatel) Statement

Este produto está homologado pela Anatel, de acordo com os procedimentos regulamentados e atende aos requisitos técnicos aplicados.

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados. Para maiores informações, consulte o site da Anatel – www.anatel.gov.br.

Taiwan Regulatory Statement

取得審驗證明之低功率射頻器材，非經核准，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。低功率射頻器材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。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材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。 應避免影響附近雷達系統之操作。

Thailand Regulatory Statement

.

MPE

United Kingdom (UK) and European Union (EU) Radiation Warning Statement

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

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE

	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK (NI)

The frequency and the maximum transmitted power in EU and UK are listed below:

AP5060D EU	AP5060U UK
2412-2472MHz: 20	2412-2472MHz : 20
2402-2480MHz (BT): 20	2402-2480MHz (BT): 20
2405–2480 MHz (802.15.4): 20	2405–2480 MHz (802.15.4): 20
5180-5240MHz : 23	5180-5240MHz : 23
5260-5320MHz : 23	5260-5320MHz : 23
5500-5700MHz : 30	5500-5700MHz : 30
5745-5825MHz : 13.98	5745-5825MHz : 23
5955-6415MHz : 23	5955-6415MHz : 23

Warning

AP5060D - This equipment complies with EU/UK radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

AP5060U:This device has been tested and meets applicable limits for Radio Frequency (RF) exposure.

EU: The highest SAR value 2.610 W/Kg.

UK: The highest SAR value 2.610 W/Kg. This device was tested with a separation distance of 25 mm.

MPE (Pole Mount): 25cm

Always keep the devices away from your body to ensure exposure levels remain at or below the as-tested levels.

Extreme Networks UK Address

Extreme Networks, UK Ltd.250 Longwater Avenue Green Park1st FloorReading, UK

Extreme Networks EU Importer Address

Extreme Networks, Ireland Ops Ltd.Rineanna House Shannon Industrial EstateShannon, V14CA36 Ireland

European Waste Electrical and Electronic Equipment (WEEE) Notice

In accordance with Directive 2012/19/EU of the European Parliament on waste electrical and electronic equipment (WEEE):

1. The symbol above indicates that separate collection of electrical and electronic equipment is required.
2. When this product has reached the end of its serviceable life, it cannot be disposed of as unsorted municipal waste. It must be collected and treated separately.
3. It has been determined by the European Parliament that there are potential negative effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment.
4. It is the user's responsibility to utilize the available collection system to ensure WEEE is properly treated.

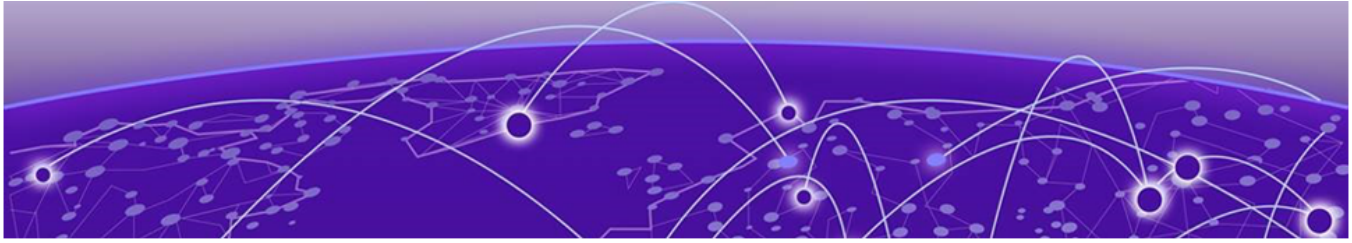
Information on the product take back program, the treatment and recycling facilities, and detailed information regarding the components, materials, and location of hazardous substances is available free of charge upon request by contacting Green@extremenetworks.com.

Declaration of Conformity in Languages of the European Community

English	Hereby, Extreme Networks declares that the radio equipment type (AP5060D/AP5060UWW) is in compliance with Directive 2014/53/EU. For full text of the EU Declaration of Conformity, contact Extreme Regulatory Compliance at compliancerequest@extremenetworks.com The and
Finnish	Valmistaja Extreme Networks vakuuttaa täten että Radio LAN device (AP5060D/AP5060UWW) tyyppinen laite on direktiivin 2014/53/EU oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen. EU-vaatimustenmukaisuusvaatimuksen täydellisestä tekstistä ota yhteyttä äärimmäisiin säädösten noudattamiseen osoitteessa compliancerequest@extremenetworks.com
Dutch	Hierbij verklaart Extreme Networks dat het toestel Radio LAN device (AP5060D/AP5060UWW) in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 2014/53/EU. Neem voor de volledige tekst van de EU-conformiteitsverklaring u contact opnemen met extreme regelgeving op compliancerequest@extremenetworks.com

French	Par la présente Extreme Networks déclare que l'appareil Radio LAN device (AP5060D/AP5060UWW) est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 2014/53/EU. Pour obtenir le texte intégral du processus de Déclaration de la conformité de l'UE, veuillez contacter la conformité réglementaire extrême à l'adresse suivante: compliancerequest@extremenetworks.com
Swedish	Härmed intygar Extreme Networks att radioutrustningstypen (AP5060D/ AP5060UWW) överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 2014/53/ EU. För fullständig text av EU-försäkran om överensstämmelse, kontakta Extreme regelefterlevnad på compliancerequest@extremenetworks.com
Danish	Undertegnede Extreme Networks erklærer herved, at følgende udstyr Radio LAN device (AP5060D/AP5060UWW) overholder de væsentlige krav og øvrige relevante krav i direktiv 2014/53/EU. For den fulde ordlyd af EU-overensstemmelseserklæringen bedes du kontakte Extreme Regulatory Compliance på compliancerequest@extremenetworks.com
German	Hiermit erklärt Extreme Networks die Übereinstimmung des "WLAN Wireless Controller bzw. Access Points" (AP5060D/AP5060UWW) mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 2014/53/EU. Für den vollständigen Wortlaut der EU-Konformitätserklärung wenden Sie sich bitte an extreme Regulatory Compliance unter compliancerequest@extremenetworks.com
Greek	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Extreme Networks ΔΗΛΩΝΕΙ ΟΤΙ Radio LAN device (AP5060D/AP5060UWW) ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 2014/53/EU. Για το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ, παρακαλούμε επικοινωνήστε με την ακραία κανονιστική συμμόρφωση στο compliancerequest@extremenetworks.com
Icelandic	Extreme Networks lysir her med yfir að thessi bunadur, Radio LAN device (AP5060D/AP5060UWW), uppfyllir allar grunnkrofur, sem gerdar eru i R&TTE tilskipun ESB nr 2014/53/EU. Fyrir fullan texta í ESB yfirlýsingu um samræmi, vinsamlegast hafðu samband við Extreme Reglufylgni á compliancerequest@extremenetworks.com
Italian	Con la presente Extreme Networks dichiara che questo Radio LAN device (AP5060D/AP5060UWW) è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 2014/53/EU. Per il testo integrale della Dichiarazione di conformità dell'UE, contattare Extreme Regulatory Compliance presso compliancerequest@extremenetworks.com
Spanish	Por medio de la presente Extreme Networks declara que el Radio LAN device (AP5060D/AP5060UWW) cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 2014/53/EU. Para obtener el texto completo de la Declaración de conformidad de la UE, póngase en contacto con Extreme Regulatory Compliance en compliancerequest@extremenetworks.com

Portuguese	Extreme Networks declara que este Radio LAN device (AP5060D/AP5060UWW) está conforme com os requisitos essenciais e outras disposições da Directiva 2014/53/EU. Para o texto integral da declaração de conformidade da UE, contacte a conformidade regulamentar extrema em compliancerequest@extremenetworks.com
Malti	Hawnhekk, Extreme Networks, jiddikjara li dan Radio LAN device (AP5060D/AP5060UWW) jikkonforma mal-htigijiet essenzjali u ma provvedimenti ohrajn relevanti li hemm fid-Dirrettiva 2014/53/EU. Għat-test sħiħ tad-dikjarazzjoni ta ' konformità tal-UE, jekk jogħġbok ikkuntattja lill-konformità regolatorja compliancerequest@extremenetworks.com



Index

R

S

T

U

W