

# ExtremeWireless 802.11ax Wi-Fi 6E Outdoor AP5050U Access Point

## Overview of AP5050U

The AP5050U access point is a cloud-ready, stadium-optimized Wi-Fi 6E outdoor access point. It is 802.11ax outdoor rated with an internal antenna. It supports high density of users and devices. It can be mounted on a wall, to a pole, under a seat or under a bench with the EIO-04 mounting kit (sold separately). For more information, see *Extreme Wireless 802.11ax Wi-Fi 6E Outdoor AP5050U Access Point Installation Guide*.

## AP5050U Box Contents

Ensure that the following items came with the access point:

Quantity	Item
1	AP5050U access point.
1	Quick Reference Guide.
10	Black gaskets for use with CAT6 and CAT6A cables; Five Bags of two gaskets each.

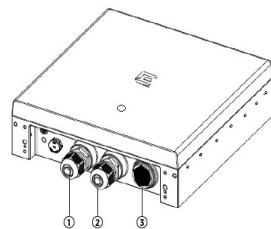
The AP ships with black gaskets for Category 6 (CAT 6) Ethernet cables with a cable diameter of 6.0-9.2mm. This includes unshielded twisted-pair (UTP) Cat 6 cables. Store these gaskets in a safe place if you do not use them right away. The AP has light-gray gaskets pre-installed on the AP glands for CAT 5 and CAT 5E cables, with a cable diameter range from 4.5-6.0mm.

## Features

The AP5050U access point has the following features:

- Radios: 3 radios (2.4GHz, 5.0 GHz, and 6 GHz); 1 IoT Radio (BLE/802.15.4)
- One micro USB console port (part number ACC-WIFI-MICRO-USB)
- Two Ethernet ports (ETH0 and ETH1):
  - ETH0 is 1 x 100/1000/2500/5000 Mbps auto-negotiation Ethernet port, RJ45 (PoE)
  - ETH1 is 1 x 100/1000/2500 Mbps auto-negotiation Ethernet port, RJ45 (PSE)
- Dimensions: 11.3 in. x 10.0 in. x 2.9 in. (288 mm x 254 mm x 75 mm)
- One dual LED, for LED activity description
- 3 mm diameter safety hanger provision
- Power: PoE 802.3at with 4x4x4
- One omni-directional internal antenna
- Temperature:
  - -40°C to +60°C (-40°F to +140°F) operating temperature
  - -40°C to +70 °C (-40 °F to +158 °F) storage temperature
- Enclosure: Plastic top enclosure and aluminum bottom

Figure 1 AP5050U access point



Callout	Description
1	ETH1 (PSE) port
2	ETH0 (PoE) port
3	Console port

## Mounting Options

The AP5050U is used with the EIO-04 under-seat mounting kit for installations on sloping surfaces and flat surface such as stadium floor.

**Note:** The AP5050U cannot be installed without the mounting brackets, which are purchased separately. For more information, see *Extreme Wireless 802.11ax Wi-Fi 6E Outdoor AP5050U Access Point Installation Guide*.

**Best practice:** Install the EIO-04 under-seat mounting kit horizontally. The under-seat mounting kit can also be installed vertically on a slope or on a flat surface if it is being installed on a stadium riser.

**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.

The following table lists the available mounting options.

Mounting bracket/part number	Wall install	Pole install	Under-seat install	Notes
EIO-04 under-seat housing	No	No	Yes	The AP can be installed under a seat, on a slope or a flat surface such as stadium floor.
KT-147407-02 bracket; with 3 bracket parts	Yes	Yes	No	1-axis +/-15 degree tilt.

Mounting bracket/part number	Wall install	Pole install	Under-seat install	Notes
KT-150173-01; extension arm; used with KT-147407-02 bracket parts	Yes; place the KT-150173-01 extension arm on top of the 1-axis KT-147407-02 tilt part	Yes; attach the KT-147407-02 pole part to the extension arm	No	-
MBO-ART03	Yes	Yes, attach the KT-147407-02 pole part to the MBO-ART03	No	For wall installations, the wall must be strong enough to support the access point during inclement weather.

## Available Accessories

The following accessories are available:

Item	Description
ACC-CAT6-LAN-GSKT	A black gasket. For use with a CAT6 and CAT6A cable. The gasket ships with the AP5050D and AP5050U RevAB and later.
ACC-WIFI-MICRO-USB	Micro USB cable Used for troubleshooting issues.
EIO-03-SP	A service panel that protects the LAN gland side of the AP.
EIO-04	An under-seat mounting solution.
EIO-GASKET	Spacer for use in stadiums.
KT-147407-03	A stainless steel hardware kit for mounting access points outdoors.
KT-150173-01	A 12-inch extension arm for pole and wall mounting.
MBO-ART03	An unistrut mounting bracket with 2-axis tilt +/- 80-degree in 10 degree increments - and variable 7.5°, 9°, or 10.5° extension.

## Install the EIO-04 Under-Seat Mounting Kit With the AP5050U Access Point on a Slope

Attach the conduit cable through the conduit holes on the metal sloping bracket, then attach the metal L bracket to the AP, and install the AP on a slope.

**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.

## Install the EIO-04 Under-Seat Mounting Kit on a Slope

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 slope.

## Install the metal sloping bracket on a slope:

- 1 Using the metal sloping bracket as a template, mark and drill two holes on the concrete.
- 2 Insert the anchors without the nuts and washers.
- 3 Place the metal sloping bracket, attach the nuts and washers to the exposed threads, and torque them to 60 in-lbs.

## Install the AP5050U access point on the slope:

- 1 Attach the conduit couplers to the conduit.
- 2 Remove the locking nut. For the conduit hole that is not used, insert a blank conduit cover over the conduit hole in the slope.
- 3 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 in. NPT or a 3/4 in. NPT conduit on the EIO-04 conduit holes.

**Note:** If you are using a 3/4 in. NPT, use the conduit cover that comes with the unit to cover the conduit hole.

- 4 Tighten the locking nut.
- 5 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.

- 6 If you are using the right side conduit hole in the slope, repeat step 3.
- 7 Run the cable through the conduit and add the RJ45 connectors to the wires.

**Note:** The cable must have 1 in. bend radius and be accessible to the glands on the AP.

## Attach the metal "L" bracket to the AP5050U access point:

- 1 Attach the metal "L" bracket to the gland side of the AP using two M6 screws. Torque the screws to 35 in-lbs.

**Install the access point on the slope:**

- 1 Center the access point alignment holes and the side tab extension holes. Attach the AP to the tabs using two M6 screws.
- 2 Use two M6 screws and attach the gland side of the AP with the "L" bracket to the sloping bracket.

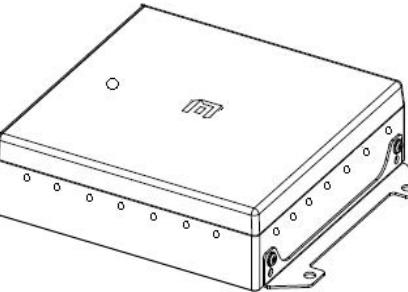
- 3 Push the access point to the rear as far as it would go.
- 4 Torque the screws to 35 in-lbs.

## Install the EIO-04 Under-Seat Mounting Kit with the Access Point on a Flat Surface

- 1 Attach a metal "L" bracket on each side of the AP5050U access point using two M6 screws for each bracket. Torque the M6 screws to 35 in-lbs.
- 2 Using the metal "L" brackets as a template, mark four hole centers, and drill in the concrete.
- 3 Insert four concrete anchors into the holes without the washers and nuts.
- 4 Place the metal "L" bracket over the threaded anchor posts and put on the flat-washer, the spring washer, and the nut on each side.
- 5 Torque the nuts to 60 in-lbs.

**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.

Figure 2 AP5050U flat surface installation with metal "L" brackets



## Install the Plastic Service Panels on the Access Point

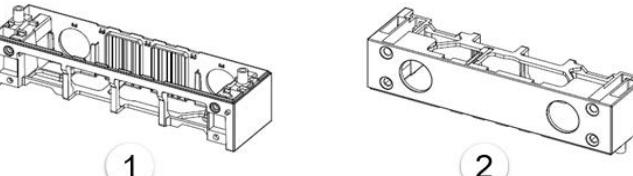
A service panel must be installed when the AP is used with an under-seat enclosure.

The service panel is used in the following ways:

- 1 It is part of EIO-04 for under seat installation. Order EIO-04 separately. EIO-03-SP is included in the box.
  - Option 1: For mounting on slope using 1 angle bracket.
  - Option 2: For floor mounting, use the 2 Angle Bracket and the EIO-03-SP. All are included with EIO-04.
- 2 It can be used on wall or pole mount with EIO-03-SP to protect the glands. Order EIO-03-SP.

**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.

Figure 3 Plastic service panel base



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

- 1 Attach the plastic service panel base to the access point using four, 75 mm service panel shoulder screws. Torque the screws to 13 in-lbs.
- 2 Place the service panel top over the service panel base and lock it into place using the captive screw on the service panel top.

## Power or Pressure Washing Guidelines

Ensure that your pressure washing equipment fulfills the following specifications:

- Pressure washer Pounds per Square Inch (PSI) must be less than 4000psi.
- 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.

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

## Cleaning solution specifications:

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

**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.



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

## Connect the ETH1 or ETH0 cable

The ETH cable connects through the front or the rear hole of the service panel base or the metal sloping bracket. The following hardware is required:

- ETH1 or ETH0 cable
- One blank conduit cover to cover the front hole on the side of the service panel base
- One 3/4 in. or 1/2 in. conduit cover, based on the circumference of the ETH cable
- Service panel base and top.

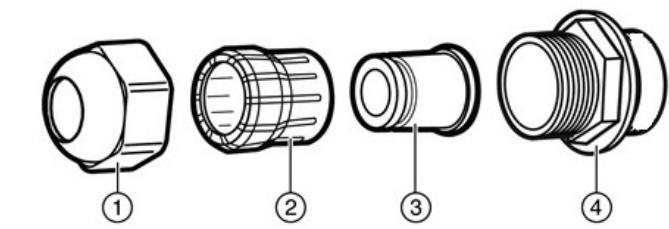


**Note:** Use the correct gasket for your LAN cable.

Option 1: Pre-installed on the AP gland. The grey gasket is for CAT5 and CAT5E cables. Cable diameter range is 4.5-6.0mm.

Option 2: Included in the box. The black gasket is for CAT6, including /UTP cables, and CAT6A cables. Cable diameter range is 6.0-9.2mm.

Figure 4 AP5050U Glands



- 1 Using the blank conduit cover, cover the front hole of the service panel base.
- 2 Attach either the 1/2 in. or the 3/4 in. conduit cover to the rear hole of the service panel base.
- 3 Bring the ETH1 or ETH0 cable, and the ground wire through the rear side hole of the service panel base.
- 4 Place the service panel base next to the metal sloping bracket; leave space to attach the ETH1 or ETH0 cable to the access point.
- 5 Attach the ground wire to the AP5050U access point.
- 6 Remove the gland cap, plastic cage, and the gasket from the ETH0 port.

**Note:** Put the removed parts onto the LAN cable for use later.

- 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, insert the cable through the ETH1 gland until it locks into place.
- 8 Torque the gland cap to 12-15 in-lbs.
- 9 Arrange the ETH0 cable in the gap between the bracket and the base. The ETH0 cable must not be bent sharply and must have a 1 in.

## Federal Communications Commission (FCC) Notice

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.

**Caution:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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

**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 device was tested with a separation distance of 25 mm. Always keep the device away from your body to ensure exposure levels remain at or below the tested levels.

For 5925-6425 MHz and 6525-6875 MHz transmitter operation in Standard power access point mode:

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 un[manned] aircraft systems.

## Industry Canada Notice

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). 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.

Standard power access points subject to following conditions:

1. Operation on oil platforms, automobiles, trains, maritime vessels, and aircraft shall be prohibited.

2. The antenna height shall be determined by the install[er] 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.

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:

(1) Cet appareil ne doit pas provoquer d'interférences.

(2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

Points d'accès à l'alimentation standard soumis aux conditions suivantes :

1. L'exploitation sur les plates-formes pétrolières, les automobiles, les trains, les navires maritimes et les avions est interdite.

2. 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.

This device is for indoor use only in the 5150 MHz - 5250 MHz band 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: 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 25 mm. 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 25 mm. Gardez toujours l'appareil éloigné de votre corps pour vous assurer que les niveaux d'exposition restent égaux ou inférieurs aux niveaux testés.

## 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.

### Selling Countries:



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:

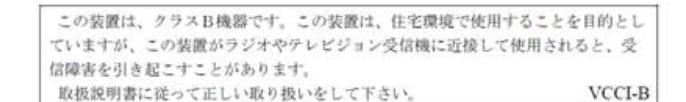
AP5050U EU	AP5050U UK
2400-2483.5MHz: 19.97 dBm	2400-2483.5MHz: 19.97 dBm
2400-2483.5MHz (LE): 8.71 dBm	2400-2483.5MHz(LE): 8.82 dBm
2400-2483.5MHz (802.15.4): 8.82 dBm	2400-2483.5MHz (802.15.4): 8.82 dBm
5150-5250MHz: 22.91 dBm	5150-5250MHz: 22.91 dBm
5250-5350MHz: 22.86 dBm	5250-5350MHz: 22.86 dBm
5470-5725MHz: 27.08 dBm	5470-5725MHz: 27.08 dBm
5725-5850MHz(EN 300 440): 13.96 dBm	5725-5850MHz: 22.97 dBm

**Warning:** This device has been tested and meets applicable limits for Radio Frequency (RF) exposure.  
EU: The highest SAR value: 2.761 W/kg.

UK: The highest SAR value: 0.348 W/kg. This device was tested with a separation distance of 25 mm.

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

## Japan Voluntary Control Council for Interference (VCCI) - Class B



Translation:

This is a Class B equipment. Although this equipment is intended for use in a residential environment, it could cause poor reception if used near a radio or a television receiver. Please follow instructions in the instruction manual.

VCCI-B

## Brazil Regulatory Information

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](http://www.anatel.gov.br).

O uso deste equipamento é restrito a ambientes fechados e proibido em plataformas petrolíferas, carros, trens, embarcações e no interior de aeronaves abaixo de 3.048 m (10.000 pés).

O produto poderá operar na faixa de 5150-5350MHz somente em ambientes fechado (indoor).

## Mexico Regulatory Information

La operación de este equipo está 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 operación no deseada.

## 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 below 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 users' responsibility to utilize the available collection system to ensure WEEE is properly treated.

For information about the available collection system, please contact Extreme Environmental Compliance at [Green@extremenetworks.com](mailto:Green@extremenetworks.com).

## 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。

請至此連結閱讀中文說明：[www.extremenetworks.com/support/documentation/](http://www.extremenetworks.com/support/documentation/)

ExtremeWireless 802.11ax Wi-Fi 6E 室外 AP5050U 無線接入點

無線電：3 個無線電 (2.4GHz、5 GHz 和 6 GHz); 1 個物聯網無線電 (BLE/802.15.4)

## Extreme Networks UK Address

Extreme Networks, UK Ltd.  
250 Longwater Avenue Green Park  
1st Floor, Reading, UK

## Extreme Networks EU Importer Address

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

## Thailand Regulatory Information

เครื่องโทรศัพท์มือถือและอุปกรณ์มีความสอดคล้องตามมาตรฐานหรือข้อกำหนดทางเทคนิคของ กสทช.

## SAR Statement

เครื่องวิทยุคมนาคมนี้มีอัตราการดูดซึ�บพลังงานจากตัวเรี่ยงวิทยุ (Specific Absorption Rate - SAR) ที่น้อยกว่า 2.761 W/kg ซึ่งสอดคล้องตามมาตรฐานความปลอดภัยขององค์กรมาตรฐานความปลอดภัยของประเทศไทย ใช้เครื่องวิทยุคมนาคมที่คุณจะได้รับการรับรองการก่อจลาจลของ กสทช.



## ExtremeWireless™ Access Point

### Quick Reference

AP5050U

### Scan to Download the ExtremeCloud IQ Companion Mobile Application

Commission, monitor, and troubleshoot devices easily with **ExtremeCloud IQ Companion** Mobile Application (supported on iOS and Android).

Use your mobile device camera to scan the serial number, capture installation images, assign or change device location, and network policy. The **ExtremeCloud IQ Companion** Mobile Application enables you to access the device CLI for troubleshooting and view device and client status.



ExtremeCloud IQ Companion  
iOS Mobile Application



ExtremeCloud IQ Companion  
Android Mobile Application



ExtremeCloud IQ Companion  
Mobile Application Onboarding



Documentation



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