

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 internal antenna and supports high density of users and devices.

The AP5050U access point can be mounted under a seat or under a bench with the EIO-04 mounting kit (sold separately). It can also be mounted on a wall or to a pole. 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:

Table 1 AP5050U box contents

Quantity	Item
1	AP5050U access point.
1	Quick Reference Guide.
2	Black gaskets for use with a CAT6 and CAT6A cable.

The access point ships with two black gaskets in the box for use with Category 6 (CAT 6) Ethernet cables with a cable diameter from 6.0mm to 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 access point has light-gray gaskets pre-installed in the access point glands. The light-gray gasket handles all CAT 5 and CAT 5E cables, with a cable diameter range from 4.5mm to 6.0mm.

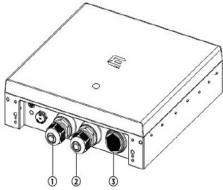
Features

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
 - You can order a micro USB console adapter for the access point using the 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
 - For complete power profile information, refer to the *ExtremeWireless AP5050U Access Point Installation Guide* at the Extreme Networks Documentation Site.
- Antenna:
 - 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 access point is used with the EIO-04 under-seat mounting kit for the following installations:

- Slope
- Flat surface such as stadium floor

Note: The AP5050U cannot be installed without the mounting brackets. The mounting brackets are purchased separately. For more information, see *Extreme Wireless 802.11ax Wi-Fi 6E Outdoor AP5050U Access Point Installation Guide*.<https://www.extremenetworks.com/products/extremewireless..>

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

The following table lists the mounting options available.

Mounting bracket and part number	Wall install	Pole install	Under-seat install	Notes
EIO-04 under-seat housing	No	No	Yes	The access point can be installed under a seat on a slope or a flat surface such as stadium floor.
KT-147407-02 bracket; comes with three bracket parts	Yes	Yes	No	Micro USB cable Used for troubleshooting issues.
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-ART02	Yes	Yes	No	The articulating mounting bracket is paired with the POLE01 bracket for pole installations. For wall installations, the wall must be strong enough to support the access point during inclement weather.
30520 (WS-MBO-POLE01 bracket)	No	Yes (must be used with the MBO-ART02 bracket)	No	If the pole diameter is <= 1.0 in. (25.4 mm), use small cable clamp. If the pole diameter is between 5.0 in. - 7.0 in. (127.0 mm), use large cable clamp. For any other pole diameter, provide your own stainless steel cable clamp. The band must be 0.5 in. (12.7 mm) wide. The POLE01 bracket can be used only when paired with the MBO-ART02 bracket.

Available Accessories

The following accessories are available.

Item	Description
ACC-CAT6-LAN-GSKT	A black gasket. For use with a CAT6 and CAT6A cable.
ACC-WIFI-MICRO-USB	Micro USB cable Used for troubleshooting issues.
EIO-03-SP	A wireless access point service panel. Protects the LAN gland side of the access point.
EIO-04	An under-seat mounting solution.
EIO-GASKET	Spacer for use in stadiums.
KT-147407-02	A stainless steel hardware kit for mounting access points outdoors.
KT-150173-01 A	A 12-inch extension arm for pole and wall mounting.
30520 (WS-MBO-POLE01)	.A pole mounting bracket.

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 access point, and install the access point on a slope. 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 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 ¾ in. NPT conduit on the EIO-04 conduit holes.

Note: If you are using a ¾ 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 AP5050U access point.

Attach the metal “L” bracket to the AP5050U access point:

- 1 Attach the metal “L” bracket to the gland side of the AP5050U access point using two M6 screws.
- 2 Torque the screws to 35 in-lbs.

Install the access point on the slope:

- 1 Align and center the alignment holes of the access point and the side tab extension holes, and attach the access point to the tabs using two M6 screws.
- 2 Attach the gland side of the access point, that has the “L” bracket to the metal sloping bracket using two M6 screws.
- 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 AP5050U 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.

Figure 2 AP5050U flat surface installation with metal “L” brackets



Install the Plastic Service Panels on the AP5050U Access Point

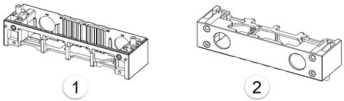
A service panel must be installed when the access point is installed with an under-seat enclosure.

The service panel is uses in the following ways:

- 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: Throw out the Slope (Casting) and you would use the 2 Angle Bracket as well as the EIO-03-SP to mount to floor). All included with EIO-04
- It can be used on wall or pole mount using EIO-03-SP to protect the glands or hide them for aesthetics. You need to order EIO-03-SP.

- 1 Attach the plastic service panel base to the AP5050U access point using four, 75 mm service panel shoulder screws.

Figure 3 Plastic service panel base



Label	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 on the service panel top.

Secure the Access Point after Installation

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.

You must supply the following hardware must for safety cable installation:

- A 3 mm diameter security cable
 - Lock to secure the ends of the security cable
- 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.
 - 3 Insert a lock through the looped ends of the cable and lock it in place.

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 access point.
- 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.

Note: Wear safety goggles with complete eye protection when using the power washing equipment.

You can pressure wash the access point and the surface around the access point to remove dirt and debris.

Connect the ETH1 or ETH0 cable

The ETH1 or ETH0 cable can be connected through the front or the rear hole on the side of the service panel base or the metal sloping bracket.

The following hardware is required to attach the ETH1 or ETH0 cable through the rear hole of the service panel base:

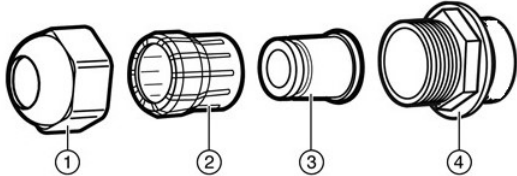
- ETH1 or ETH0 cable
- One blank conduit cover to cover the front hole on the side of the service panel base
- One 3/4 in. or 1/2 in. conduit cover, depending on the circumference of the ETH1 or ETH0 cable
- Service panel base
- Service panel top

Note: Make sure that you use the correct gasket for your LAN cable.

Option 1: Pre-installed on the access point gland. The grey gasket is for CAT5 and CAT5E cables. It has a cable diameter range of 4.5-6.0mm.

Option 2: Included in the box in a plastic bag. The black gasket is for all CAT6, including /UTP cables, and CAT6A cables. It has a cable diameter range of 6.0-9.2mm.

Figure 4 AP5050U Glands



Callout	Description
1	Gland cap
2	Gland cage
3	Gland LAN cable gasket
4	Gland body - Do not remove the gland body. This is a factory sealed component; do not remove from housing.

- 1 Using the blank conduit cover, cover the front hole of the service panel base.
- 2 Attach either the 1/2 in. conduit cover or the 3/4 in. conduit cover to the rear hole of the service panel base.
- 3 Bring in the ETH1 or ETH0 cable, and the ground wire through the rear side hole of the service panel base.

