Extreme Wireless 802.11be
Wi-Fi 7 Weatherized AP3060 Solution

Overview of AP3060

The AP3060 is an ExtremeCloud IQ managed, Wi-Fi 7 (802.11be) universal weatherized access point (AP). It has a dual-radio design with two 2x2:2 radios for use across the 6 GHz, 5 GHz, and 2.4 GHz bands. It also features a dedicated sensor and dual IoT radios.

The AP3060 can be mounted on a pole, a Unistrut, or a wall with the following brackets:

- AH-ACC-STRP-MRN
- AH-ACC-BKT-ASM
- KT-147407-02
- KT-150173-01
- MBO-ART03

Technical Specifications

Fig. 1 AP3060



Note: South Korea, Mexico, Taiwan, and Brazil require the use of Cat6 shielded cable.

The AP3060 has the following features and specifications. For more information, see the data sheet.

Radios

- Two radios:
  Radio 1: 2x2:2 2.4 GHz, 6 GHz or 5GHz-Low; 6 GHz operation is country-dependent
  Radio 2: 2x2:2 5 GHz-Full or 5 GHz-High
- Two IoT radios -Thread and Zigbee ready, Bluetooth 5.4 Low Energy, IEEE 802.15.4

Ports

- One Ethernet port with RJ45 connectors:
  - ETH0: 100/1000/2500 Mbps auto-sensing Ethernet PoE port with PoE in.
- 802.3az Energy-Efficient Ethernet (EEE)

Security

- One safety hanger slot
- Trusted Platform Module (TPM)

Power Consumption

- 802.3af Input: Typical 11W, Max 13W
- 802.3at Input: Typical 11W, Max 13W

Physical Dimensions

- Dimensions: 20.5 × 20.5 × 8.1cm (8.07 × 8.07 × 3.19in.)
- Weight: 1.45 kg (3.2lb)

Environmental

- Operating: -40°C to +60°C (-40°F to 140°F) (including solar load)
- Storage: -40°C to +70°C (-40°F to 158°F)
- Humidity: 0% to 95% (non-condensing)

Enclosure: Plastic Top, Aluminum Bottom

Fig.2 AP3060 Ports

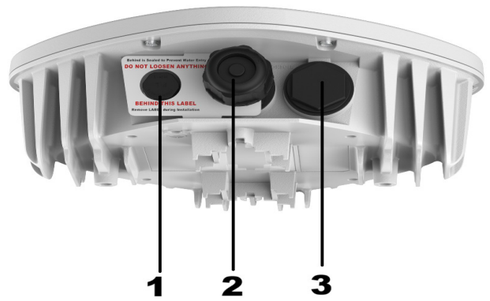


Table 1. *AP3060 Ports and Connections*

Item	Port
1	Air Vent
2	ETH0/PoE port
3	Hex console cap with tether

Box Contents

Confirm the following items shipped with your AP before you begin the installation. Contact your dealer if any items are damaged or missing.

Table 2. *Box Contents*

Quantity	Item
1	AP3060 with two installed M25 cable gland assemblies and plugs, and two installed M25 seal caps.
1	Regulatory guide
1	Hardware bag with an M4 ground screw, ring terminal, and star washer.
1	AH-ACC-BKT-AX-TB mounting bracket

Micro USB Console Port

Through the console port, you can make a serial connection between your management system and the access point.
Use the SKU ACC-WIFI-MICROUSB if you need to order the Micro USB cable. The console port can only be used with the Extreme Networks console cable. You will damage the AP if you use another cable.

Status LED Activity

The AP3060 has a LED on top of the chassis. It shows the operational states for power, firmware updates, Ethernet and wireless interface activity, and alarms.

Table 3. ExtremeCloud IQ LED Activity

LED	Description
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 device power is on and the access point is in boot up mode, or is running without a CAPWAP connection.
Fast-blinking amber	The IQ Engine firmware is updating.

Table 4. ExtremeCloud IQ Controller Status LED Activity

LED	Description
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.

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

Obtain the following items:

- The flat part of the KT-147407-02 bracket
- One axis tilt part of the KT-147407-02 bracket
- One access point
- Six machine screws
- Four wall screws

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

1. Attach the flat part of the KT-147407-02 bracket to the access point using two machine 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 wall 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.
5. Tilt the access point to a desired angle and tighten the four machine screws to a torque of 45 inch-lbs.
6. The tilt bracket has +15 degrees to -15 degrees of tilt.

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

Obtain the following items:

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

The KT-150173-01 extension arm is used in combination with the wall and pole bracket parts of the KT-147407-02 bracket if you want a tilt. Install your access point with an extension arm if a standoff distance—but no tilt—is required.

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.
3. The holes must be within the circular cuts in the end of the flange.
4. 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.
5. 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.
6. 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.
7. Use screw-in anchors with the four M6 hex-head screws when you mount the bracket on a wood surface. Use concrete anchors for concrete surface.

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

Before you begin

You need the following items:

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

You also need one crescent wrench, socket wrench, or channel pliers.

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-in., 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 on a Flat Surface Using the AH-ACC-BKT-ASM Accessory

Install the access point on a vertical or horizontal flat surface using the AH-ACC-BKT-ASM accessory.
The following hardware is required to install the access point:

Note: The glands must point downward to prevent water from entering the AP.

- An access point.
- One AH-ACC-BKT-ASM wall accessory, purchased separately.
- Four shoulder M5 bolts.
- Four mount screws and screw-in anchors, included with the bracket.

1. Using the ASM wall accessory as a template, mark

and drill four mounting holes on a flat surface.
The printed arrows on the accessory must be pointing up.
2. Attach the ASM accessory to the wall by using four mounting screws.
Use screw-in anchors with the mounting screws on a wood surface, and concrete anchors on a concrete surface.
3. Insert the M5 shoulder mounting screws into the access point mounting holes.
4. Torque the M5 shoulder mounting screws to 25 inch-lbs.
5. Remove the two locking screws on the accessory.
6. Insert the M5 bolt heads on the access point into the large end of the accessory keyholes and slide the access point down until the bolts rest in the narrow end of the keyholes.
7. Reinstall and tighten the locking screws on the ASM accessory to secure the access point.

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

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

- All parts of the KT-147407-02 bracket
- Four M6 screws
- Two hex-head M12 stainless-steel screws
- Two hex-head M12 stainless-steel nuts
- Two 0.5 in. wide stainless-steel cable clamps
- One access point

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 Using KT-147407-02 Bracket Parts and KT-150173-01 Extension Arm*".
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.
4. Insert the stainless-steel cable clamp through the long slots on the pole bracket.
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 about 11 inch-lbs

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

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.
You need the following:

- One access point.
- One KT-147407-02 bracket.
- One MBO-ART03 articulating mounting bracket.
- Two M6 hex-head screws to attach the MBO-ART03 to the access point.
- Two M6 screws with nuts and washers to attach KT-147407-02 to the MBO-ART03.
- Two Long M6 Hex screws and nuts for providing an angular lock for each axis.
- Two Cable clamps with a bandwidth of 0.5 in. (12.7 mm). Cable clamps must be purchased separately as they are not included.
- One crescent wrench, socket wrench, or channel pliers.
- One screwdriver.

1. Attach the KT-147407-02 to the MBO-ART03 with two M6 screws, nuts, and washers.
2. Attach both cable clamps to the KT-147407-02 bracket.
3. Open the cable clamp by inserting the head of the flathead screwdriver into the retaining screw and turning the screw counterclockwise. Then insert the non-clamp end into the KT-147407-02 through the holes.
4. Attach the two brackets to the pole.
5. Tighten the cable clamp screw around the pole by turning the screws clockwise with a flathead screwdriver.
6. Attach the access point to the MBO-ART03 with two M6 hex-head screws.
7. Adjust the two pivot points until you are satisfied.
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.
11. Attach the safety hanger strap as per the local code.
12. 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

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

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
- Two 0.5" wide stainless-steel cable clamps
- One screwdriver.
- One access point

1. Attach the flat part and the 1-axis tilt part of the KT-147407-02 bracket to the access point.
2. For instructions on how to attach the bracket parts, see "Install the Access Point Using KT-147407-02 Bracket Parts and KT-150173-01 Extension Arm".
3. Align the circular holes on one end of the KT-150173-01 extension arm against the large holes on the 1-axis tilt bracket.
4. 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.
5. 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.

Install the Access Point on a Pole Using AH-ACC-STRP-MRN

You can install the access point on a vertical pole in the following positions:

- Vertically oriented access point mounted onto a pole
- Horizontally oriented access point mounted onto a pole.

The following hardware is required for installing the access point on a vertical pole or a horizontal pole:

- Two AH-ACC-STRP-MRN accessories.
The best practice is to mount the access point to a pole with a minimum circumference of 3 in. Use a stainless-steel cable clamp that is 0.5 in. (12.7 mm) wide. You must provide your own cable clamps if you are mounting the AP to a pole that is less than 3 in. or more than 7 in. in diameter
- A screwdriver to tighten the clamp screws.

1. Thread the cable clamp straps through the access point rear slots.
2. Position and insert the cable clamp straps around the pole.
3. Using a slotted screwdriver, tighten the clamp screws to a minimum torque of 14 inch-lbs. until the access point is securely mounted onto the pole.
As an added security measure, you can thread a safety strap through one of the cable clamp slots in addition to the cable clamps. Connect the other end of the strap to a secure object.

Note: Ensure that the access point top slots are nearest to the sky and the bottom slots are nearest to the ground.
The access point LAN glands must point down to eliminate water from entering the chassis.

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

The MBO-ART03 bracket has +/- 80-degree (in 10-degree increments) 2-axis tilt and variable 7.5 in. to 10.5 in. extension. The bracket comes installed with M6 pivot screws. 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.

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.
5. Use a crescent wrench or a 13 mm tool to tighten the pivot screws and nuts.
6. Tighten the screws and nuts.

Adjust the MBO-ART03 bracket's angular position

1. The horizontal and vertical adjustments can be made in 10 degree increments.
2. The increments are marked on the MBO-ART03 bracket.

Note: The glands must point down to prevent water from entering the AP.

3. Rotate the arm to the desired position.
4. When the lock screw hole lines up with the appropriate serrated screw hole, insert the long M6 screw and fasten with a hex nut.
5. Torque the lock screws and nuts to about 45 inch-lbs.
6. Torque the pivot screws and nuts to about 60 inch-lbs.
7. The left to right adjustment can be made to any angle, with the access point having at least 1 in. clearance from another object.

Power or Pressure Washing Guidelines

Ensure that your pressure washing equipment meets 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

Cleaning Solution Specifications

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

Connect the ETH0 Cable

The ETH0 cable is connected through the ETH0 gland port.

Figure 3: Glands

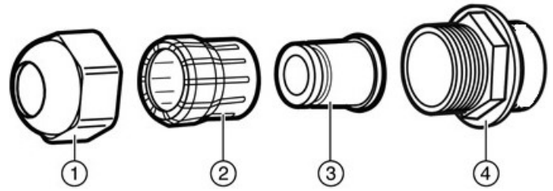


Table 5. AP Glands

Callout	Item
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. 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. Slide the plastic cage over the gland and into the gland body, and then secure it with the gland cap.
5. Torque the gland cap to at least 16-in lbs.

Connect the AP to the Network

Before you begin
You will need an Ethernet cable. Locate the Ethernet port on the AP before you begin.
Do the following:

- Connect the Ethernet cable to the ETH0/PoE port for PoE.

Documentation

You can find documentation for all of your Extreme Net-

works products at the Extreme documentation portal at https://supportdocs.extremenetworks.com/support/documentation/.

Downloads

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

If you need to manually download the applications, then you can use the URLs below.

- ExtremeCloud IQ Companion Mobile: Application Onboarding: https://extremecloudiq.com/login
- ExtremeCloud IQ Companion Android Mobile Application: https://play.google.com/store/apps/details?id=com.extremenetworks.xiqmobileapp
- ExtremeCloud IQ Companion iOS Mobile Application: https://apps.apple.com/us/app/extremecloud-iq-companion/id1526789768

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Extreme Wireless

Access Point

QUICK INSTALLATION
AP3060

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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 Android Mobile Application

ExtremeCloud IQ Companion iOS Mobile Application

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P/N 9041101-00 Rev AA