# ExtremeMobility 802.11ax/ac/abgn Outdoor AP560u Under-seat Mounting Solution

# Overview of AP560u

The AP560u is an under-seat solution that consists of the AP560i access point and the under-seat housing kit EIO-03. The AP560i access point is a cloudready, stadium-optimized Wi-Fi 6, and 802.11ax/ac/abgn outdoor access point with internal antenna. The AP560i access point supports high density of users and devices.

The AP560u under-seat solution can be mounted under a seat or under a bench.



**Note:** The AP560i requires a minimum base firmware of WiNG 7.1.1.

# **AP560u Ordering Details**

The AP560u under-seat solution can be ordered as a bundle or as separate units.

Part Number	Order Details	Description
AP560u-FCC	<ul> <li>Under-seat access point bundle</li> <li>AP560i-FCC access point</li> <li>EIO-03 under-seat mounting kit</li> <li>WS-EIO-02 (#30524) silicone rubber kit</li> </ul>	802.11ax High-Capacity Indoor/Outdoor AP with omni-directional antenna. Targeted for under-the seat deployments with a small physical footprint, flexible installation options, and IP67 protection from surrounding elements such as weather, tampering from fans, and pressure washing.
		Two mounting options: flat or sloped.
AP560i-FCC	Standalone access point	Cloud-ready, dual 5GHz, dual-band, sensor radio, dual Radio 802.11ax/ac/ abgn, 4x4:4 MIMO outdoor 11ax access point. Internal Antenna. Domain: US
EIO-03	Under-seat mounting kit	Under-seat mounting solution for AP560i.
WS-EIO-02	Silicone rubber kit (#30524)	Silicone rubber chamfer gasket kit for access point under-seat mounting kit.

# Verifying the AP560u, AP560i, EIO-03, and WS-EIO-02 Box Contents

Ensure that the following items are available:

Table 1 Contents of the AP560u Box

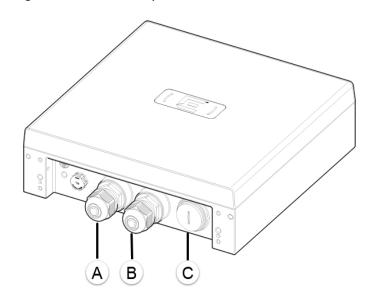
Quantity	Item
1	AP560i box containing the AP560i access point, Quick Reference, and the Cloud Quick Start Card (see Table 2)
1	EIO-03 under-seat mounting kit with required hardware and URL Card (see Table 3)
1	WS-EIO-02 silicone rubber kit (see Table 4)

## Table 2 Contents of the AP560i Box

Quantity	Item
1	AP560i Quick Reference
1	Cloud Quick Start Card
1	AP560i access point
1	Ground screw
2	Hex-head M6 screws

**Note:** The two hex-head M6 screws are not used during the AP560u installation.

Figure 1 AP560i access point



Label		Description	
А	GE1 port		
В	GE2 port		
С	Console port		

# Table 3 Contents of the EIO-03 Box

Quantity	Item	
1	URL Card	
1	Metal sloping bracket	
1	Sheet-metal heat spreading plate for the slope bracket	
2	Metal "L" brackets	
1	Plastic service panel base	
1	Plastic service panel top with one captive screw	
2	Blank conduit covers for the service panel base	
1	1" conduit cover	
1	3/4" conduit cover	
1	<ul> <li>Hardware bag containing:</li> <li>Ten 10 mm M6 screws with integral washer</li> <li>Four 75 mm service panel shoulder screws</li> <li>Four flat washers for anchors</li> <li>Four lock washers for anchors</li> <li>Four anchor posts</li> <li>Four anchor sleeves</li> <li>Anchor assembly instruction sheet</li> </ul>	

### Table 4 Contents of the WS-EIO-02 Box

Quantity	Item
2	Silicone rubber gaskets
2	Shoulder screws (security torx, T20 bit-size)
1	URL Card

Note: Use the WS-EIO-02 kit when you have concerns about dirt getting between the AP560i access point and the riser.

# Installing the EIO-03 under-seat mounting kit with the AP560i access point

- The EIO-03 under-seat mounting kit can be installed on a:
- Slope
- Flat surface such as stadium floor
- Riser, with WS-EIO-02 silicone rubber kit

**Note:** It is recommended to install the EIO-03 under-seat mounting kit horizontally. The EIO-03 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.

# Installing the EIO-03 under-seat mounting kit with the AP560i access point on a slope

The following hardware is required to install the EIO-03 under-seat mounting kit on a slope:

Table 5	Hardware requirements for slope installation
Quantity	/ Item
1	AP560i access point
10	10 mm M6 screws with integral washer
4	75 mm service panel shoulder screws
2	Anchor posts
2	Flat washers for anchors
2	Lock washers for anchors
1	Metal "L" bracket
1	Plastic service panel base
1	Plastic service panel top with one captive screw
1	Metal sloping bracket
1	Sheet-metal heat spreading plate for the slope bracket

### Installing the EIO-03 under-seat housing 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.
- 4 Align the sheet-metal heat spreading plate holes against the metal sloping bracket and attach it using four M6 screws, and torque the screws to 35 inlbs.

#### Figure 2 Metal sloping bracket



### Attaching the metal "L" bracket to the AP560i access point:

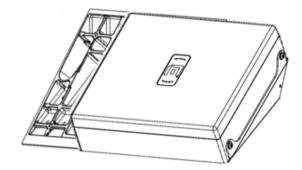
1 Attach the metal "L" bracket to the gland side of the AP560i access point using two M6 screws.

2 Torque the screws to 35 in-lbs.

### Installing the AP560i access point on the slope:

- Align the keyholes of the AP560i access point and the sheet-metal heat spreading bracket, and attach the access point to the bracket using two M6 screws.
- 2 Attach the gland side of the AP560i access point, that has the "L" bracket to the metal sloping bracket using two M6 screws.
- 3 Torque the screws to 35 in-lbs.

# Figure 3 AP560i slope installation with the metal sloping bracket



# Installing the EIO-03 under-seat mounting kit with the AP560i access point on a flat surface

The following hardware is required to install the EIO-03 under-seat mounting kit on a flat surface:

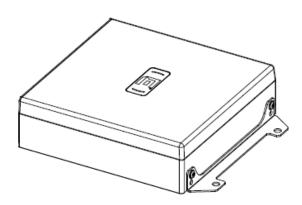
# Table 6 Hardware requirements for flat surface installation

Quantity	Item
1	AP560i access point
8	M6 screws with integral washer
4	75 mm service panel shoulder screws
2	Metal "L" bracket
1	Plastic service panel base
1	Plastic service panel top with one captive screw

1 Attach a metal "L" bracket on each side of the AP560i access point using two M6 screws for each bracket. Torque it to 35 in-lbs.

- 2 Use 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 4 AP560i flat surface installation with metal "L" brackets



# Connecting the GE1 or GE2 cable

The GE1 or GE2 cable can be connected through:

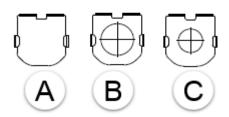
• The front or the rear hole on the side of the service panel base

The large conduit hole on the metal sloping bracket

The following hardware is required to attach the GE1 or GE2 cable through the rear hole of the service panel base:

- GE1 or GE2 cable
- One blank conduit cover to cover the front hole on the side of the service panel base
- One 1" or 3/4" conduit cover, depending on the circumference of the GE1 or GE2 cable
- Service panel base
- Service panel top

# Figure 5 Metal conduit covers

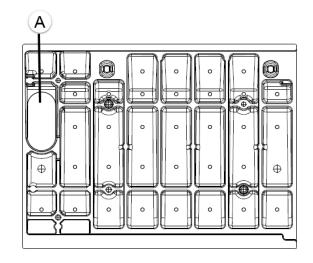


Label	Description
А	Blank conduit cover to cover the front hole on the side of the service panel base
В	1" conduit cover
С	3/4" conduit cover

- 1 Using the blank conduit cover, cover the front hole of the service panel
- 2 Attach either the 1" conduit cover or the 3/4" conduit cover to the rear hole of the service panel base.
- 3 Bring in the GE1 or GE2 cable, and the ground wire through the rear side hole of the service panel base.
- 4 Loosely align the service panel base next to the metal sloping bracket, thereby leaving enough space to attach the GE1 or GE2 cable to the access point
- Attach the ground wire to the AP560i access point.
- 6 Remove the gland cap, plastic cage, and the gasket from the GE1 port.
- 7 Connect the GE1 LAN cable through the GE1 gland port until it clicks into place in to the GE1 port.
- If there is a GE2 connection, insert the cable through the GE2 gland until it locks into place in to the GE2 port.
- 8 Torque the gland cap to 10-in lbs.
- 9 Fold and arrange the GE1 cable into the gap of the metal sloping bracket and the service panel base.

## Attaching the GE1 or GE2 cable using the large conduit hole on the metal sloping bracket

# Figure 6 Metal sloping bracket with the large conduit hole





The following hardware is required to attach the GE1 or GE2 cable through the large conduit hole on the metal sloping bracket:

- GE1 or GE2 cable
- Two blank conduit covers to cover the front and the rear holes on the side of the service panel base
- One 1" or 3/4" conduit cover, depending on the circumference of the GE1 or GF2 cable
- One metal sloping bracket



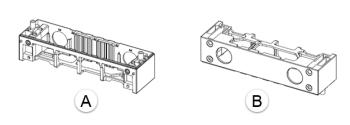
Note: The conduit cover used on the metal sloping bracket can extend above the concrete floor but, cannot extend above the slope.

- 1 Attach the metal sloping bracket to the concrete floor using two anchors, nuts, and washers (see "Installing the EIO-03 under-seat housing on a slope:" on page 1).
- 2 Attach the conduit to the metal sloping bracket,
  3 Bring in the GE1 or GE2 cable through the conduit hole.
- 4 Remove the gland cap, plastic cage, and the gasket from the GE1 port.
- 5 Connect the GE1 LAN cable through the GE1 gland port until it clicks into place in to the GE1 port.
- If there is a GE2 connection, insert the cable through the GE2 gland until it locks into place in to the GE2 port.
- 6 Torque the gland cap to 10-in lbs.
- 7 Fold and arrange the GE1 cable into the gap of the metal sloping bracket and the service panel base

# Installing the plastic service panels to the AP560i access point:

1 Attach the plastic service panel base to the AP560i access point using four, 75 mm service panel shoulder screws.

# Figure 7 Plastic service panel base



#### Label Description

- Plastic service panel base Δ
- В Side view of plastic service panel base
- Torque the screws to 13 in-lbs.
- Place the service panel top over the service panel base and lock it into place using the captive screw on the service panel top.

# Figure 8 Plastic service panel top



Laber	Description
А	Plastic service panel top captive screw

4 Tighten the captive screw to 4.5 in-lbs by hand.

# **Professional Installation Instruction**

# Installation personal

This product is designed for specific application and needs to be installed by a qualified personal 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 y lead to the violation of FCC/IC limit and is prohibited. Installation procedure

# Please refer to user's manual for the detail.



Warning: Please carefully 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.

# Instructions d'installation professionnelle

# 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. Antenn externe

Utiliser uniiquement les antennes approuvees par le fabricant. L'utilisation d'autres antennes peut conduire a un niveau de rayonnement essentiel ou non essentie 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

> violation de cette regle peut conduire a de serieuses penalites federales.

s'assurer que la puissance de sortie ne depasse pas les limites en vigueur. La



# **Regulatory and Compliance Information** Safety Guidelines

This section contains notices that are intended to protect your personal safety and prevent damage to the equipment. **Qualified Personnel:** 

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

# 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, 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 that to
- which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help.
  - 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 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.

> Warning: FCC Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an

uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

# **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):

- 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 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.

# **ExtremeMobility**<sup>™</sup> **Access Points**

# **Quick Reference**

AP560u-FCC

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