# ExtremeWireless™ AP3917i/e

## Installation Guide

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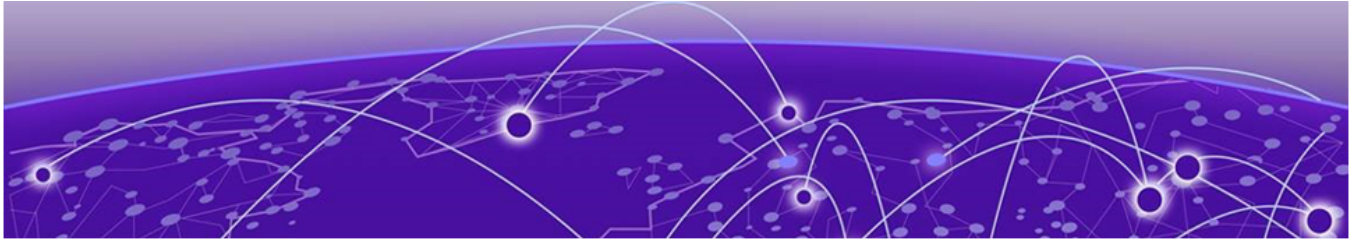

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# Preface

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 or SLX routers, the product is referred to as *the switch* or *the router*.

**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.<br>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

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# 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 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

Features on page 9
LED Indicators on page 11

The AP3917i/e is an IP67 rated outdoor Access Point with 802.11ac dual band 2:2 radios. The AP3917 is easy to install, lightweight, and is available in an internal (AP3917i) and external (AP3917e) antenna model. Each model includes 802.11 radios, an IoT radio, and a GPS radio. The antennas are built into the AP3917i while you need to install external antennas or terminators for the AP3917e model. In this document, the functionality, features, and the procedures apply to both the models when AP3917i/e is used.

**Note**
The AP3917i/e requires a minimum base firmware of 10.41.

## Features

The AP3917i/e model has the following features:

- Radios: 2 radios (2.4GHz and 5GHz); 1 IoT/BLE/802.15.4 Radio (2.4 GHz)
- Console Port: RJ45
- One RJ45, 10/100/1000 Mbps Ethernet Port (GE1) with PoE
- One RJ45 , 10/100/1000 Mbps Ethernet Port (GE2)
- IP67 Connectors on all ports
- LEDs: 4
- One Reset button
- Power: PoE 802.3af or 802.3at
- GPS Receiver (will be supported via a future firmware release)
- Antennas:
  - AP3917i - Five **internal** antennas (one BLE antenna).
  - AP3917e- Five **external** antennas (one BLE antenna)
- Temperature:

  -40 to +70°C without solar radiation

  -40 to +60°C with solar radiation
- Enclosure: Cast Aluminum base and outdoor rated PC cover

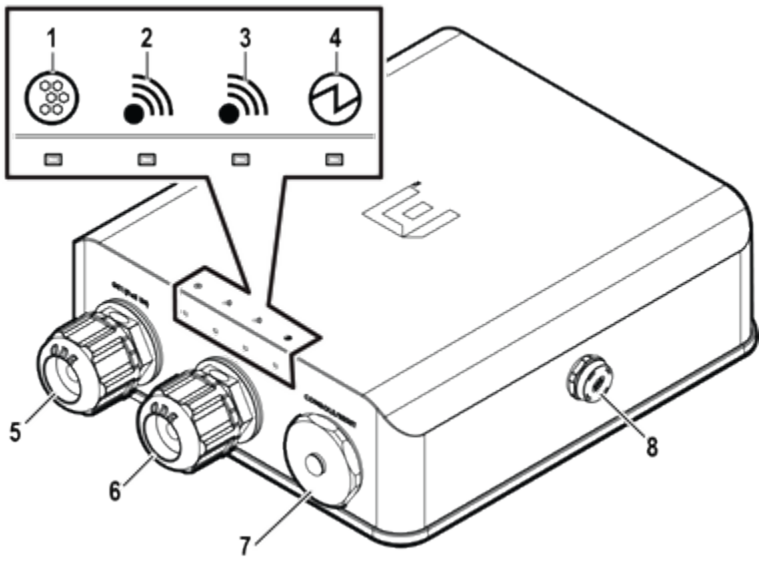


**Figure 1: Top and Side Views of AP3917i**

| | |
|---|---|
| 1 | IoT/BLE Radio |
| 2 | Radio - 5 GHz |
| 3 | Radio - 2.4 GHz |
| 4 | Status |
| 5 | GE1 (PoE IN) |
| 6 | GE2 |
| 7 | Console/Reset |
| 8 | Vent |

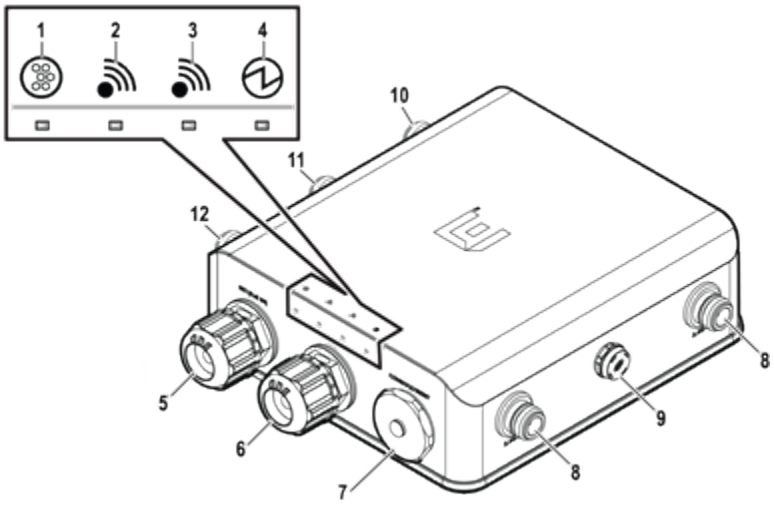


**Figure 2: Top and Side Views of AP3917e**

| | |
|---|---|
| 1 | IoT/BLE Radio |
| 2 | Radio - 5 GHz |
| 3 | Radio - 2.4 GHz |
| 4 | Status |
| 5 | GE1 (PoE IN) |
| 6 | GE2 |
| 7 | Console/Reset |
| 8 | 2.4 G - Antenna 1 and 2 |
| 9 | Vent |
| 10 | 5G - Antenna 2 |
| 11 | BLE/802.15.4 Antenna |
| 12 | 5 G - Antenna 1 |

## LED Indicators

Both the Radio LEDs will be Green when they are ON and the LEDs will not have any lights when they are OFF. Blue LED indicates the IoT status.

**Table 4: AP3917ie LEDs**

| Item | Status | Description |
|---|---|---|
| IoT Radio LED | Blue | Indicates IoT application is running |
| 2.4GHz Radio LED | Green | Indicates radio is enabled |
| 5 GHz Radio LED | Green | Indicates radio is enabled |

**Table 4: AP3917ie LEDs (continued)**

| Item | Status | Description |
|---|---|---|
| Status LED | Green | Indicates AP is working normally |
| | Amber | Indicates system failure |

# Hardware Mounting and Installation


Verifying the Box Contents on page 13
Positioning the AP for Installation on page 14
Mounting Brackets Usage on page 14
Mounting the AP3917i/e to a Wall or Solid Surface on page 15
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Installing External Antennas on page 24
Connecting the AP3917i/e to a Power Source on page 24
LAN/Console Connections on page 24
Professional Installation Instruction on page 27


This section describes guidelines for mounting and connecting the AP3917i/e easily and safely. The access point can be mounted to a wall, girder, ceiling, and pole using the appropriate bracket. The AP3917i/e mounting brackets are sold separately.

**Warning**
Only qualified personnel should perform installation procedures.

## Verifying the Box Contents

Verify the contents of the box and ensure that the following items are available:

**Table 5: Contents of the AP3917i/e Box**

| Quantity | Item |
|---|---|
| 1 | AP3917i/e Quick Reference Guide |
| 1 | Cloud Quick Start Card |
| 1 | AP3917i/e Access Point |
| The following hardware is included: | |
| 1 | M4 screw assembly with star washer |
| 1 | Ring terminal |

## Positioning the AP for Installation

Mount the AP so that the vent side is always down. Insert and crimp a ground wire to the provided terminal. You must provide a 3-inch drip loop on all cables. Use the M4 ground screw assembly, with the star washer, to attach the ground wire's ring terminal to the back of the AP. The wire should be as close to the AP bottom as possible. Tighten the screw to a torque of 13.0-13.5 in-lbs.

**Note**
Attach the ground wire to the AP before attaching any bracket.

**Note**
Do not remove the dust cap until you need to install the BLE/ IoT antennas.

## Mounting Brackets Usage

The AP3917i/e does not come with any mounting bracket. Hence, they need to be purchased separately. Refer the table below for information on mounting brackets used with the access point and it's specifications.

**Table 6: Mounting Brackets used with AP3917i/e**

| Mounting Bracket/ Accessory | Wall Install | Pole Install | Notes |
|---|---|---|---|
| WS-MBO-H01 (#30519); Bracket; Also known as the "H" mounting bracket | Yes | No | For installing the AP on a masonry wall, use a 5/16" diameter bit. For other materials, use the appropriate bit for the screws being used. |
| WS-MBO-POLE01 (#30520); Bracket; Also known as the Pole mounting bracket | No | Yes | If the pole diameter is <= 1" (25.4mm), use small cable clamp. If the pole diameter is between 5" - 7" (178mm), use large cable clamp. For any other pole diameter, provide your own stainless steel cable clamp. The band must be ½" (12.7mm) wide. |

**Table 6: Mounting Brackets used with AP3917i/e (continued)**

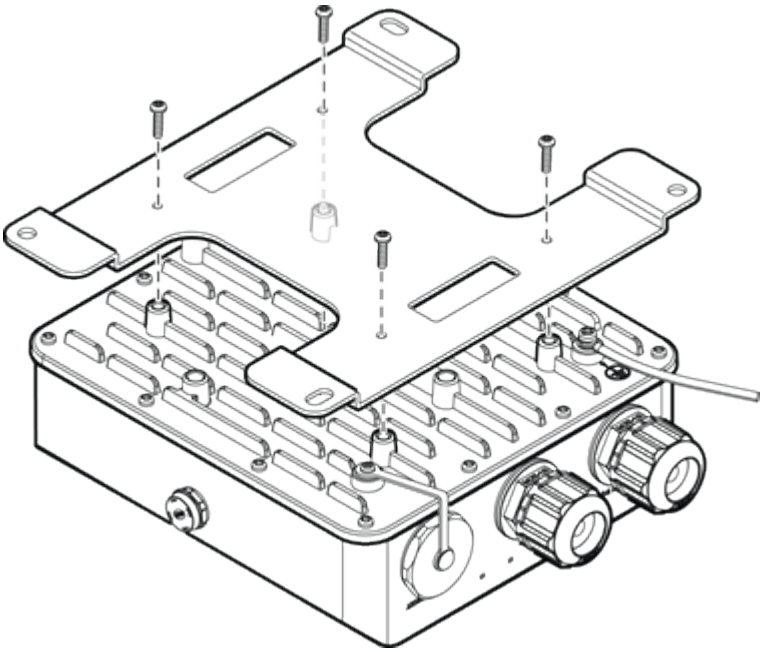
| Mounting Bracket/ Accessory | Wall Install | Pole Install | Notes |
|---|---|---|---|
| WS-MBO-ART01 (# 30514); 10" 2-Axis extension arm | Yes | Yes | The extension arm is used along with the H01 and POLE01 brackets for wall install and pole install respectively. The wall must be strong enough to support the AP during inclement weather. |
| KT-147407-01; Bracket; comes with three parts | Yes | Yes | For attaching to a wall or a flat surface, use the bracket part that has two holes on the surface of the metal portion. For attaching to a pole, if the 1-axis tilt is not required, attach the pole part of the bracket to the access point. If 1-axis tilt is required, attach the pole part of the KT-147407-01 bracket on top of the second wall part. |
| KT-150173-01; Bracket; used with KT-147407-01 bracket parts | Yes; use the flat wall mount part of KT-147407-01 bracket | Yes; use the pole bracket part of the KT-147407-01 bracket | The KT-150173-01 extension arm can also be used by itself without the other KT-147407-01 bracket parts. |

## Mounting the AP3917i/e to a Wall or Solid Surface

**Note**
The “H” type Mounting Bracket (WS-MBO-H01) is sold as a separate accessory (ordering part #30519).

1. Using the mounting bracket as a guide, mark the location for the mounting screws. The wall bracket provides eight attachment holes. Use four (one in each corner). Place the bracket and mark the four hole centers.
2. Drill four holes into the wall as follows:
   a. For installing the AP on a masonry wall, use a 5/16” diameter bit.
   b. For other materials, use the appropriate bit for the screws being used.

3. For masonry installations, drill at least 1/8” (3 mm) past the depth of the screw or bolt being used, and place four anchor assemblies into the holes.
4. Attach the AP to the “H” Bracket:



   a. Use four M4 screw assemblies to attach the AP to the “H” bracket on the side as shown.
   b. Tighten the four screws to a torque of 13.0-13.5 in-lbs.
5. Secure the anchors to the wall, then secure the bracket to the anchors. If you are attaching the bracket to anchors:
   a. Remove the nut and flat washer, if any from the threaded part of the anchors.
   b. Put the bracket over the threaded part of the anchors and up against the wall.
   c. Put a flat washer, then a split washer, and a hex nut on the exposed threaded part of the anchor.
   d. Torque it to about 60 in-lbs.

6. If using #10 screws, tighten them to a torque of 25 in-lbs. If using ¼" screws, tighten them to 45 in-lbs.

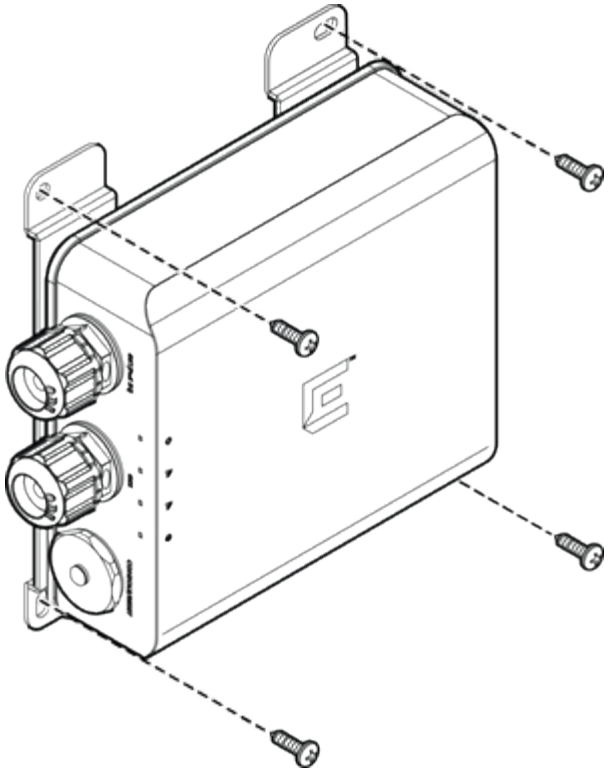


**Figure 3: AP3917i Wall Mount H Bracket**

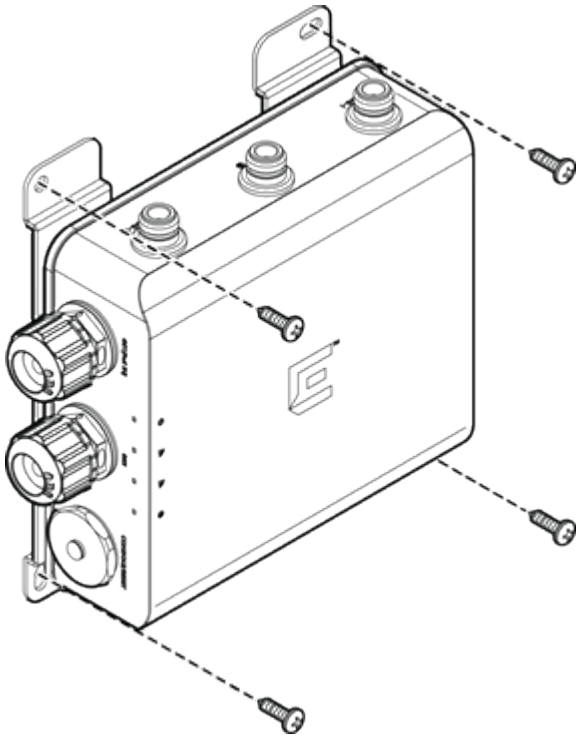


**Figure 4: AP3917e Wall Mount H Bracket**

7. Remove the black gland cap and the gasket under it. Then separate the gasket from its plastic cage.
8. Attach the gland parts to the LAN cables and insert the LAN cables into the mating connectors in the AP.

## Mounting the AP3917i/e to a Pole

**Note**
The Pole Mounting Bracket (WS-MBO-POLE01) is sold as a separate accessory (part number 30520).

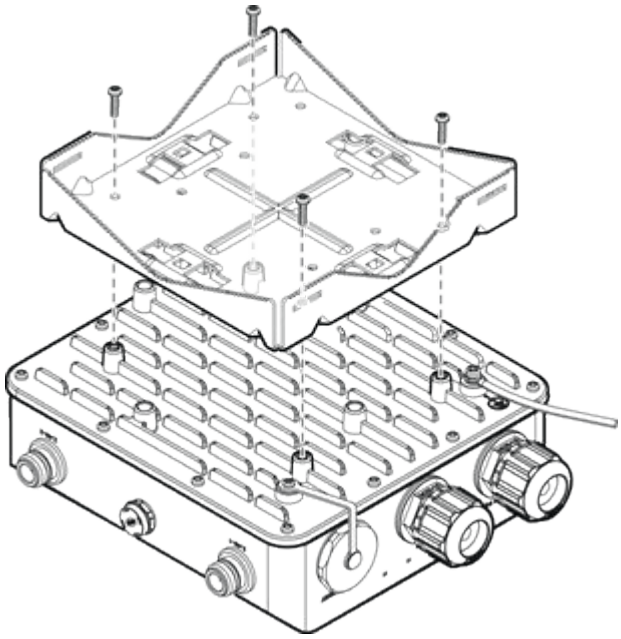
1. Determine the diameter of the pole.

| Pole Diameter | Cable Clamp Size |
|---|---|
| <= 1" (25.4mm) | Use small cable clamp |
| 5" - 7" (178mm) | Use large cable clamp |
| Other | Provide your own stainless steel cable clamp. The band must be ½" (12.7mm) wide |

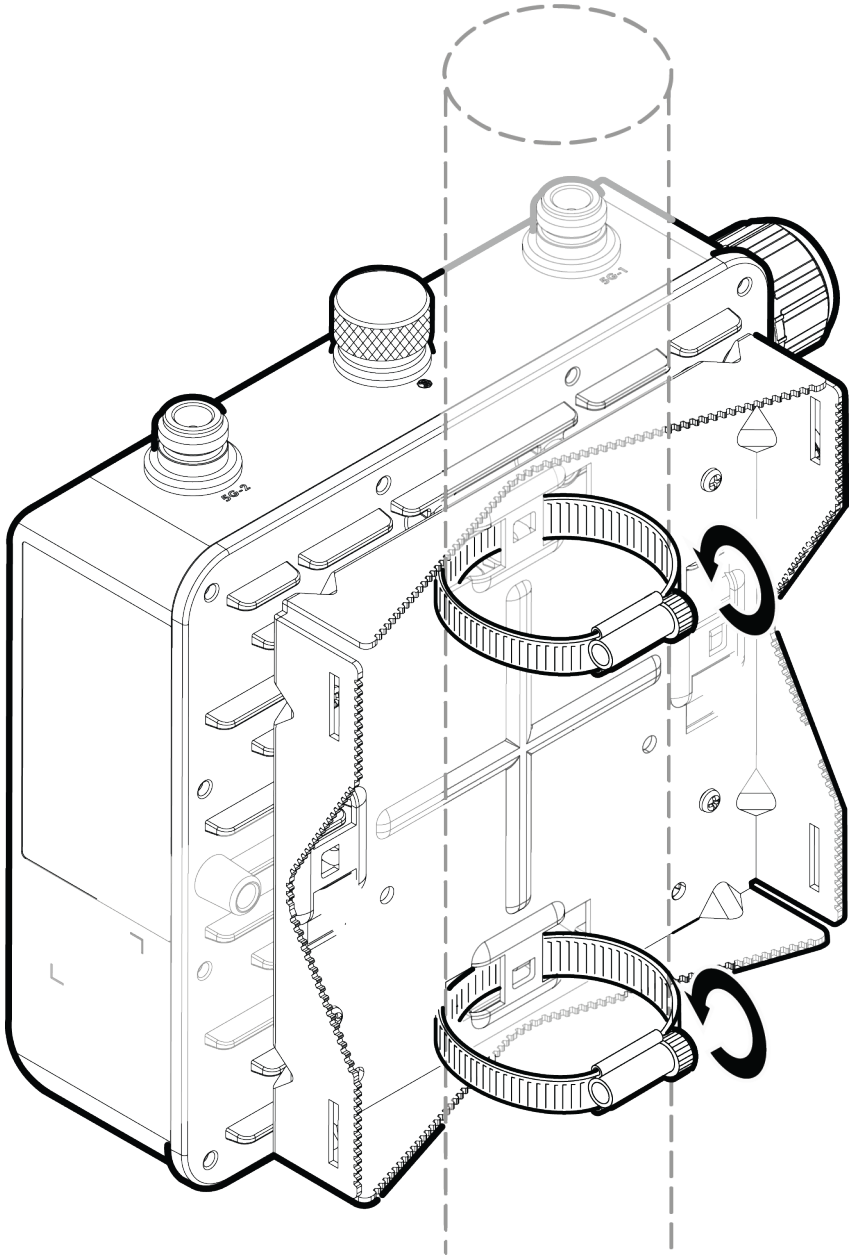
2. Attach the cable clamp to the pole bracket. Open the cable clamp by turning a flat bladed screwdriver counterclockwise. Then insert the non-clamp end into the pole bracket through the holes.

   **Note**
   It is easier to install both clamps before attaching to the pole or AP.

3. Attach the AP to the “Pole Mount” bracket using four M4 screws. Tighten the four screws to a torque of 13.0-13.5 in-lbs.



4. Put the metal band around the pole and insert it into the clamp. Turn the clamp screw clockwise, tightening the band around the pole.



5. Remove the black gland cap and the gasket under it. Then separate the gasket from its plastic cage.
6. Attach the gland parts to the LAN cables and insert the LAN cables into the mating connectors in the AP.

## Mounting the AP3917i/e Using Extension Arm

This section describes the procedure to mount the AP3917i/e to a wall or a pole using the 10" WS-MBO-ART01 2-Axis extension arm (part number 30514).

1. Attach the large bracket to the AP using four M4 screw assemblies. Torque them to 12 in-lbs.
2. Insert the two large locking screws into the metal bracket holes marked zero. On the threaded end add one flat washer, one split washer, and one hex nut. Turn the nut only a couple of turns on the threads.
3. If you are mounting the other end to a pole, insert the two desired cable clamps and then attach the small bracket end to the pole bracket using four M4 screws. Torque the screws to 12 in-lbs.

   **Important**
   The wall must be strong enough to support the AP during inclement weather.

4. Attach the cable clamps to the pole where desired. Torque the clamp screws to 15 in-lbs.
5. If mounting the other end to a wall, attach the small bracket end to the wall with four screws. Torque the screws to 15 in-lbs.
6. If the AP needs to be tilted up or down, remove the locking screw and tilt the AP to the desired angle. Re-insert the locking screw into the center hole in the black part of WS-MBO-ART01. Torque the locking screw and nut to 12 in-lbs.
7. If the AP needs to be turned sideways, remove the locking screw and tilt the AP to the desired angle. Re-insert the locking screw into the center hole in the black part of WS-MBO-ART01. Torque the locking screw and nut to 12 in-lbs.
8. Remove the black gland cap and the gasket under it. Then separate the gasket from its plastic cage.
9. Attach the gland parts to the LAN cables and insert the LAN cables into the mating connectors in the AP.

## Mounting the AP using the KT-147407-01 bracket to a flat surface

The KT-147407-01 bracket can be attached to a flat surface and a pole with 1-axis of tilt. The bracket has three parts:

- Flat part with two holes on the metal surface (used to attached the AP to a flat surface)
- 1-axis tilt bracket
- Boxed pole bracket part with step edges (used to attach the AP to a pole when 1-axis tilt is not required)

### Attaching the AP to a flat surface using the flat part of the bracket and 1-axis tilt bracket

1. Use four M6 screws to attach the flat part of the KT-147407-01 bracket. This is the bracket that has two holes on the surface of the metal portion.
2. Use the tilt bracket as a template and mark the location of the two mounting screws.
3. Use two screws to attach the tilt bracket to the mounting surface.

4. Use four M6 screws to attach the wall mounted part to the AP bracket. The AP bracket must be inside the wall mounted tilt bracket.
5. Adjust and tilt the AP to the desired angle. Tighten the four M6 screws to a torque of 45 in-lbs.

### Mounting the AP using the KT-147407-01 bracket to a pole

The AP can be mounted to a pole using the KT-147407-01 by either using the 1-axis tilt or by using just the pole bracket part of the KT-147407-01 bracket.

1. If 1-axis tilt is not required, attach the pole part of the KT-147407-01 bracket to the AP using four M6 screws in the semi-circular slots.
2. If 1-axis tilt is required, use four M6 screws, split washers, and hex nuts to attach the pole bracket to the 1-axis tilt bracket.

   Before attaching the pole bracket to the tilt bracket, ensure that you follow the steps mentioned in Attaching the AP to a flat surface using the flat part of the bracket and 1-axis tilt bracket to attach the other parts of the KT-147407-01 bracket.
3. Insert cable clamps that are ½" wide stainless steel through the long slots on the side of the pole bracket.
4. Locate the AP and bracket on the pole, insert the ends of the cable clamps, and tighten them to a torque of 11 in-lbs.

## Mounting the AP using the KT-150173-01 extension on the KT-147407-01 bracket

The KT-150173-01 is installed on top of the KT-147407-01. The KT-150173-01 is a 12-inch extension arm that can be used in combination with the KT-147407-01 bracket parts. You can also install one end of the KT-150173-01 extension arm to the AP and attach the other end to a flat surface.

Before attaching the KT-150173-01 extension arm to the KT-147407-01 bracket parts, ensure that the flat surface bracket parts are attached to the AP by following the steps in this procedure. To mount the KT-150173-01 extension arm on top of KT-147407-01 bracket parts:

1. Attach the flat bracket parts of the KT-147407-01 bracket to the AP.
2. Use one end of the KT-150173-01 bracket and mark and drill two hole centers on a flat surface.
3. Attach one end of the KT-150173-01 bracket to the flat surface part of the KT-147407-01 bracket using two screws, split washers, and hex nuts.
4. Attach other end of the KT-150173-01 extension arm using two M6 screws to a flat surface.

### Attaching the KT-150173-01 extension arm to a pole

1. Attach one end of the KT-150173-01 extension arm to the flat surface bracket parts of the KT-147407-01 bracket.

2. On the other end of the KT-150173-01 extension arm, place the pole part of the KT-147407-01 bracket and insert cable clamps that are ½" wide stainless steel through the long slots on the side of the pole bracket.
3. Locate the AP and bracket on the pole, insert the ends of the cable clamps, and tighten them to a torque of 11 in-lbs.

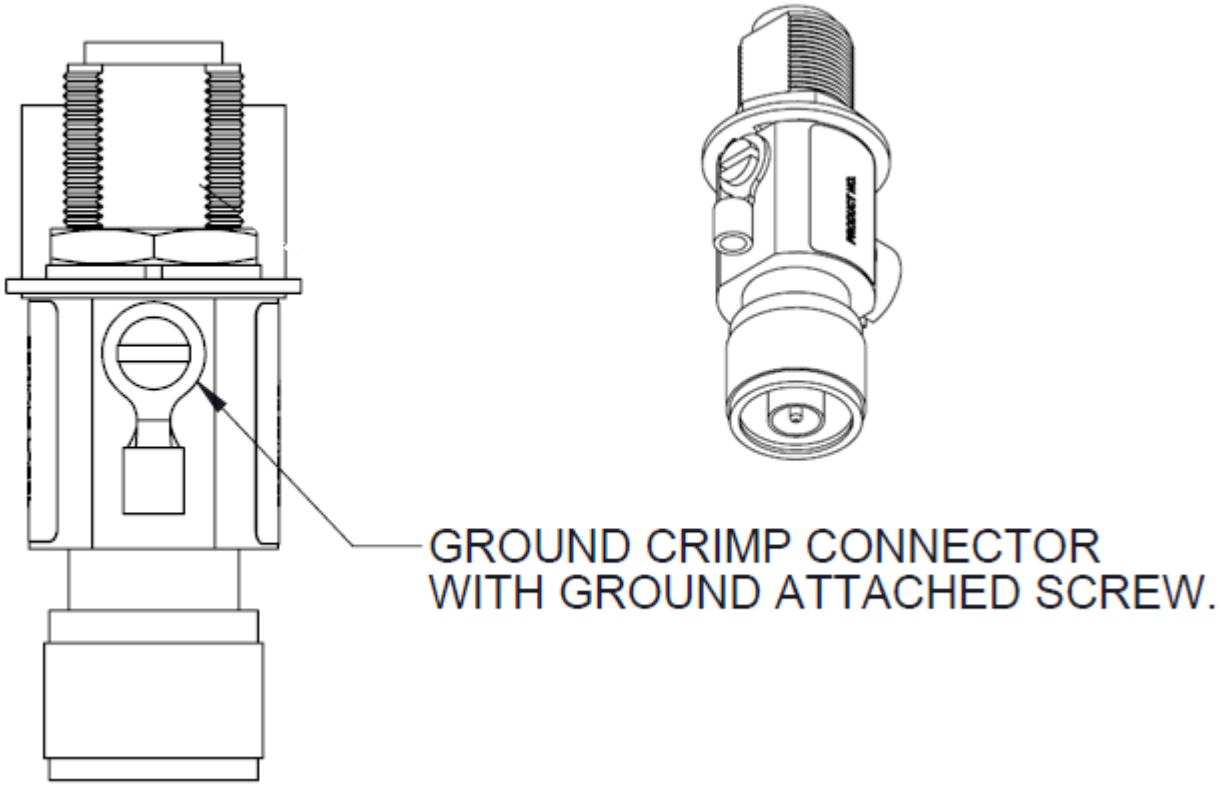
## Attaching the KT-150173-01 extension arm directly on to the AP

1. Using the KT-150173-01 bracket as a template, mark and drill hole centers on a flat surface for flat surface installation.
2. Place one end of the KT-150173-01 extension arm and attach it to the AP using four M6 panhead screws. Use the AP's threaded M6 holes.
3. Attach other end of the KT-150173-01 bracket to the flat surface.
4. If mounting on to a pole, after attaching the KT-150173-01 to the AP, place the pole part of the KT-147407-01 bracket on top of the KT-150173-01 extension arm, insert the ends of the cable clamps, and tighten them to a torque of 11 in-lbs.

## Installing External Antennas

1. Attach the external antenna cables to the Standard Polarity Type-N connectors on the AP3917e. All the antennas can be extended away from the AP using the optional cables.

**Note**
**Optional:**To protect your Type-N, Male-Female external antennas from lightning, use lightning protector ML-2452-LAK1-02R.




2. Place a terminator cap on any antenna connectors that will not be used.
3. When installing the AP, all antennas must be positioned vertically. If the AP is vertical, do not install the AP with the glands pointing upward. If the AP is horizontal, the recommended installation is with the glands located be closest to the ground. In both cases, we recommend that the antennas be extended vertically.

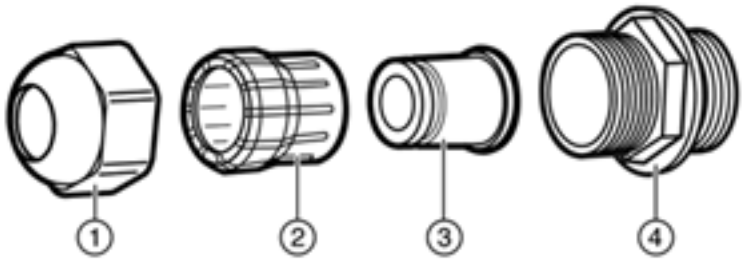
## Connecting the AP3917i/e to a Power Source

Power can be provided through the RJ45 Ethernet (GE1) port on the AP. The power LED on the front face of the AP illuminates when the device is connected to a power source.

## LAN/Console Connections

The AP3917i/e has one LAN (Ethernet) port and a Console port. Refer to Features on page 9 for the location of these ports. During administration and maintenance through

the LAN or Console, the AP must still have a power connection through an Ethernet PoE cable.

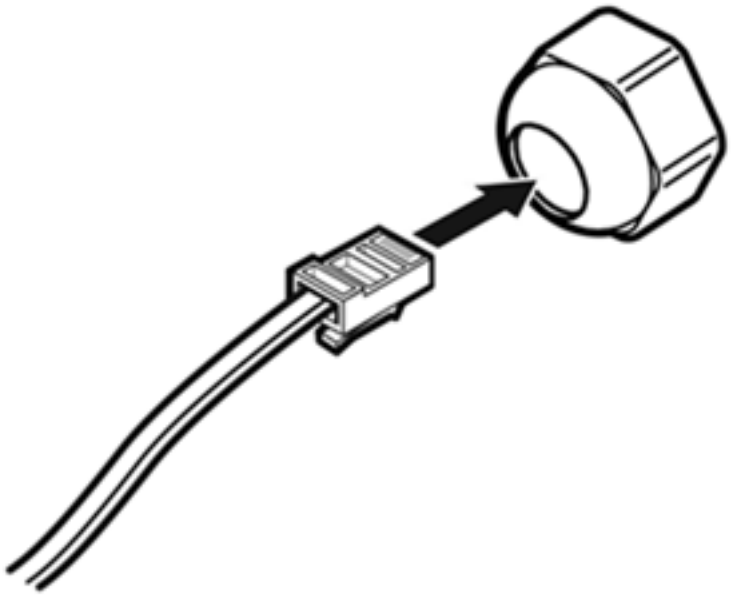



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | Sealing nut | 2 | Claw | 3 | Seal | 4 | Main body |

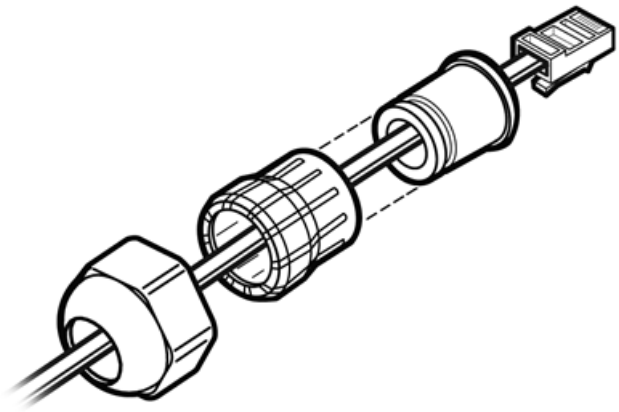
## Installing the Cable Gland Adapter Assembly

Install the cable gland adapter assembly onto LAN 1 or LAN 2 as follows:

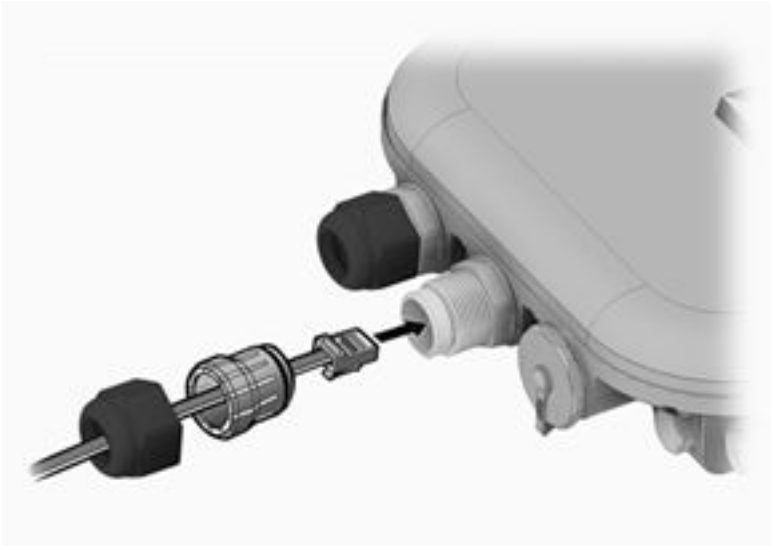
1. Insert the RJ45 cable onto the sealing nut (shown below).



2. Slide the claw and seal onto the RJ45 cable (shown below).

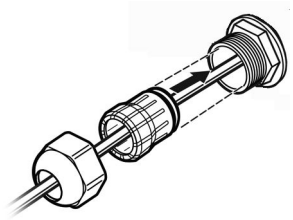


3. Plug the RJ45 cable into the port (shown below).

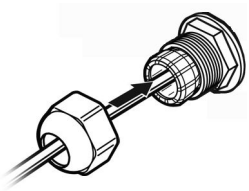


**Caution**
Do not run the network cable through the cable conduit connector used for connecting the power cables. You must connect the network cable and power cables through separate connectors.

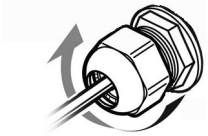
4. Slide the seal and claw into the main body (shown below).



5. Secure the seal nut onto the main body (shown below).



6. Tighten the assembly by hand. Tighten the cap to 5 inch-pounds (shown below).



**Note**
There should still be some visible threads after you torque in the cap.

## Professional Installation Instruction

### 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 20 cm for AP3917i and 35 cm for AP3917e (FCC) and 20 cm for AP3917i and 42 cm for AP3917e (ISED) 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 nonapproved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC/ISED 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 20 cm pour AP3917i et 35cm pour AP3917e (FCC) et 20 cm pour AP3917i et 42cm pour AP3917e (ISED) 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 essentiel depassant les niveaux limites definis par FCC/ISED, 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.

# Specifications

**Table 7: Specifications for the AP3917i**

| Item | Specification |
|---|---|
| AP Part Number: 31050 | WS-AP3917i-FCC |
| AP Part Number: 31051 | WS-AP3917i-ROW |
| Enclosure material | Cast aluminum base with outdoor rated plastic cover |
| Power source | Power is provided by Power-over-Ethernet 802.3af/at. |
| Antenna | Five internal single band locked antennas with one internal antenna that can operate as Bluetooth (BLE). |
| Uplink interface | Two 10/100/1000 Ethernet ports with PoE. |
| Radio configuration | Radio 1: 2x2:2 band locked to 2.4GHz<br>Radio 2: 2x2:2 band locked to 5 GHz |
| Operating temperature | -40°C to +70°C (-40°F to 158°F) without solar radiation<br>-40°C to +60°C (-40°F to 140°F) with solar radiation |
| Non-operating temperature (transportation/storage) | -40°C to +70°C (-58°F to 158°F) |
| Altitude (feet) | 6,000 feet |
| Relative humidity (% RH) | 0% to 95% (non-condensing) |
| ExtremeCloud™ enabled | Yes |

**Table 8: Specifications for the AP3917e**

| Item | Specification |
|---|---|
| AP Part Number: 31055 | WS-AP3917e-FCC |
| AP Part Number: 31056 | WS-AP3917e-ROW |
| Enclosure material | Cast aluminum base with outdoor rated plastic cover |
| Power source | Power is provided by Power-over-Ethernet 802.3af/at. |

**Table 8: Specifications for the AP3917e (continued)**

| Item | Specification |
|---|---|
| Antenna | Four external dual-band antennas with one Bluetooth (BLE) antenna. |
| Uplink interface | Two 10/100/1000 Ethernet ports. One port is powered by PoE. |
| Radio configuration | Radio 1: 2x2:2 band locked to 2.4GHz<br>Radio 2: 2x2:2 band locked to 5 GHz |
| Operating temperature | -40°C to +70°C (-40°F to 158°F) without solar radiation<br>-40°C to +60°C (-40°F to 140°F) with solar radiation |
| Non-operating temperature (transportation/storage) | -40°C to +70°C (-40°F to 158°F) |
| Altitude (feet) | 6,000 feet |
| Relative humidity (% RH) | 0% to 95% (non-condensing) |
| ExtremeCloud™ enabled | Yes |

# Regulatory Information

Safety Guidelines on page 31
FCC Declaration of Conformity Statement on page 31
FCC Radiation Exposure Statement on page 32
Industry Canada Notice on page 32
European Waste Electrical and Electronic Equipment (WEEE) Notice on page 35
Hazardous Substances on page 36
NCC Statements on page 36
Declaration of Conformity in Languages of the European Community on page 37

## 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.

## FCC Declaration of Conformity Statement

**Warning**
This device is restricted for indoor use.

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.

### 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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference .
- 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.

**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 of 23 cm between the radiator and your body.

## FCC Radiation Exposure Statement

**Warning**
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 for AP3917i and 35 cm for AP3917e between the radiator & your body.

## Industry Canada Notice

This device complies with ISED's licence-exempt RSSs. 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.

Le présent appareil est conforme aux CNR d' ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit

accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Caution

1. 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.
2. The maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate.
3. Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Caution
Avertissement:

1. 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.
2. le gain maximal d'antenne permis (pour les dispositifs utilisant la bande de 5725 à 5 850 MHz) doit être conforme à la limite de la p.i.r.e. spécifiée pour l'exploitation point à point et l'exploitation non point à point, selon le cas.
3. De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LANEL.

Warning
**IC Radiation Exposure Statement:** This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm for AP3917i and 42 cm for AP3917e between the radiator & your body.

Warning
**Déclaration d'exposition aux radiations:** Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm pour AP3917i et 42 cm pour AP3917e de distance entre la source de rayonnement et votre corps.

# 产品说明书附件
# Supplement to Product Instructions

| 部件名称 (Parts) | 有毒有害物质或元素 (Hazardous Substance) | | | | | |
|---|---|---|---|---|---|---|
| | 铅 (Pb) | 汞 (Hg) | 镉 (Cd) | 六价铬 ($Cr^{6+}$) | 多溴联苯 (PBB) | 多溴二苯醚 (PBDE) |
| 金属部件 (Metal Parts) | × | ○ | ○ | × | ○ | ○ |
| 电路模块 (Circuit Modules) | × | ○ | ○ | × | ○ | ○ |
| 电缆及电缆组件 (Cables & Cable Assemblies) | × | ○ | ○ | × | ○ | ○ |
| 塑料和聚合物部件 (Plastic and Polymeric parts) | ○ | ○ | ○ | ○ | ○ | × |
| 电路开关 (Circuit Breakers) | ○ | ○ | × | × | ○ | ○ |

○: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。
Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJ/T 11363-2006 standard.

×: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006 标准规定的限量要求。
Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts is above the relevant threshold of the SJ/T 11363-2006 standard.

对销售之日的所售产品, 本表显示,
凯创供应链的电子信息产品可能包含这些物质。注意:在所售产品中可能会也可能不会含有所有所列的部件。
This table shows where these substances may be found in the supply chain of Extreme electronic information products, as of the date of sale of the enclosed product. Note that some of the component types listed above may or may not be a part of the enclosed product.

除非另外特别的标注, 此标志为针对所涉及产品的环保使用期标志. 某些零部件会有一个不同的环保使用期(例如, 电池单元模块)贴在其产品上.
此环保使用期限只适用于产品是在产品手册中所规定的条件下工作.
The Environmentally Friendly Use Period (EFUP) for all enclosed products and their parts are per the symbol shown here, unless otherwise marked. Certain parts may have a different EFUP (for example, battery modules) and so are marked to reflect such. The Environmentally Friendly Use Period is valid only when the product is operated under the conditions defined in the product manual.

This radio transmitter (IC: 4141B-AP3917E/ Model: AP3917e) has been approved by ISED to operate with the antenna type listed below with maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (IC: 4141B-AP3917E/ Model: AP3917e) a été approuvé par ISED pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain

est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

| Item | Function | Antenna Type | Part No | Connector | Gain (dBi) | | |
|---|---|---|---|---|---|---|---|
| | | | | | 2.4G | 4.9G | 5G |
| 1 | WLAN | Dipole | ML-2452-HPAG5A8-01 | N Male | 5 | 7.5 | 8 |
| 2 | WLAN | Dipole | ML-2452-HPAG4A6-01 | N Male | 4 | | 7.3 |
| 3 | WLAN | Dipole | ML-2452-HPA6X6-036 | N Male | 4 | | 6 |
| 4 | WLAN | Dipole | WS-AO-DQ04360N | 4 N Male | 5.5 | | 6 |
| 5 | WLAN | Dipole | ML-2499-HPA4-01 | N Male | 4.5 | | |
| 6 | WLAN | Dipole | ML-2452-HPA6-01 | N Male | 5.3 | 4.6 | 6.1 |
| 7 | WLAN | Dipole | ML-5299-HPA5-01 | N Male | | | 5.6 |
| 8 | WLAN & BT LE & Zigbee | Dipole | ML-2499-HPA8-01 | N Male | 8 | | |
| 9 | WLAN | Dipole | ML-2499-FHPA5-01R | N Male | 7.7 | | |
| 10 | WLAN | Dipole | ML-5299-FHPA6-01R | N Male | | 8.25 | 8.25 |
| 11 | WLAN | Panel | ML-2452-PNA5-01R | N Male | 4.5 | 5 | 5~4.5 MAX:5 |
| 12 | WLAN & BT LE & Zigbee | Panel | ML-2452-PNA7-01R | N Male | 7.8 | 7 | 10.7~7 MAX:10.7 |
| 13 | WLAN | Polarized Panel | ML-2452-PNL6M4-N36 | 4 N Male | 5.6 | 6.7 | 6.7 |
| 14 | WLAN | Polarized Panel | ML-2452-SEC6M4-N36 | 4 N Male | 6.92 | | 7.23 |
| 15 | WLAN | Polarized Panel | ML-2452-SEC6M4-N30 | 4 N Male | 5.5 | | 6 |
| 16 | WLAN | Polarized Panel | ML-2452-PNL9M3-N36 | N Male | 11 | 7.3 | 10.7 |

4.9G Antenna for Item 6 and Item 11 will be secondary primary permanent fixed operations use only.

## 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.

For information about the available collection system, please contact Extreme Environmental Compliance at Green@extremenetworks.com.

## Hazardous Substances

This product complies with the requirements of Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

## NCC Statements

**NCC Statement**

低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，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。

第十四條 低功率射頻電機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。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機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。

- 「電磁波曝露量MPE標準值1mW/cm²，送測產品實測值為0.359mW/cm²」
- 使用此產品時應避免影響附近雷達系統之操作。
- 隱私權警語標示：「為維護隱私權，請妥適使用」。
- 本器材須經專業工程人員安裝及設定，始得設置使用，且不得直接販售給一般消費者。

**NCC Statement**

低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，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。

第十四條 低功率射頻電機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。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機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。

- 「電磁波曝露量MPE標準值1mW/cm², 本產品使用時建議應距離人體 35cm」
- 此器材須經專業安裝並限用於固定式點對點操作。
- 高增益指向性天線只得應用於固定式點對點系統。
- 使用此產品時應避免影響附近雷達系統之操作。
- 本器材須經專業工程人員安裝及設定，始得設置使用，且不得直接販售給一般消費者。
- 隱私權警語標示：「為維護隱私權，請妥適使用」。

## Declaration of Conformity in Languages of the European Community

The full text of the EU declaration of conformity is available at the following Internet address: http://www.extremenetworks.com/

**Note**
Changes or modifications made to this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### English

Hereby, Extreme Networks, Inc. declares that the radio equipment type Wireless LAN Access Point is in compliance with Directive 1999/5/EC.

### Finnish

Valmistaja Extreme Networks vakuuttaa täten että Radio LAN device tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

### Dutch

Hierbij verklaart Extreme Networks dat het toestel Radio LAN device in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG. Bij deze verklaart Extreme Networks dat deze Radio LAN device voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.

### French

Par la présente Extreme Networks déclare que l'appareil Radio LAN device est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/ CE. Par la présente, Extreme Networks déclare que ce Radio LAN device est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables.

### Swedish

Härmed intygar Extreme Networks att denna Radio LAN device står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

### Danish

Undertegnede Extreme Networks erklærer herved, at følgende udstyr Radio LAN device overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.

### German

Hiermit erklärt Extreme Networks die Übereinstimmung des "WLAN Wireless Controller bzw. Access Points" mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG.

### Greek

ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Extreme Networks ΔΗΛΩΝΕΙ ΟΤΙ Radio LAN device ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.

### Icelandic

Extreme Networks lysir her med yfir að thessi bunadur, Radio LAN device, uppfyllir allar grunnkrofur, sem gerdar eru i R&TTE tilskipun ESB nr 1999/5/EC.

### Italian

Con la presente Extreme Networks dichiara che questo Radio LAN device è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

### Spanish

Por medio de la presente Extreme Networks declara que el Radio LAN device cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.

### Portuguese

Extreme Networks declara que este Radio LAN device está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

### Malti

Hawnhekk, Extreme Networks, jiddikjara li dan Radio LAN device jikkonforma mal-htigijiet essenzjali u ma provvedimenti ohrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.

## New Member States Requirements of Declaration of Conformity

### Estonian

Käesolevaga kinnitab Extreme Networks seadme Radio LAN device vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.

### Hungarian

Alulírott, Extreme Networks nyilatkozom, hogy a Radio LAN device megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.

### Slovak

Extreme Networks týmto vyhlasuje, že Radio LAN device spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.

### Czech

Extreme Networks tímto prohlašuje, že tento Radio LAN device je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES."

### Slovenian

Šiuo Extreme Networks deklaruoja, kad šis Radio LAN device atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.

### Latvian

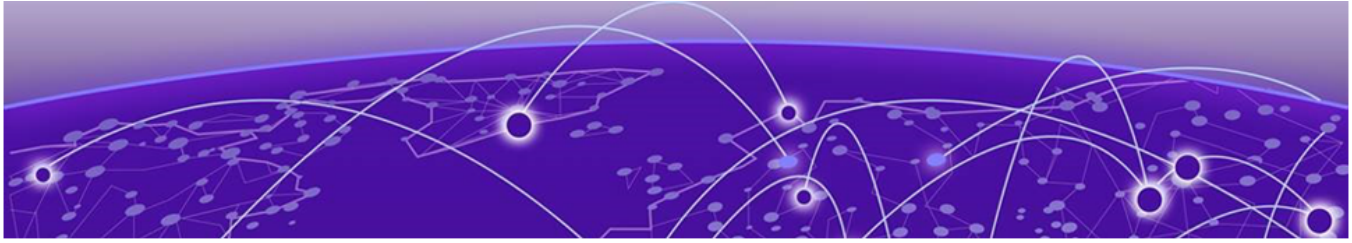
Ar šo Extreme Networks deklarē, ka Radio LAN device atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem

### Lithuanian

Extreme Networks deklaruoja, kad Radio LAN device atitinka 1999/5/EC Direktyvos esminius reikalavimus ir kitas nuostatas".

### Polish

Niniejszym, Extreme Networks, deklaruję, że Radio LAN device spełnia wymagania zasadnicze oraz stosowne postanowienia zawarte Dyrektywie 1999/5/EC.



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