

ExtremeWireless™ WiNG AP7662i/AP7662 Access Point Installation Guide



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For product documentation online, visit: <https://www.extremenetworks.com/documentation/>

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Preface

Text Conventions

The following tables list text conventions that are used throughout this guide.

Table 1: Notice Icons






Icon	Notice Type	Alerts you to...
	General Notice	Helpful tips and notices for using the product.
	Note	Important features or instructions.
	Caution	Risk of personal injury, system damage, or loss of data.
	Warning	Risk of severe personal injury.
	New	This command or section is new for this release.

Table 2: Text Conventions

Convention	Description
Screen displays	This typeface indicates command syntax, or represents information as it appears 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 with brackets, such as [Return] 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]
<i>Words in italicized type</i>	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.

Platform-Dependent Conventions

Unless otherwise noted, all information applies to all platforms supported by ExtremeXOS® software, which are the following:

- ExtremeSwitching® switches
- Summit® switches
- SummitStack™

When a feature or feature implementation applies to specific platforms, the specific platform is noted in the heading for the section describing that implementation in the ExtremeXOS command documentation (see the Extreme Documentation page at <http://documentation.extremenetworks.com>). In many cases, although the command is available on all platforms, each platform uses specific keywords. These keywords specific to each platform are shown in the Syntax Description and discussed in the Usage Guidelines sections.

Providing Feedback to Us

We are always striving to improve our documentation and help you work better, so we want to hear from you! We welcome all feedback but especially want to know about:

- Content errors or confusing or conflicting information.
- Ideas for improvements to our documentation so you can find the information you need faster.
- Broken links or usability issues.

If you would like to provide feedback to the Extreme Networks Information Development team about this document, please contact us using our short [online feedback form](#). You can also email us directly at internalinfodev@extremenetworks.com.

Getting Help

If you require assistance, contact Extreme Networks using one of the following methods:

- **GTAC (Global Technical Assistance Center) for Immediate Support**
 - **Phone:** 1-800-998-2408 (toll-free in U.S. and Canada) or +1 408-579-2826. For the support phone number in your country, visit: www.extremenetworks.com/support/contact
 - **Email:** support@extremenetworks.com. To expedite your message, enter the product name or model number in the subject line.
- **Extreme Portal** — Search the GTAC knowledgebase, manage support cases and service contracts, download software, and obtain product licensing, training, and certifications.
- **The Hub** — A forum for Extreme 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.

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number and/or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any action(s) 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

Extreme Networks Documentation

To find Extreme Networks product guides, visit our documentation pages at:

Current Product Documentation	www.extremenetworks.com/documentation/
Archived Documentation (for earlier versions and legacy products)	www.extremenetworks.com/support/documentation-archives/
Release Notes	www.extremenetworks.com/support/release-notes

Open Source Declarations

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1 Overview

Features LED Indicators

The AP7662 is an IP67 rated outdoor Access Point with 802.11ac dual band 2:2 radios. The AP7662 is easy to install, lightweight, and is available in an internal (AP7662i) and external (AP7662) antenna model. Each model includes 802.11 radios, an IoT radio, and a GPS radio. The AP7662 model comes in two models: AP7662i (internal antenna) and AP7662 (external antenna). In this document, the functionality, feature, and the procedure applies to both the models when AP7662i/AP7662 is used.



Note

The AP7662i/AP7662 requires a minimum base firmware of WiNG 5.9.1.

Features

The AP7662i/7662 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 Ethernet Port (GE1) with PoE
- One RJ45, 10/100/1000Mb Ethernet port (GE2)
- IP67 Connectors on all ports
- LEDs: 4 (see Figure 1)
- One Reset button
- Power: PoE 802.3af or 802.3at
- GPS Receiver (will be supported via a future firmware release)
- Antennas:
 - AP7662i - Five internal antennas (four band locked antennas and one BLE antenna)
 - AP7662- Five external antennas (four single band antennas and one BLE antenna)
- Temperature:
 - 40 to +65°C without solar radiation
 - 40 to +55°C with solar radiation
- Enclosure: Cast Aluminum base and Top

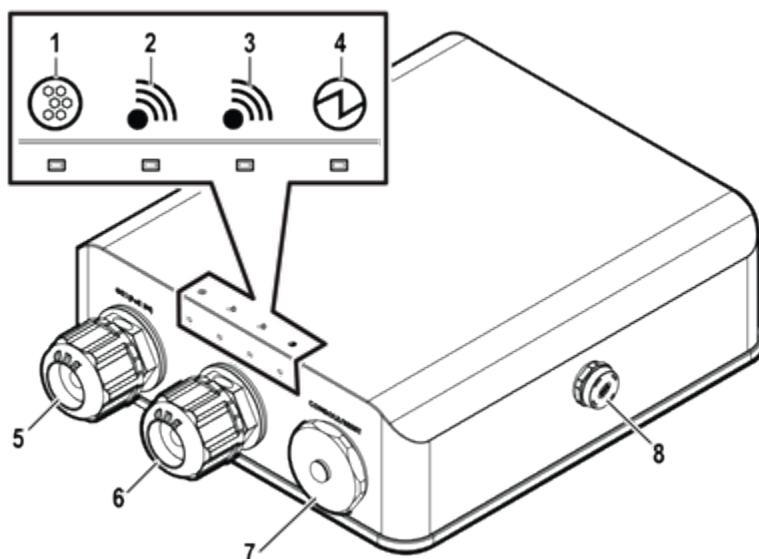


Figure 1: Top and Side Views of AP7662i

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

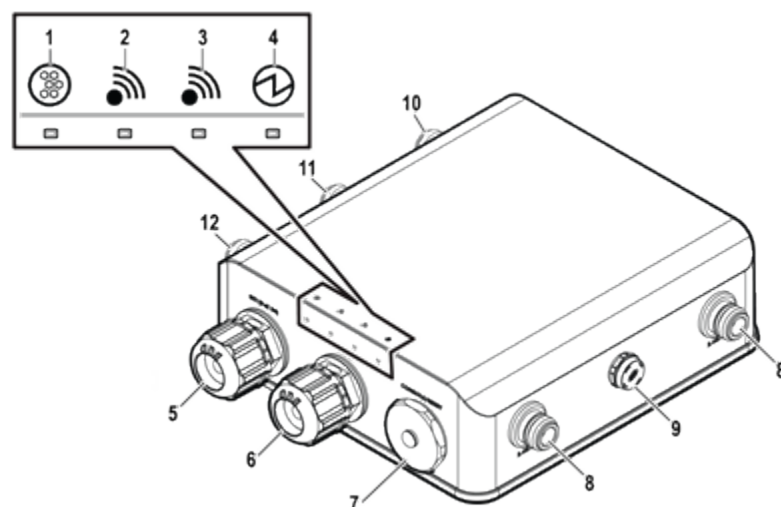


Figure 2: Top and Side Views of AP7662

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

LED Indicators

Green LEDs indicate 2G Wi-Fi Radio, Amber LEDs indicate 5.2G Wi-Fi Radio, and Blue LED indicates the IoT Radio. The Status LED is ON only during diagnostics.

Table 3: AP7662ie 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	Amber	Indicates radio is enabled
Status LED	Green	Indicates AP is working normally
	Amber	Indicates system failure

2 Hardware Mounting and Installation

Verifying the Box Contents
Positioning the AP for Installation
Mounting the AP7662i/AP7662 to a Wall
Mounting the AP7662i/AP7662 to a Pole
Mounting the AP7662i/AP7662 Using Extension Arm
Installing External Antennas
Connecting a Power Supply to the AP7662i/AP7662
LAN/Console Connections
Professional Installation Instructions

Use these instructions as guidelines for mounting and connecting the AP7662i/AP7662 easily and safely. The AP7662i/7662 mounting brackets are sold separately.



Warning

Only qualified personnel should perform installation procedures.



Note

For installation videos of the AP, see www.extremenetworks.com/support/

Verifying the Box Contents

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

Table 4: Contents of the AP7662i/AP7662 Box

Quantity	Item
1	AP7662i/AP7662 Quick Reference Guide
1	Cloud Quick Start Card
1	AP7662i/AP7662 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 glands are on the side of the AP closest to the ground, and not above the plastic cover. You must provide a 3-inch drip loop on all cables.

**Note**

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

Attach the Gound Wire

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 inlbs.

**Note**

Attach the H bracket after attaching the ground wire onto the AP. Tighten the torque, tighten the screws, and attach the LAN cable.

Mounting the AP7662i/AP7662 to a Wall

**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 drill for the screws being used.
- 3 For masonry installations, drill at least 1/8" (3mm) 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:

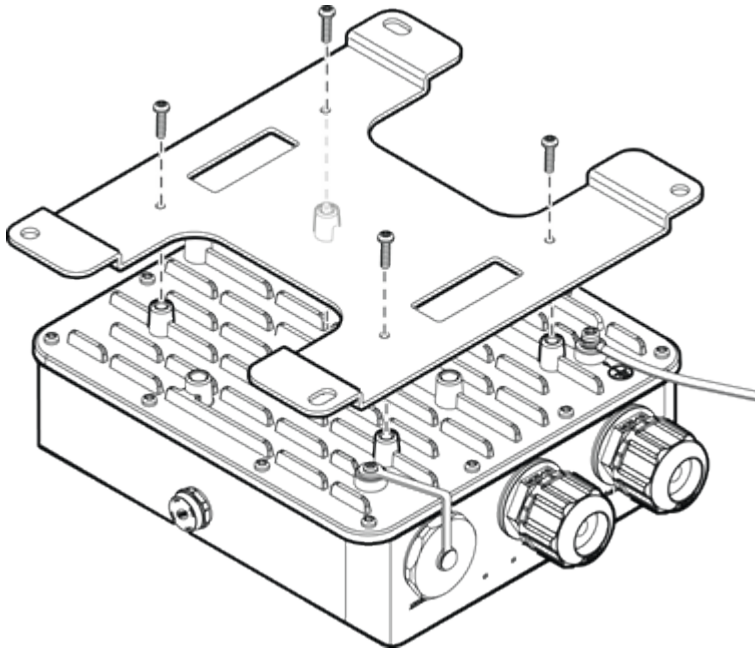


Figure 3: Attaching the H Bracket to the AP

- a Use 4 M4 screw assemblies to attach the AP to the “H” bracket on the side that does not have the PEM stand-offs.
 - 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.

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

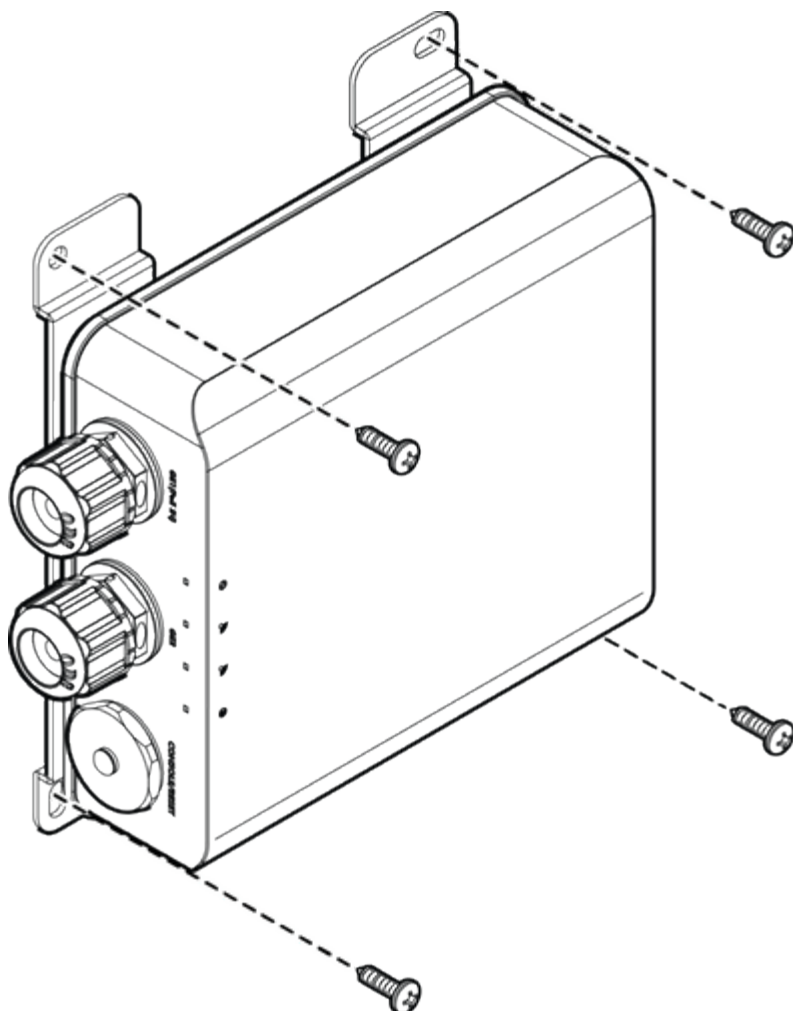


Figure 4: AP7662i Wall Mount H Bracket

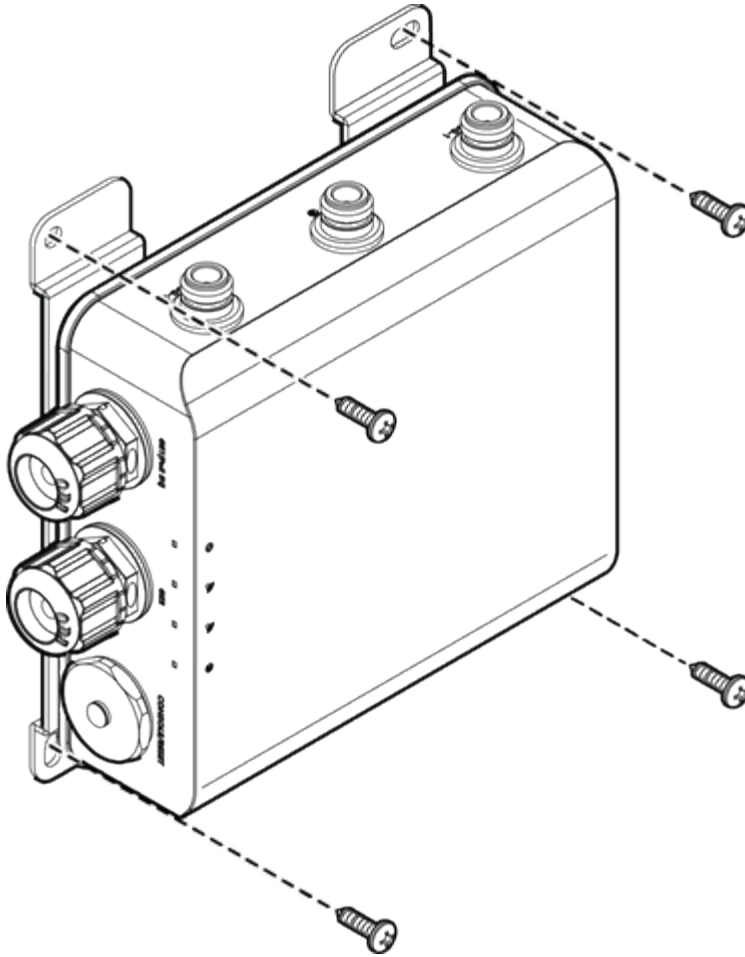


Figure 5: AP7662 Wall Mount H Bracket

Mounting the AP7662i/AP7662 to a Pole



Note

The Pole Mounting Bracket (WS-MBO-POLE01) is sold as a separate accessory (ordering part #30520).

- 1 Determine the diameter of the pole.

Pole Diameter	Cable Clamp Size
$\leq 2.5"$ (63.5mm)	Use small cable clamp
5" - 7" (127mm)	Use large cable clamp
Other	Provide your own stainless steel cable clamp. The band must be $\frac{1}{2}"$ (12.7mm) wide

- 2 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.

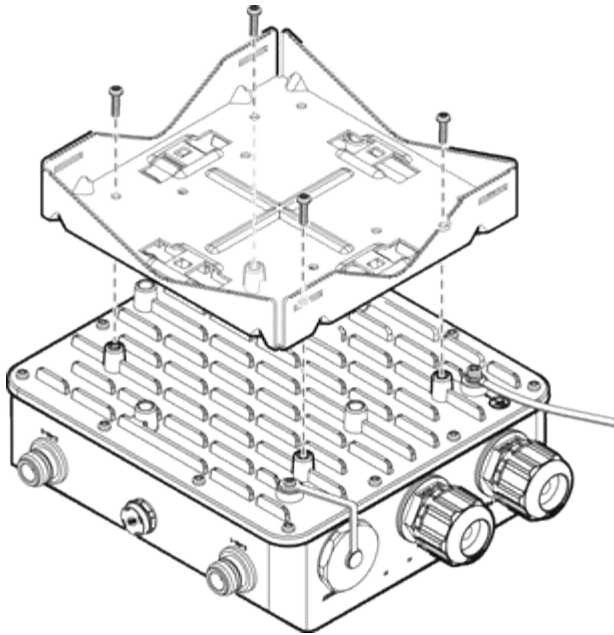


Figure 6: Attaching a Pole Bracket to the AP

- 3 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.

- 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.

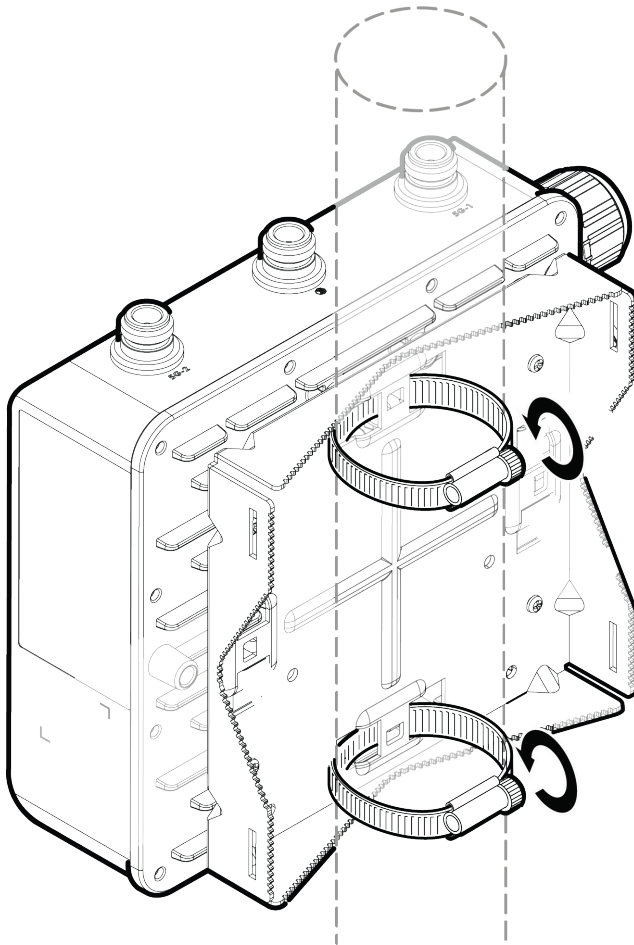


Figure 7: AP with Mounting Bracket - Vertical Pole

Mounting the AP7662i/AP7662 Using Extension Arm

This section describes the procedure to mount the AP7662i/AP7662 to a wall or a pole using the 10" WS-MBO-ART01 2-Axis extension arm (ordering part #30514).

- 1 Attach the small bracket on the WS-MBO-ART01 to the pole bracket or the wall with four M4 screws, verifying that the AP orientation will be upright before you tighten the brackets screws. Torque the screws to 12 in-lbs.



Important

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

- 2 Insert two cable/pipe clamps into the pole bracket. Attach the clamps to the pole where desired. Torque the clamp screws to 12 in-lbs.
- 3 If the AP needs to be tilted up or down, remove the screw and tilt the AP to the desired angle. Re-insert the screw into the center hole in the black part of WS-MBO-ART01. Torque the screw and nut to 12 in-lbs.

- 4 If the AP needs to be turned sideways, remove the screw and tilt the AP to the desired angle. Re-insert the screw into the center hole in the black part of WS-MBO-ART01. Torque the screw and nut to 12 in-lbs.
- 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.

Installing External Antennas

- 1 Attach the external antenna cables to the Standard Polarity Type-N connectors on the AP-7662i/e. All the antennas can be extended away from the AP using the optional cables.
- 2 Place a terminator cap on any antenna connectors that will not be used.
- 3 Do not install the AP with the antennas pointing upward. If the AP is vertical, the recommended installation is with the glands pointing down. 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 horizontally.

Connecting a Power Supply to the AP7662i/AP7662

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.

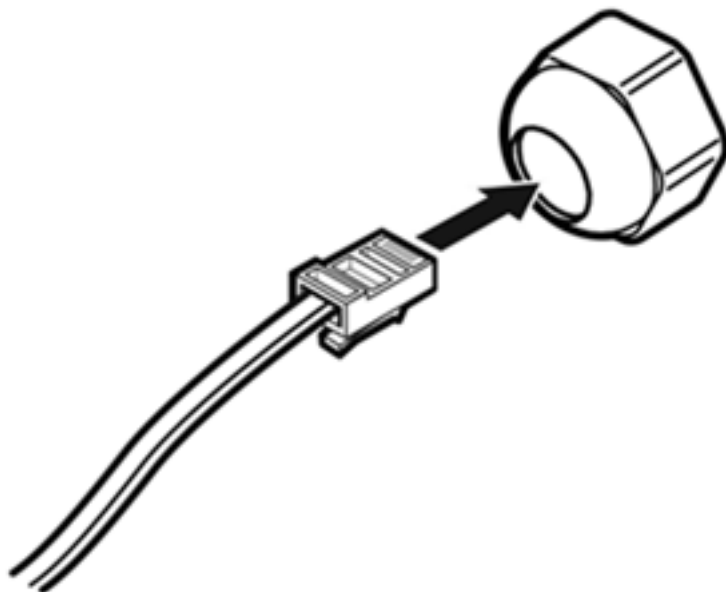
LAN/Console Connections

The AP7662i/AP7662 has one LAN (Ethernet) port and a Console port. Refer to [Features](#) for the location of these ports. During administration and maintenance through the LAN or Console, the AP must still have a power connection through either an Ethernet PoE cable or a DC power supply.

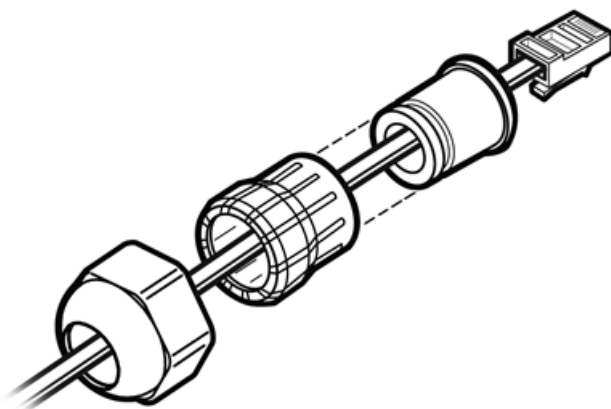
Installing the Cable Gland Adapter Assembly

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

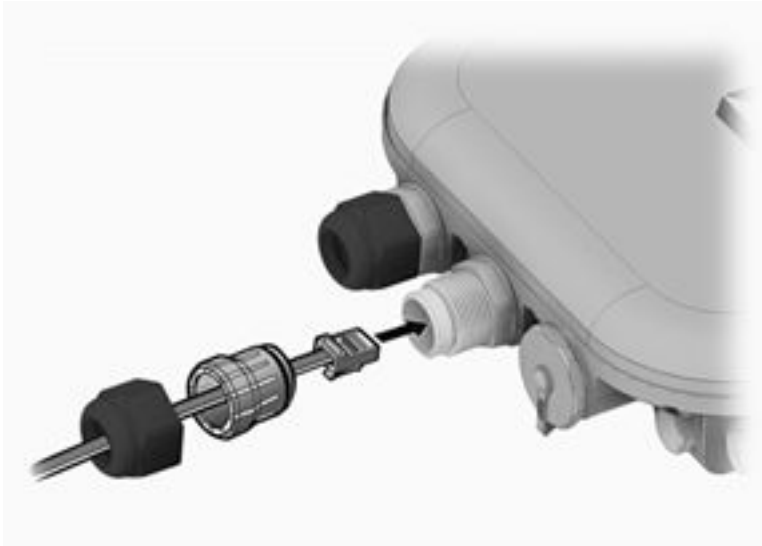
- 1 Insert the RJ45 cable onto the sealing nut (shown below).



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

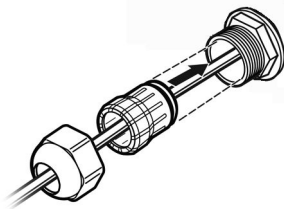


- 3 Plug the RJ45 cable into the port (shown below).

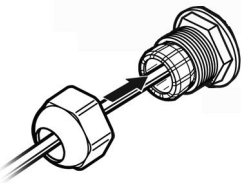
**Caution**

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.

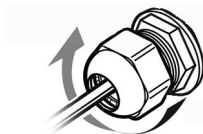
- 4 Slide the seal and claw into the main body (shown below).



- 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 Instructions

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 AP7662i and 35 cm for AP7662 (FCC) and 20 cm for AP7662i and 42 cm for AP7662 (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 ISED limit and is prohibited.

Installation Procedure

Please refer to the 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 20cm pour AP7662i et 35 cm pour AP7662 (FCC) et 20 cm pour AP7662i et 42 cm pour AP7662 (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 dépasse pas les limites en vigueur. La violation de cette règle peut conduire à de sérieuses pénalités fédérales.

3 Specifications

Table 5: Part Number/Ordering Specifications for AP7662

Item	Specification
AP Part Number: 37121	AP-7662-680B30-US
AP Part Number: 37122	AP-7662-680B30-WR
AP Part Number: 37123	AP-7662-680B40-US
AP Part Number: 37124	AP-7662-680B40-WR

Table 6: Physical Characteristics AP7662

Item	Specification
Dimensions	AP7662i - 8.6" x 7.1" x 2.7" - 218 mm x 180 mm x 69mm AP7662 - 8.6" x 7.8" x 2.7" - 218 mm x 198 mm x 69mm
Weight	AP7662i - 2.4 lbs/ 1.1 kg AP7662 - 2.8 lbs/ 1.3 kg
Housing	IP67 rated outdoor use
Available mounting	H-bracket (flush wall), Pole mount
LEDs Activity Indication	4 side-mounted LEDs; activity indication
LAN Ethernet	2xIEEE 802.3 Gigabit Ethernet auto-sensing
Configuration	Internal antenna model: AP-7662-680B30 External antenna model, 5 N-type antenna ports: AP-7662-680B40
Antenna	AP-7662-680B30: 4.3 dBi - 2.4 GHz band; 5.3 dBi - 5GHz band with dual polarization capability
Antenna connectors	AP-7662-680B40: Five N-type connectors. See Antenna Guide for available external antennas
Console port	RJ45
Warranty	1 Year Hardware Replacement

Table 7: Environmental Characteristics AP7662

Item	Specification
Operating Temperature	-40° F to 158° F/ -40° C to 70° C No Solar Load -40° F to 140° F/ -40° C to 60° C with Solar Load
Storage Temperature	-40°F to 158°F/-40°C to 70°C
Operating Humidity	0%-95% (noncondensing)
Electrostatic Discharge	Condensing electrostatic
Operating Altitude	8,000 ft. at 54 °F/12 °C

Table 7: Environmental Characteristics AP7662 (continued)

Item	Specification
Storage Altitude	30,000 ft. at 82 °F/28 °C
Wind Rating	165 Mph gusts

Table 8: Power Specifications AP7662

Item	Specification
Operational Shock	IEC60721-3-4, Class 4M3, MIL STD 810G Method 516.6
Operation Vibration	ASTM D3580-95, IEC60721-3-4, Class 4M3 (IEC 60068-2-64)
Operating voltage	PoE-PD: 48VDC
Operating current	PoE-PD: 230 mA at 48V typical
PoE-PD class	802.3af, 802.3at

Table 9: Radio Specifications AP7662

Item	Specification
Wireless Medium	Direct Sequence Spread Spectrum (DSSS), Orthogonal Frequency Division Multiplexing (OFDM), and Spatial Multiplexing (MIMO)
Network Standards	IEEE 802.11a/b/g/n/ac, 802.11d and 802.11i WPA2, WMM, and WMM-UAPSD, L2TPv3, Client VPN, MESH (released in a future version of WiNG), Captive Portal server, Support SNMP v1, v2c, v3
Data Rates Supported	802.11b/g: 1,2,5.5,11,6,9,12,18,24,36,48 and 54 Mbps; 802.11a: 6,9,12,18,24,36,48, and 54 Mbps; 802.11n: MCS 0-15 up to 300 Mbps; 802.11ac on 2G VHT MCS0-9 up to 400Mbps, 802.11ac on 5G: VHT MCS 0-9 up to 867 Mbps
Operating Channels	2.4 GHz band: channel 1 through channel 13 5 GHz band: channel 36 through channel 165
Antenna Configuration	802.11: 2X2 MIMO (transmit/receive on both antennas). Transmit power adjustment 1dB increment BTLE radio: 1x1
Operating Frequencies	802.11: 2412 to 2472 MHz, 5180 to 5825 MHz BTLE radio: 2402 to 24835 MHz in 40 2 MHz wide channels
GPS radio	Not available in first release

4 Regulatory Information

Professional Installation Instructions
Instructions d'installation professionnelle
Safety Guidelines
FCC Declaration of Conformity Statement
Industry Canada Notice
European Waste Electrical and Electronic Equipment (WEEE) Notice
Hazardous Substances
NCC Statements
Declaration of Conformity in Languages of the European Community

Professional Installation Instructions

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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 AP7662i and 35 cm for AP7662 (FCC) and 20 cm for AP7662i and 42 cm for AP7662 (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 ISED limit and is prohibited.

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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 destiné à un usage spécifique et doit être installé par un personnel qualifié maîtrisant les radiofréquences et les règles s'y rapportant. L'installation et les réglages ne doivent pas être modifiés par l'utilisateur final.

Emplacement d'installation

En usage normal, afin de respecter les exigences réglementaires concernant l'exposition aux radiofréquences, ce produit doit être installé de façon à respecter une distance de 20cm pour AP7662i et 35 cm pour AP7662 (FCC) et 20 cm pour AP7662i et 42 cm pour AP7662 (ISED) entre l'antenne émettrice et les personnes.

Antenn externe

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Procédure d'installation

Consulter le manuel d'utilisation.



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Emplacement d'installation

En usage normal, afin de respecter les exigences réglementaires concernant l'exposition aux radiofréquences, ce produit doit être installé de façon à respecter une distance de 20cm entre l'antenne émettrice et les personnes.

Antenn externe

Utiliser uniquement les antennes approuvées par le fabricant. L'utilisation d'autres antennes peut conduire à un niveau de rayonnement essentiel ou non essentiel dépassant les niveaux limites définis par 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 dépasse pas les limites en vigueur. La violation de cette règle peut conduire à de sérieuses pénalités fédérales.

Safety Guidelines

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

Qualified Personnel:



Warning

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 outdoor electrical equipment in accordance with national codes.

FCC Declaration of Conformity Statement

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:

- 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. Operations in the 5.15-5.25GHz frequency range is restricted to indoor environment. 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 20cm between the radiator & your body.

Industry Canada Notice

This device complies with ISSED'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 5850 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,
凯创供应链的电子产品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 & AP7662) 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 & AP7662) 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 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.

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 $1\text{mW}/\text{cm}^2$ ，送測產品實測值為 $0.359\text{mW}/\text{cm}^2$ 」
- 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。

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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 $1\text{mW}/\text{cm}^2$ ，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 lýsir her með yfir að thessi bunadur, Radio LAN device, uppfyllir allar grunnkröfur, sem gerðar eru í 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 oħrajn 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 alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
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, deklaruje, że Radio LAN device spełnia wymagania zasadnicze oraz stosowne postanowienia zawarte Dyrektywie 1999/5/EC.