

Installing the ExtremeWiNG 802.11 a/ac+b/g/n Indoor AP7632i Access Point

Overview of the AP7632i

The AP7632i is an 11ac Wave 2, Cloud and IoT ready indoor ceiling mount model with 5 internal antennas. This AP comes with an 802.3 PoE PD for powering and has an option for 12VDC input when mounted on a wall. The AP7632i features dual-band, dual radio, 2 x Multi-User MIMO, smoke-detector footprint, and can be mounted on a dry wall, on a ceiling or a solid surface, suspended on a ceiling, and attached to a beam.

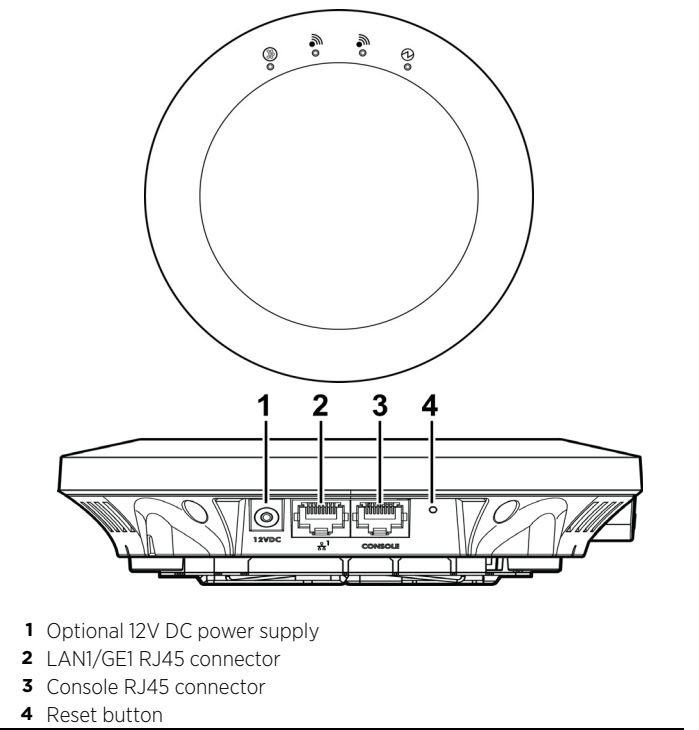
 **Note:** The AP7632i requires a minimum base firmware of WiNG 5.9.1.

The AP7632i model has the following features:

- Radios: 2 radios (2.4GHz and 5GHz); 1 IoT Radio (2.4 GHz)
- Console Port: RJ45
- One RJ45, 10/100/1000 Ethernet Port (LAN1) with PoE
- LEDs: 4 (see [Figure 2](#))
- One Reset button
- Power: PoE 802.3af, 12VDC power in connector (see [Table 1](#))
- Antennas:
 - 5 **internal** antennas (2- 4dBi, 2.4GHz band locked antennas; 2- 6dBi, 5GHz band antennas, and 1 BLE antenna)
- Mounting adaptors that can be purchased separately to attach to the back of the AP or to the Mounting bracket:
 - Mounting Bracket for 802.11ac Indoor APs
 - Flat Metal Indoor Bracket for Wall Mounting
 - Drop Ceiling T-bars
- 0-40°C ambient temperature
- Enclosure:
 - Top Material: Plastic only
 - Base Material: Die-cast plastic with metal bracket

In [Figure 1](#), the top image indicates the top view of AP7632i and the bottom one shows the side view of AP7632i.

Figure 1 Top and Side View of AP7632i



- Optional 12V DC power supply
- LAN1/GE1 RJ45 connector
- Console RJ45 connector
- Reset button

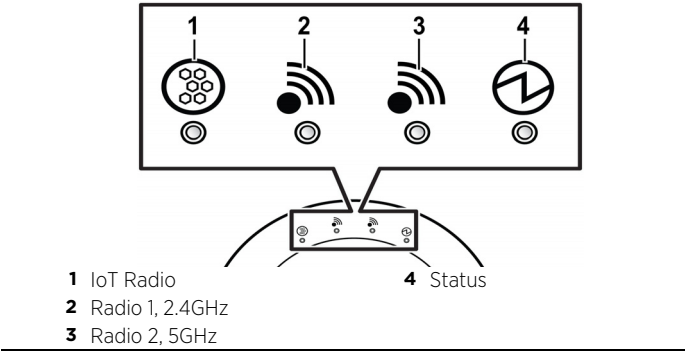
Table 1 shows ways to power the AP7632i.

Table 1 Powering the AP7632i

Power Source	Description
Power over Ethernet (PoE)	Power is provided through the RJ45 Ethernet port (LAN1 port) to the right of the 12V DC port of AP7632i. This is the preferred method of powering the AP on ceiling and high wall installations.
External 12V DC power supply (optional)	The AP7632i can also be powered by an external DC power supply plugged into an AC source. Plug the supply's input jack into the DC-In port (callout 1 in Figure 1).

Figure 2 shows the LEDs on the front of the AP7632i.

Figure 2 LEDs on AP Front Face



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.

For detailed installation information about the AP7632i, see the *Extreme Networks WiNG AP7632i Installation Guide*.


Verifying the AP7632i Box Contents

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

Table 2 Contents of the AP7632i Box

Quantity	Item
1	AP7632iQuick Reference Guide
1	Mounting Bracket for 802.11ac Indoor AP assembled onto the AP
1	Cloud Quick Start Card
The following hardware is included:	
2	Phillips Pan-head wood screws
2	Screw-in anchors

Mounting and Connecting the AP

 **Electrical Hazard:** Only qualified personnel should perform installation procedures.

Use these instructions as guidelines for mounting and connecting the AP7632i easily and safely.

The AP7632i comes with a Mounting Bracket (ordering part #37201) that can be used to mount the AP on a flat surface. You can also purchase an optional flat metal indoor bracket (ordering part #37210) for easy installation.


You also have an option to purchase the optional adapters to mount the AP on a wall, onto a drop ceiling, or a beam.

For more information about installing the optional bracket and the adapter, see the *Extreme Networks WiNG AP7632i Installation Guide*.

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

Mounting the AP on a Dry or Wood Wall/Solid Flat Ceiling

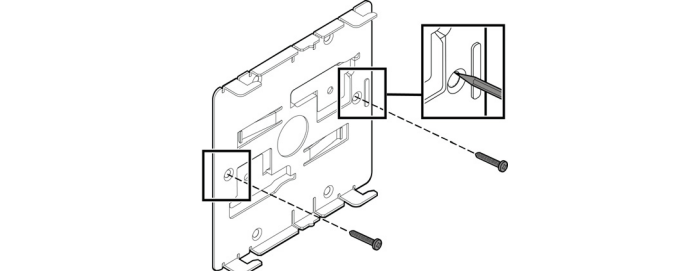
To install the AP on a dry wall or flat surface:


 **Warning:** The AP must be mounted ONLY horizontally if you mount it onto a plenum space.

Option 1: Using the Main Bracket

- Remove the mounting bracket attached to the back of the AP.
- Use the mounting bracket as a template and mark the hole centers on the wall ([Figure 3](#)).

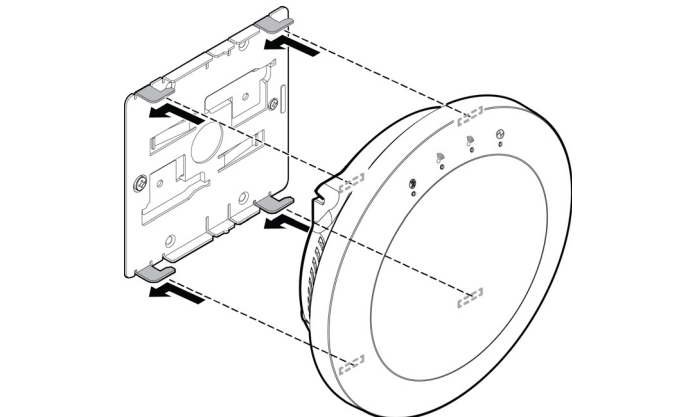
Figure 3 AP7632i Mounting Bracket



 **Note:** The four feet of the bracket must be horizontal and pointing to the right and the flat part of the bracket must be touching the surface it is being attached to.


- Insert the screws into the holes of the mounting bracket and use the screw-in anchors if needed.
- Insert the Ethernet cable's RJ45 connector into the LAN1/GE1 port.
- Insert the AP onto the bracket's four feet and slide it to the left to lock it in place.

Figure 4 Attaching the AP to a Wall using the Mounting Bracket



Option 2: Mounting the AP directly to the wall using 2 screws

- Remove the main bracket attached to the back of the AP
- Drill two holes 104mm (4.100") apart from each other on the wall.
- Insert the screws into the holes and use the screw-in anchors if needed.

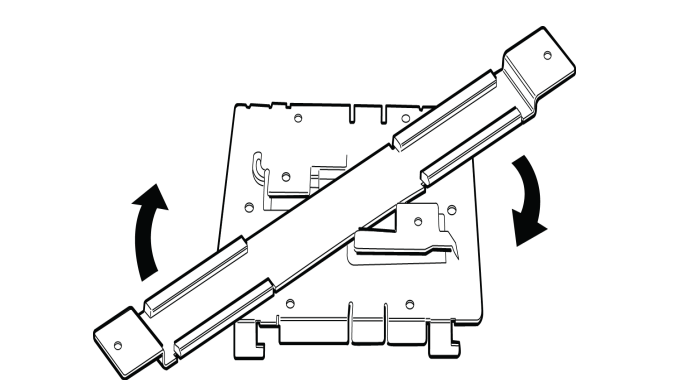
 **Note:** Leave 1/8" gap between the screw head and the wall.

- Insert the Ethernet cable's RJ45 connector into the GE1 port ([Figure 1](#); side view). Attach the optional DC adaptor if there is no PoE on the Ethernet cable.
- Insert the keyholes of the AP onto the screws and slide it down till it is firmly held by the screw heads. If the AP is loose, unmount the AP and decrease the distance between the screw head and the wall. Remount the AP.

Option 3: Using an optional Flat Metal Indoor Bracket


- Attach the flat metal indoor bracket to the main bracket. Keep the bracket to the center of the main bracket, push and rotate it ([Figure 5](#)).

Figure 5 Attaching the optional Flat Metal Indoor Bracket to the main bracket



- Hold the AP to the surface to which it needs to be attached and use the optional bracket's end holes as a template to mark the attachment holes.
- Drill two holes on the wall where you want to mount the AP.
- Connect the LAN/Ethernet cable to the back of the AP.
- Hold the AP, insert and tighten the 2 screws until you lock it into place.

Option 4: Using an optional Wall and Box bracket

 **Note:** Mounting the AP to a flat ceiling/wall requires the WS-MBI-WALL04 (purchasing part #30516) bracket, which must be purchased separately.


Remove the main bracket from the AP and attach the Wall and Box bracket to the back of the AP. Follow the procedure mentioned in *ExtremeWireless AP7632i Installation Guide* to mount the AP on a Wall and Box bracket.

Mounting the AP on a Junction or Gang Box

To mount the AP to a Bracket on a Junction or Gang box, use the Wall and Box Bracket (needs to be purchased separately).

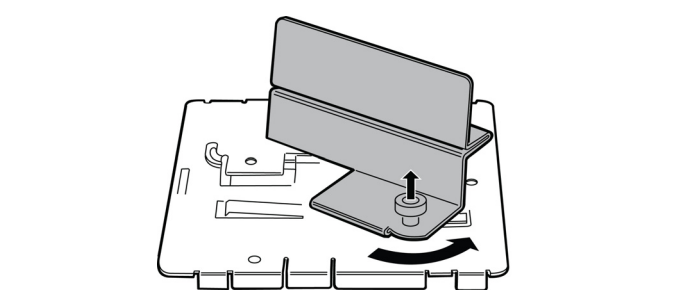
- Follow the procedure mentioned in *ExtremeWireless AP7632i Installation Guide* to mount the AP on a Wall and Box bracket.

Mounting the AP to a Suspended or Drop Ceiling

 **Note:** Mounting the AP to a suspended or drop ceiling requires the optional adapter (Universal Mounting Kit for EWLAN APs; purchasing part # KT-135628-01), which must be purchased separately.

- Attach the T-bar adaptor by pushing down the mounting bracket's angled locking tabs and by pulling up the T-bar adapter's locking pin.

Figure 6 Attaching the adapter to the main bracket



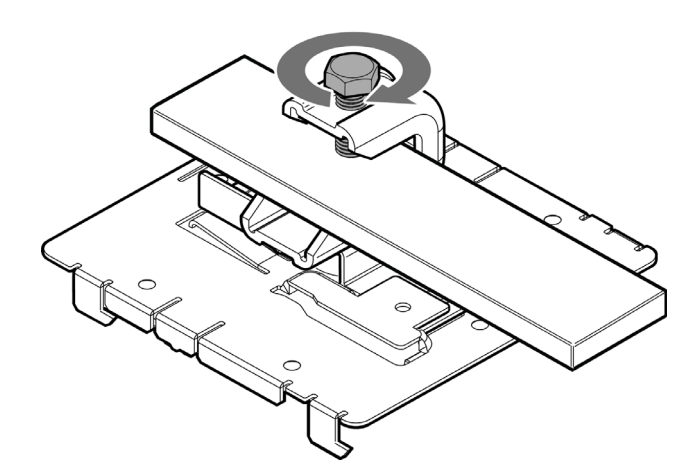
- Slide the T-bar holder onto the T-bar and replace the tiles to hold the adaptor onto the T-bar.
- Hold the AP and rock it back and forth to ensure that it is securely mounted.
- Attach the Ethernet cable's RJ45 connector to the LAN1/GE1 port. The optional WS-MBI-DCMTR01 (purchasing part #30518) adaptor can also be used for T-bar installations without the mounting bracket. For detailed instructions, refer *ExtremeWireless AP7632 Installation Guide*

Mounting the AP to a Beam (AP7632i)

To attach an AP to a beam, attach a beam clip (Accessory BRKT-000147A-01) to the mounting bracket:

- Attach the adapter to the mounting bracket by using a twisting motion.
- Attach the mounting bracket to the AP.
- Place the adapter on a beam in such a way that there is enough space between the screw and clamp to be tightened.
- Use the screw and clamp on the top of the adapter to secure the AP in place on the beam.
- Insert the Ethernet plug into the AP.

Figure 7 Attaching the beam clamp on a beam



For detailed procedure on Installing the AP, see the *Extreme Networks WiNG AP7632i Installation Guide*.

Connecting a Power Supply to the AP7632i

If you need to power the AP7632i with an external 12V DC power supply, you can plug the power cord into the power connector (callout 2 in [Figure 1](#)) on the back of the AP. There is no wall mount for the 12V DC power supply. When the device is powered on, the power LED on the front face of the AP is lit. Refer to the *Extreme Networks WiNG AP7632i Installation Guide* for information about optional power supplies.

LAN/Console Connections

The AP7632i has one GE1 (Ethernet) port and a Console port. Refer to [Figure 1](#) for the location of these ports. During administration and maintenance through the GE1 or Console, the AP must still have a power connection through either an Ethernet PoE cable or a DC power supply.

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 outdoor 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.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.



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 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; and
- 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.

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 LAN-EL.



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 22cm 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 22 cm de distance entre la source de rayonnement et votre corps.

單元Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛Lead (Pb)	汞Mercury (Hg)	鎘Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr ⁺⁶)	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
金屬零件 (Metal Parts)	○	○	○	○	○	○
電路模組 (Circuit Modules)	—	○	○	○	○	○
電纜及電纜組件 (Cables & Cable Assemblies)	○	○	○	○	○	○
塑料和聚合物零件 (Plastic and Polymeric parts)	○	○	○	○	○	○
備考1. “超出0.1 wt %”及“超出0.01 wt %”係指限用物質之百分比含量超出百分比含量基準值。 Note 1 : “Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition. 備考2. “○”係指該項限用物質之百分比含量未超出百分比含量基準值。 Note 2 : “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence. 備考3. “—”係指該項限用物質為排除項目。 Note 3 : The “—” indicates that the restricted substance corresponds to the exemption.						

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0.963mW/cm²

1. 使用此產品時應避免影響附近雷達系統之操作。

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 Customer Support at +353 61 705500 (Ireland).

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.

Declaration of Conformity in Languages of the European Community

English	Hereby, Extreme Networks, declares that this Radio LAN device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Finnish	Valmistaja Extreme Networks vakuuttaa täten että Radio LAN device tyypinen 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 essenzzjali u ma provvedimenti oħrajn rilevanti li hemm fid-Dirrettiva 1999/5/EC.

ExtremeWiNG™ Access Points

Quick Reference

P/N 37111 AP-7632-680B30-US

P/N 37112 AP-7632-680B30-WR

Notice

Copyright © 2017 Extreme Networks, Inc. All Rights Reserved.

Legal Notices

Extreme Networks, Inc., on behalf of or through its wholly-owned subsidiary, Enterasys Networks, Inc., reserves the right to make changes in specifications and other information contained in this document and its website without prior notice. The reader should in all cases consult representatives of Extreme Networks to determine whether any such changes have been made.

The hardware, firmware, software or any specifications described or referred to in this document are subject to change without notice.

Trademarks

Extreme Networks and the Extreme Networks logo are trademarks or registered trademarks of Extreme Networks, Inc. in the United States and/or other countries.

All other names (including any product names) mentioned in this document are the property of their respective owners and may be trademarks or registered trademarks of their respective companies/owners.

For additional information on Extreme Networks trademarks, please see: www.extremenetworks.com/company/legal/trademarks/

Documentation & Support

For product support, including documentation, visit: www.extremenetworks.com/support/

P/N 9035135-02

