# Installing the ExtremeWiNG Outdoor AP7662k **Access Point**

# **Overview of the AP7662k**

The AP7662k is a board only model. It does not have any enclosures or antennas. The users can integrate the AP7662k board into their solution.

Note: The AP7662k requires a minimum base firmware of WiNG 5.9.1

# Verifying the AP7662k Box Contents

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

# Table 1 Contents of the AP7662k Box

Quantity	Item
1	AP7662k Quick Reference Guide
1	AP7662k board

# **Unpacking Instructions**

The AP7662k board comes in an ESD (Electrostatic discharge) bag and is sealed using an ESD label. The board also includes four pin-headers to attach to any box that the user might be using the board on.

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Note: Remove the protective pin-header cap from the board before installing it.

# Using the Board

To integrate the board:

- Slide the board out of the bag.
- Install the board into the target system
- Connect WiFi and IoT antennas according to the wiring instructions.
- 4 Connect PoF network connection.

Electrical Hazard: Use ESD protection wrist wrap when installing the AP7662k board.

Refer to the ExtremeWireless WiNG AP7662k Installation Guide for additional installation instructions

### Notice

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# **Documentation & Support**

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

# **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 gualified personnel should perform installation procedures. Within the context of the safety notes in this documentation, gualified 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.

#### **Guidance to the Host Manufacturer**

- We hereby acknowledge our responsibility to provide guidance to the host manufacturer in the event that they require assistance for ensuring compliance with the Part 15 Subpart B requirements.
- 2 The host manufacturer is responsible for additional testing to verify compliance as a composite system. When testing the host device for compliance with the Part 15 Subpart B requirements, the host manufacturer is required to show compliance with the Part 15 Subpart B while the transmitter module(s) are installed and operating. The modules should be transmitting and the evaluation should confirm that the module's intentional emissions are compliant (i.e. fundamental and out of band emissions) with the Radio essential requirements. The host manufacturer must verify that there are no additional unintentional emissions other than what is permitted in the Part 15 Subpart B or emissions are complaint with the Radio aspects.

### Warning:

- 1 Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this eauipment
- 2 The restriction of operating this device in indoor could void the user's authority to operate the equipment.This device and its antenna(s) must not be co-located or operating in
- conjunction with any other antenna or transmitter
- 4 This equipment should be installed and operated with minimum distance 31 cm between the radiator & your body.
- 5 The FCC part 15.19 statement: 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.

# Label of the end product

The final end product must be labeled in a visible area with the following: "Contains TX FCC ID: QXO-AP3917K."

The end product shall bear the following 15.19 statement: 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

#### **Federal Communications Commission (FCC) Interference** 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.

Antenna Type	Model Number	Brand Name	Antenna gain	Frequency
Omni	ML-2499-HPA8-01	Extreme	7.5 dBi	2400- 2500MHz
Omni	ML-5299-FHPA6- 01R	Extreme	7.75 dBi	4900- 5875MHz
Omni	ML-5299-HPA5-01	Extreme	5.6 dBi	5150- 5850MHz

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Omni	CX080MI136-VC	Extreme	6.8 dBi	2400- 2483.5MHz
Omni	CX080MI136-VC	Extreme	7.2 dBi	4940- 4990MHz
Omni	CX080MI136-VC	Extreme	7.2 dBi	5150- 5350MHz
Omni	CX080MI136-VC	Extreme	6.2 dBi	5470- 5725MHz
Omni	CX080MI136-VC	Extreme	7.2 dBi	5725- 5850MHz



**Caution:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

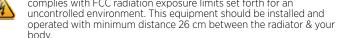
Note: No antenna shall be used with a gain lower than 5.6dBi in the 802.11A/AN/AC bands with current modular approval.

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 device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible. This device is restricted to indoor use

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



The module is limited to OEM installation ONLY.

- This module is intended for OEM integrators under the following conditions: This module is restricted to installation in products for use only in mobile and fixed applications.
- The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 26 cm from all persons.
- The antenna(s) used for this transmitter must not transmit simultaneously with any other antenna or transmitter.
- Δ OEM integrator has be limited the operation channels in channel 1-11 for 2.4GHz band.
- Fixed outdoor applications for point to multipoint operations are subject to the conditions in Part 15.407(a)(1)(i).
- The OEM integrator is still responsible for:

Ensuring that the end-user has no manual instructions to remove or install module

- 2 The FCC compliance requirement of the end product, which integrates this module.
- 3 Appropriate measurements (e.g. 15 B compliance) and if applicable additional equipment authorizations (e.g. Verification, Doc) of the host device to be addressed by the integrator/manufacturer.
- The separate approval is required for all other operating configurations, 4 including portable configurations with respect to Part 2.1093 and different antenna configurations.

# **Industry Canada Notice**

This device complies with Industry Canada'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'Industrie Canada 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 recu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

This radio transmitter IC: 4141B-AP3917K has been approved by Industry Canada to operate with the antenna types listed below with the 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.

Antenna	Model	Brand	Antenna	Frequency
Type	Number	Name	gain	
Omni	ML-2499- HPA8-01	Extreme	7.5 dBi	2400- 2500MHz

Omni	ML-5299- FHPA6-01R	Extreme	7.75 dBi	4900- 5875MHz
Omni	ML-5299- HPA5-01	Extreme	5.6 dBi	5150- 5850MHz

Le présent émetteur radio (IC: 4141B-AP3917K) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et avant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

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:

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:



#### Warning: Déclaration d'exposition aux radiations: Cet

équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 31 cm de distance entre la source de rayonnement et votre corps



Warning: IC Radiation Exposure Statement: This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 31 cm between the radiator & your body.

Antenna Type	Model Number	Brand Name	Antenna gain	Frequency
Omni	ML-2499- HPA8-01	Extreme	7.5 dBi	2400- 2500MHz
Omni	ML-5299- FHPA6-01R	Extreme	7.75 dBi	4900- 5875MHz
Omni	ML-5299- HPA5-01	Extreme	5.6 dBi	5150- 5850MHz



**Note:** No antenna shall be used with a gain lower than 5.6dBi in the 802.11A/AN/AC bands with current modular approval.

OEM integrator is still responsible for testing their end product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).



Note: In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the IC authorization is no longer considered valid and the IC No. cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate IC authorization.

# **Modular OEM Integrator Notice**

# End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 31 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains transmitter module IC: 4141B-AP3917K"

Contient le module d'émission IC: 4141B-AP3917K This device is intended only for OEM integrators under the following conditions.

- 1 The antenna must be installed such that 31 cm is maintained between the antenna and users. and
- 2 The transmitter module may not be co-located with any other transmitter or antenna.

Cet appareil est conçu uniquement pour les intégrateurs OEM dans les conditions suivantes: (Pour utilisation de dispositif module)

- 1 L'antenne doit être installée de telle sorte qu'une distance de 31 cm est respectée entre l'antenne et les utilisateurs, et
- 2 Le module émetteur peut ne pas être coïmplanté avec un autre émetteur ou antenne.

# Important Note for OEM integrator

This module is intended for OEM integrator. The OEM integrator is still responsible for:

- 1 ensuring that the end-user has no manual instructions to remove or install module
- 2 the ISED compliance requirement of the end product, which integrates this module
- 3 Appropriate measurements and if applicable additional equipment authorizations of the host device to be addressed by the integrator/ manufacturer

4 The separate approval is required for all other operating configurations. including portable configurations and different antenna configurations. The transmitter module may not be co-located with any other transmitter or antenna. Le module émetteur peut ne pas être coïmplanté avec un autre émetteur ou antenne. CAN ICES-3 (B)/NMB-3(B)

#### 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 <sup>**</sup> )	多溴联苯 (PBB)	多溴二苯醚 (PBDE)	
金属部件 (Metal Parts)	×	0	0	×	0	0	
电路模块 (Circuit Modules)	×	0	0	×	0	0	
电缆及电缆组件 (Cables & Cable Assemblies)	×	0	0	×	0	0	
塑料和聚合物部件 (Plastic and Polymeric parts)	0	0	0	0	0	×	
电路开关 (Circuit Breakers)	0	0	×	×	0	0	

- 表示该有盡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 homogen 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。 that the board of the concentration of the hazardous substance of at least one of all homogo rials 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 太老星云

对销售之口的所售产临,本农意示, 到创供应键的中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.



# **European Waste Electrical and Electronic Equipment** (WEEE) Notice



In accordance with Directive 2012/19/EU of the European Parliament on waste electrical and electronic equipment (WEEE)

- The symbol above indicates that separate collection of electrical and electronic equipment is required
- 2 When this product has reached the end of its serviceable life, it cannot be disposed of as unsorted municipal waste. It must be collected and treated separately.
- 3 It has been determined by the European Parliament that there are potential negative effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment.
- 4 It is the users' responsibility to utilize the available collection system to ensure WEEE is properly treated.
- For information about the available collection system, please contact Extreme Environmental Compliance at Green@extremenetworks.com

# **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 typpinen 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.

- Härmed intygar Extreme Networks att denna Radio Swedish 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.

#### ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Extreme Networks ΔΗΛΩΝΕΙ Greek 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 guesto Radio LAN device è conforme ai reguisiti 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 reguisitos 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.
- Hawnhekk, Extreme Networks, jiddikjara li dan Radio Malti LAN device jikkonforma mal-htigijiet essenziali u ma provvedimenti ohrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.

# **ExtremeWireless**<sup>m</sup> WiNG Access Points

# **Quick Reference**

P/N 37125 AP-7662K-680B40-US P/N 37126 AP-7662K-680B40-WR

