

# KHAP-800

## *Regulatory Guide*

# 1. Regulatory Information

This device is approved under Extreme Networks Inc.

This guide applies to Model Number: KHAP-800

All Extreme devices are designed to be compliant with the rules and regulations in the locations they are sold and will be labeled as required.

Local language translations are available at the following website:

<http://www.extremenetworks.com/support/documentation/>.

Any changes or modifications to Extreme equipment not expressly approved by Extreme Networks could void the user's authority to operate the equipment.

Extreme devices are professionally installed — the Radio Frequency Output Power will not exceed the maximum allowable limit for the country of operation.

Antennas: Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could cause damage and may violate regulations.

This device is only to be used with an Extreme Wireless Switch.

For use only with Extreme approved and UL Listed mobile computers, Extreme approved, and UL Listed/Recognized battery packs.

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## 2. Wireless Device Country Approvals



### NOTE

Regulatory markings, subject to certification, are applied to the device signifying the radio(s) is/are approved for use in the following countries: United States and Canada

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Please refer to the Declaration of Conformity (DoC) for details of other country markings. This is available at:

<http://www.extremenetworks.com/support/documentation/>.



### CAUTION

Operation of the device without regulatory approval is illegal.

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## Country Selection

Select only the country in which you are using the device. Any other selection will make the operation of this device illegal. The US version of Access Point will only have US listed in the country selection table. The US version will be sold /used in the US protectorates: American Samoa, Guam, Puerto Rico, US Virgin Islands.

## Frequency of Operation – IC

You are reminded of the need to observe restrictions on the use of radio devices in fuel depots, chemical plants etc. and areas where the air contains chemicals or particles (such as grain, dust, or metal powders).

### 5 GHz Only

The use in the UNII (Unlicensed National Information Infrastructure) band 1 (5150-5250 MHz) is restricted to Indoor Use Only; any other use will make the operation of this device illegal.

### Industry Canada Statement:

### Warnings for Use of Wireless Devices

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#### CAUTION

The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-Channel mobile satellite systems.

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#### Avertissement

Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

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## 2.4 GHz Only

The available channels for 802.11 b/g operation in the US are Channels 1 to 11. The range of channels is limited by firmware.

## Health and Safety Recommendations

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#### Warnings for Use of Wireless Devices

Please observe all warning notices with regard to the usage of wireless devices.

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## Potentially Hazardous Atmospheres – Fixed Installations

You are reminded of the need to observe restrictions on the use of radio devices in fuel depots, chemical plants etc. and areas where the air contains chemicals or particles such as grain, dust, or metal powders.

### Safety in Hospitals



Wireless devices transmit radio frequency energy and may affect medical electrical equipment.

Wireless devices should be switched off wherever you are requested to do so in hospitals, clinics, or healthcare facilities. These requests are designed to prevent possible interference with sensitive medical equipment.

Wireless devices transmit radio frequency energy and may affect medical electrical equipment. When installed adjacent to other equipment, it is advised to verify that the adjacent equipment is not adversely affected.

## Pacemakers

Pacemaker manufacturers recommended that a minimum of 15cm (6 inches) be maintained between a handheld wireless device and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with independent research and recommendations by Wireless Technology Research.

### Persons with Pacemakers:

- Should ALWAYS keep the device more than 15cm (6 inches) from their pacemaker when turned ON.
- Should not carry the device in a breast pocket.
- Should use the ear furthest from the pacemaker to minimise the potential for interference.
- If you have any reason to suspect that interference is taking place, turn OFF your device.

## Other Medical Devices

Please consult your physician or the manufacturer of the medical device to determine if the operation of your wireless product may interfere with the medical device.

## RF Exposure Guidelines

- **Reducing RF Exposure - Use Properly**

Only operate the device in accordance with the instructions supplied.

- **International**

The device complies with internationally recognized standards covering human exposure to electromagnetic fields from radio devices. For information on 'International' human exposure to electromagnetic fields, refer to the Extreme Declaration of Conformity (DoC) at <http://www.extremenetworks.com/support/documentation/>.

## US and Canada

- **Co-located statement**

To comply with FCC RF exposure compliance requirement, the antenna used for this transmitter must not be co-located or operating in conjunction with any other transmitter/antenna except those already approved in this filing.

- **Remote and Standalone Antenna Configurations**

To comply with FCC RF exposure requirements, Antennas that are mounted externally must be professionally installed at a fixed location and operate with a minimum distance of 30 cm from all persons.

## 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 35cm between the radiator & your body.

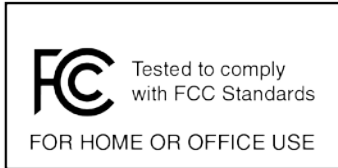
Déclaration d'exposition aux radiations:

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

## Power Supply

This device must be powered from a 802.3af or 802.3at compliant power source which has been certified by the appropriate agencies, or by a LISTED Motorola, Type no. PWRS-14000-247R or AP-PSBIAS-2P3-ATR, direct plug-in power supply, marked Class 2 or LPS (IEC60950-1,SELV). Use of alternative Power Supply will invalidate any approvals given to this unit and may be dangerous.

## 3. Radio Frequency Interference Requirements- FCC



**Note:** 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 or more 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.

### Radio Transmitters (Part 15)

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.

The use of 5 GHz WLAN's, for use in the US, have the following restrictions:

- Notched Band 5.60 - 5.65 GHz

### FCC Statement:

#### IMPORTANT NOTE:

This module is intended for OEM integrator only and limited to host with brand: MOTOROLA, model: AP-8122, AP-8132 and brand: Extreme Networks, model: AP-8163. The OEM integrator is still responsible for the FCC compliance requirement of the end product, which integrates this module.

30 cm minimum distance has to be able to be maintained between the antenna and the users for the host this module is integrated into. Under such configuration, the FCC radiation exposure limits set forth for a population/uncontrolled environment can be satisfied.

### USER'S MANUAL OF THE END PRODUCT:

In the user's manual of the end product, the end user has to be informed to keep at least 30 cm separation with the antenna while this end product is installed and operated. The end user has to be informed that the FCC radio-frequency exposure guidelines for an uncontrolled environment can be satisfied.

The end user has to also be informed that any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

## **LABEL OF THE END PRODUCT:**

The final end product must be labeled in a visible area with the following " Contains TX FCC ID: QXO-KHAP800 ". The FCC part 15.19 statement below has to also be available on the label: This device complies with Part 15 of 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.

## **IC Statement:**

Pour les produits disponibles aux États-Unis / Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible.

Dynamic Frequency Selection (DFS) for devices operating in the bands 5250- 5350 MHz, 5470-5600 MHz and 5650-5725 MHz.

Sélection dynamique de fréquences (DFS) pour les dispositifs fonctionnant dans les bandes 5250-5350 MHz, 5470-5600 MHz et 5650-5725 MHz.

The maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit.

le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz et 5470-5725 MHz doit se conformer à la limite de p.i.r.e.

le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5850 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

### **For indoor use only.**

Pour une utilisation en intérieur uniquement.

### **IMPORTANT NOTE:**

This module is intended for OEM integrator only and limited to host with brand: MOTOROLA, model: AP-8122, AP-8132 and brand: Extreme Networks, model: AP-8163. The OEM integrator is still responsible for the IC compliance requirement of the end product, which integrates this module.

35 cm minimum distance has to be able to be maintained between the antenna and the users for the host this module is integrated into. Under such configuration, the IC RSS-102 radiation exposure limits set forth for a population/uncontrolled environment can be satisfied.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

## **USER'S MANUAL OF THE END PRODUCT:**

In the user's manual of the end product, the end user has to be informed to keep at least 35 cm separation with the antenna while this end product is installed and operated. The end user has to be informed that the IC radio-frequency exposure guidelines for an uncontrolled environment can be satisfied. The end user has to also be informed that any



changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment. 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 IC: 4141B-KHAP800 ". The Host Model Number (HMN) must be indicated at any location on the exterior of the end product or product packaging or product literature which shall be available with the end product or online.

## 4. Radio Frequency Interference Requirements- Canada

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

### Radio Transmitters

For RLAN Devices:

The use of 5 GHz RLAN's, for use in Canada, have the following restrictions:

- Restricted Band 5.60 – 5.65 GHz

This device complies with Industry Canada license-exempt RSS standard(s). 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) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Label Marking: The Term "IC:" before the radio certification only signifies that Industry Canada technical specifications were met

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that permitted for successful communication.

The device could automatically discontinue transmission in case of absence of information to trans-mit, or operational failure. Note that this is not intended to prohibit transmission of control or signaling information or the use of repetitive codes where required by the technology.

The maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.

In compliance with respective local regulatory law, Motorola Solutions AP software provides professional installers the option to configure the antenna type and antenna gain for approved antennas.

This radio transmitter (KHAP-800) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type 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 (KHAP-800) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant 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 2.4 GHz antenna suite includes the following models:

<i>Part Number</i>	<i>Antenna Type</i>
ML-2499-5PNL-72-N	Panel Antenna
ML-2499-APA2-01R	Dipole Antenna

<i>Part Number</i>	<i>Antenna Type</i>
ML-2499-FHPA9-01R	Dipole Antenna
ML-2499-HPA3-01R	Dipole Antenna
ML-2499-SD3-01R	Patch Antenna
ML-2452-APA2-01	Dipole Antenna
ML-2452-PNA5-01R	Panel Antenna
ML-2452-PNA7-01R	Panel Antenna
ML-2452-HPA5-036	Dipole Antenna
ML-2452-APAG2A1-01	Dipole Antenna

The 5 GHz antenna suite includes the following models:

<i>Part Number</i>	<i>Antenna Type</i>
ML-5299-APA1-01R	Dipole Antenna
ML-5299-FHPA10-01R	Dipole Antenna
ML-5299-HPA1-01R	Dipole Antenna
ML-5299-PTA1-01R	Patch Antenna
ML-5299-BYGA15-012	Yagi Antenna
ML-2452-APA2-01	Dipole Antenna
ML-2452-PNA5-01R	Panel Antenna
ML-2452-PNA7-01R	Panel Antenna
ML-2452-HPA5-036	Dipole Antenna
ML-2452-APAG2A1-01	Dipole Antenna

## Statement of Compliance

Extreme Networks hereby declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A Declaration of Conformity may be obtained from <http://www.extremenetworks.com/support/documentation/>.

## 5. Waste Electrical and Electronic Equipment (WEEE)

Waste Electrical and Electronic Equipment

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).