

AP-8533 Access Point

Regulatory Guide - CDRDB



1. Regulatory Information

This device is approved under Extreme Networks Inc.

This guide applies to Model Number: CDRDB

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.



2. Wireless Device Country Approvals



NOTE

This section is only applicable to WW/WR/EU configurations.



NOTE

Regulatory markings subject to certification are applied to the device signifying the radio(s) is/are approved for use in the following countries and continents: United States, Canada, Japan, China, South Korea, Australia, and Europe.

Please refer to the Declaration of Conformity (DoC) for details of other country markings. This is available at: http://www.extremenetworks.com/support/documentation/.



NOTE

Europe includes Austria, Belgium, Bulgaria, Croatia, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Nether-lands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.



CAUTION

Operation of the device without regulatory approval is illegal.

Country Selection

Select only the country in which the device will be used. Any other selection will make the operation of this device illegal.

Country Roaming

This device incorporates the International Roaming feature (IEEE802.11d), which will ensure the product operates on the correct channels for the particular country of use.



Frequency of Operation – IC 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:



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. High power radars are allocated as primary users (meaning they have priori-ty) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices.



Avertissement

Le dispositive 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. Les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bands 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

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.

Warnings for Use of Wireless Devices



CAUTION

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



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 Aircraft

Switch off your wireless device whenever you are instructed to do so by airport or airline staff. If your device offers a 'flight mode' or similar feature, consult airline staff as to its use in flight.

Safety in Hospitals



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

Wireless devices should be switched off wherever you are requested to do so in hospitals, clinics, or healthcare facilitlies. 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

Safety Information

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 electromagnet 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 colocated or operating in conjunction with any other transmitter/antenna except those already approved in this filling.

To satisfy US and Canadian RF exposure requirements, a transmitting device must operate with a minimum separation distance of XX cm or more from a person's body. The minimum separation distance 35 cm must match the distance established in the SAR Test report.

Pour satisfaire aux exigences Américaines et Canadiennes d'exposition aux radio fréquences, un dispositif de transmission doit fonctionner avec une distance de séparation minimale de XX cm ou plus de corps d'une personne.

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 35 cm between the radiator and your body.

NOTE IMPORTANTE: (Pour l'utilisation de dispositifs mobiles) Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un 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.

o Remote and Standalone Antenna Configurations

To comply with FCC RF exposure requirements, antennas that are mounted externally at remote locations or operating near users at stand-alone desktop of similar configurations must operate with a minimum separation distance of 35 cm from all persons.

To comply with FCC Antenna requirements, the Antenna must be adjust such that the RF emission lobes are below 30 degrees elevation.



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.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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. When the radio is configured for outdoor operation, EIRP will be limited to below 21dBm based on the antenna gain and elevation gain entered. The software automatically restricts the output power to the certified levels when the professional installer selects the approved antenna that is being used.



Set	Brand	Model Number	Antenno	а Туре	Connector	Indoor/Outdoor	
1	ZEBRA	CEDAR-INT-ANT	CEDAR-INT-ANT Monopole		U.FL	Indoor/Outdoor	
Vote:	MI .		701				
	Antenna Gain (dBi)						
Set	2.4G			5G			
Set		2.4G			5G		
Set	Chain 1	2.4G Chain 2	Chain 3	Chain 1		Chain 3	

	Maximum conducted power(dBm)	Antenna Gain(dBi)	Maximum EIRP power(dBm)
2.4GHz	26.28	4.4	30.68
5GHz UNII-1 / indoor	22.79	5.9	28.69
5GHz UNII-1 / outdoor	16.88	5.9	22.78
5GHz UNII-1 / outdoor	16.88	4.1	20.98
Above 30 degree			
5GHz UNII-2A	21.91	5.9	27.81
5GHz UNII-2C	22.41	5.9	28.31
5GHz UNII-3	22.84	5.9	28.74



4. Radio Frequency Interference Requirements- Canada

CAN ICES-3 (B)/NMB-3(B)

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 is in compliance with the NRC for Industry Canada applicable to license-exempt radios. Use is allowed with the following two conditions: (1) the device must not produce interference, and (2) the the device must accept any interference to the radio even if the interference is likely to compromise 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 radio électrique 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.

In accordance with the regulations of Industry Canada, this radio transmitter can operate with an antenna of a type and a maximum gain (or lower) approved for the transmitter by Industry Canada. With the aim of reducing the risk of radio interference to other users, the chosen antenna type and it gain should be selected so that the equivalent isotropically radiated power (e.i.r.p.) does not exceed the intensity necessary for the establishment of a satisfactory connection.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radio électrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This radio transmitter (CDRDB) has been approved by Industry Canada to operate with the antenna types listed below and having a maximum gain allowable and the impedance required for each type of antenna. The antenna types not included in this list, or whose gain is higher than the maximum gain indicates, are strictly prohibited for the operation of the transmitter.



The antenna list and types are included in the following tables:

Part Number	Antenna Type	2.4 GHZ Gain (dBi)	5 GHZ Gain (dBi)	Elevation Gain	Impedance (Ohms)
ML-2452-HPAG4A6-01	Dipole	4	7.3	5.7	50
ML-2452-APAG2A1-01	Dipole	2.7	1.7	N/A	50
ML-2452-HPA6-01	Dipole	5.3	6.1	4.09	50
ML-2452-APA2-01	Dipole	3.17	4.85	N/A	50
ML-2452-PNA5-01R	Panel	5.5	6	5.2	50
ML-2452-SEC5M4-N36	Polarized Panel	6.92	7.23	3.95	50
ML-2452-PTA4M4-036	Patch	5	6.6	N/A	50
ML-2499-HPA6H-01	Polarized Dipole	5.4	N/A	N/A	50
ML-5299-HPA5H-01	Polarized Dipole	N/A	5	-1.21	50

Le présent émetteur radio (identifier le dispositif par son numéro de certification ou son numérode modèle s'il fait partie du matériel de catégorie I) 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.

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 and 2011/65/EU. A Declaration of Conformity may be obtained from http://www.extremenetworks.com/support/documentation/.



This module is intended for OEM integrator. The OEM integrator is still responsible for the IC compliance requirement of the end product, which integrates this module.

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 40 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-CDRDB".

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.



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).

Korea Warning Statement for Class B ITE

기 종 별	사 용 자 안 내 문
B급 기기 (가정용 방송통신기자재)	이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

South Korea

For a radio equipment using 2400-2483.5MHz or 5725-5825MHz, the following two expression should be displayed;

해당 무선설비는 운용 중 전파혼신 가능성이 있음 해당 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없습니다

Taiwan

臺灣

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。

無線接入點 (專業安裝)

- 本公司於說明書中提供所有必要資訊以指導使用者/安裝者正確的安裝及操作」警語。 並於該中文使用說明書及器材上標示
- 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」警語。

電磁波曝露量MPE標準值1mW/cm²;本產品使用時建議應距離人體 35 cm