

Quick Installation Guide

For XA4 Models

XA4 Series High Density Convention Center Access Points (CCAPs) are plenum-rated indoor APs using external antennas. With four 802.11ac Wave 2 radios, a powerful integrated controller, application-level intelligence, automated provisioning, and optional cloud management, the APs deliver robust wireless connectivity in areas of medium to high user density. The XA4-240 has four 4x4 Wave 2 802.11ac radios: Radio IAP1 is a dual-band 2.4GHz/5GHz radio, and IAP2 through IAP4 are single-band 5GHz radios.



This Guide covers the steps required to install and start the AP. For detailed configuration information, see the *Xirrus Wireless Access Point User's Guide*.

1

You Need the Following Items

- ◆ Accessory Kit (included in each AP carton) includes Mounting bracket
- ◆ Xirrus-recommended antennas (and cables if needed) for up to four radios. Network designers should specify how many antennas to install for each radio. See the table below and “[Install Antennas](#)” on page 3 to see what connectors to use, based on the number of antennas allocated to a radio. Cables (if needed) are low-loss coaxial cables terminated with RP-SMA connectors. **??OK??** If you are not using recommended antennas, the XA4’s output power setting must be reduced by 1 dB for every dB above 6dBi gain the selected antenna may produce. **??OK??**

# Antenna Connectors to Use	... For Usage Scenario (Configured settings)	Connector 1	Connector 2	Connector 3	Connector 4
2	2x2	Yes	No	No	Yes
3	3x3; or 2x2 plus DFS*	Yes	Yes	No	Yes
4	4x4 (default ??OK??); or 3x3 plus DFS*	Yes	Yes	Yes	Yes

DFS*: Zero-wait DFS (dynamic frequency selection) uses a dedicated antenna to provide fast frequency selection. This enables better use of 5GHz Wi-Fi channels.

- ◆ Power and Ethernet connection(s) to your wired network using Cat 5e/6 cables. The AP has 2 Ethernet ports:
 - ◆ **GIG1/PoE**—This 2.5 Gigabit port powers the AP via Power over Ethernet (PoE) using a Cat 5e or Cat 6 cable that also carries data traffic. See below for Power details. Note that the port’s rate is set by auto-negotiation with the switch.
 - ◆ (Optional) **GIG2**—Connection to this second, data-only one-gigabit port provides additional bandwidth. Use Cat 5E or Cat 6 cable.

AP must be connected to PoE networks without routing cabling to the outside plant. This ensures that cabling is not exposed to lightning strikes or possible crossover from high voltage lines. AP, PoE Injectors, or Switches must be installed and used indoors. The total Cat 5e or Cat 6 cable length from the switch to the AP must be no more than 100 m, including all cable segments.

XA4 Series High Density Access Points

- ◆ Power— See the matrix below to select a compatible PoE switch or Xirrus-supplied injector for your AP. If using an injector, you must provide a data connection from the switch to the injector as well as another cable from the injector's OUT port to the AP's GIGABIT1/PoE port. PoE injectors require an AC outlet.

AP Model	Maximum Power Consumption	Generic PoE Switch (802.3at)	Xirrus PoE Switch	XP1-MSI-30	XP1-MSI-75M	XP1-MSI-75 (POE-75U-1UP-X)	XP8-MSI-70M	XP2-MSI-95M
XA4-240	38W		✓ (Ports 1-12 only)		✓	✓	✓	✓

- ◆ Apply power to GIG1/POE port only—other AP Gigabit ports will not draw power if connected to a powered switch port, and AP LEDs will not light.
- ◆ Workstation with a Web browser to configure the AP via the Xirrus Management System or directly via the AP's Windows Management Interface (WMI).

NOTE: Leave protective plastic film on the AP until installation is complete, to avoid leaving marks on the AP.

- ◆ Direct Ceiling Mount—use the furnished mounting plate with four user-supplied screws that are appropriate for the construction type of the mounting site. The AP attaches to the mounting plate with four keyhole studs that are pre-installed on the back of the AP.

2

Choose a Suitable Location

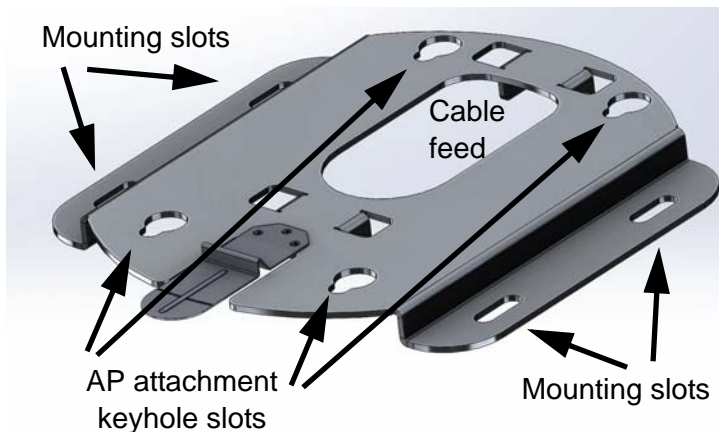
- ◆ Choose an indoor location that is central to your users, and that is away from heat sources.
- ◆ The location must be capable of supporting the weight of the AP and the mounting bracket (about 5??lb total).
- ◆ For optimal placement, we recommend that a predictive survey be performed by a qualified Xirrus partner.
- ◆ Maintain a distance of at least 50 feet between additional APs.
- ◆ Keep the unit away from electrical devices or appliances that generate RF noise—at least 3 to 6 ft (1m - 2m).
- ◆ To ensure good air flow, it is essential that the AP's vents are not blocked.
- ◆ The XA4 can operate from a Wireless Distribution System (WDS) link. However, the unit must be configured via the Ethernet connection prior to mounting and power must be supplied via the GIG1 Ethernet connector.

3

Install Mounting Hardware—Ceiling Mount

The following steps use a mounting plate, which offers a secure mount and ease of dismount.

1. Use the AP mounting plate to mark the placement on the ceiling of the cable feed opening and of the 4 mounting slots.
2. Drill and prepare holes for user-supplied screws as appropriate.
3. Cut an access hole for the cable(s) in the ceiling and draw enough cable through to attach to the AP when it is installed.
4. Align the mounting plate over the prepared holes (position the edges with the mounting slots flush against the wall.). Feed the cable(s) through. Secure the plate with the screws.

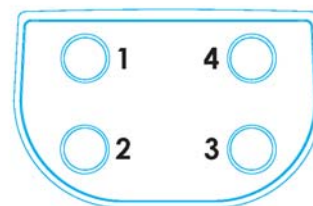


4

Install Antennas

See the *Xirrus External Antenna Guide* for recommended antennas.

- ◆ Check the network plan for the number of antennas to connect to each of the four radios, named **IAP1** to **IAP4**. The table on [page 1](#) shows which connector numbers to use, and the image at right shows their numbering.



Antenna Connectors

For Rubber Duck Antennas:

Install the antennas on the AP at the locations described above.

For Panel Antennas:

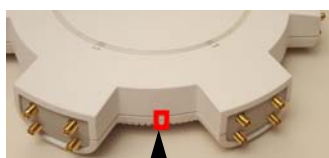
- ◆ Install your antenna(s) as directed by the manufacturer. Note that radio IAP1 is dual-band, so if you use single-band antennas for it, you must configure IAP1 to the antenna's band (2.4 GHz or 5.0 GHz). See [“Zero-Touch Provisioning and Ongoing Management” on page 4](#)).
- ◆ Use low-loss coaxial cables compatible with the XA4's RP-SMA connectors. Note that some antennas include integrated cables as part of the unit, and these do not need separate cables.

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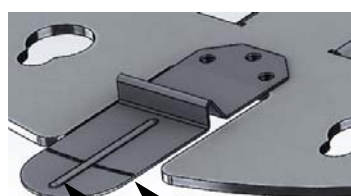
Connect Cables and Install AP

NOTE: Once you connect GIG1/POE, an automatic upgrade typically starts soon after the AP has Internet connectivity. Do not unplug this port during the upgrade or the AP may become inoperable. The upgrade should take 10 minutes or less.

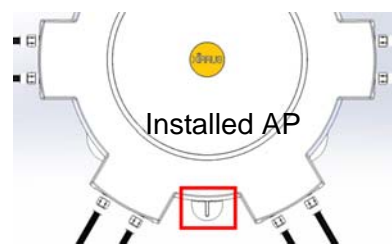
1. Connect the cable that carries power and data to **GIG1/PoE** (shown in red). If you use a Xirrus-supplied injector, its **CONNECT** LED should light (for 70W and higher injectors, it is OK if it blinks). If power is being properly supplied, the AP's LEDs will light and then commence blinking in their rotating boot pattern. A second data connection may be plugged into **GIG2** (optional).
2. If using panel antennas, connect the cables as indicated in the table on [page 1](#).



Alignment Line on AP



Alignment Lines on Lock/Unlock Lever



Lock/Unlock Lever

3. Mount the AP: Position the keyhole studs on the back of the AP over the keyhole slots on the mounting plate using the following aid—line up the alignment line on the AP (small bump located on the AP as indicated above) with the vertical line on the lock lever.
4. Push the AP against the mounting plate and slide the AP towards the locking lever until the keyhole slugs are secure in the slots and the lever locks in place. The edge of the AP will line up with the horizontal line on the lock lever.
5. If you need to remove the AP, push down on the lock lever to unlock the AP. Continue to hold it down while you slide the AP away from the lever and pull the AP off the mounting plate.

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Zero-Touch Provisioning and Ongoing Management

Most customers use the Xirrus Management System (XMS) for the initial setup and continuing management of Xirrus APs. XMS users set up new APs for zero-touch provisioning via the following platforms. Wait five minutes after powering up the AP to automatically discover it, then use XMS to view and manage it. Newly discovered APs are automatically assigned to the XMS “default” profile, and receive the configuration defined for that profile.

- ◆ XMS-Cloud—performs zero-touch provisioning. Your new APs appear in XMS even before you receive your equipment. When the email arrives with your login information, use XMS-Cloud to specify the initial settings for your APs. A Guided Tour will walk you through the basic steps of creating a profile containing

configuration settings, including creating SSIDs and firewall/application control rules. Once the installed AP has Internet connectivity, it will automatically contact Xirrus for cloud-based zero-touch provisioning per your settings, install the latest applicable license, and upgrade the AP to the latest software version as appropriate.

- ◆ XMS-Enterprise—detects and provisions new Xirrus devices deployed in your network. Create and configure a default profile for newly added APs, then set up discovery for the APs' subnetwork. New devices will automatically receive the configuration defined in the default profile.

If you are not using XMS, please see the *Xirrus Wireless AP User's Guide* to configure the AP manually via the Express Setup menu. The User Guide is available from <http://support.xirrus.com> (login required). Select the Libraries tab and click the *ArrayOS - XR Platform Latest Release* link.

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Using the Reset Button

The reset button returns the AP to factory default settings while rebooting. It is located on the bottom of the AP, just above the serial number/bar code. Use the reset button as follows:

- ◆ Unplug the cable from the **GIG1/PoE** port.
- ◆ Press the reset button all the way (there should be a faint click) and hold it.
- ◆ Plug the cable back in and continue to keep the button pressed for 10 seconds. This triggers the factory default reset during the boot process.



Appendix C: Notices (XA, XD and XR500/600 Series Only)



This Appendix contains Notices, Warnings, and Compliance information for the XA, XD and XR500/600 Series only.

For Notices, Warnings, and Compliance information for outdoor products, please see the Quick Installation Guide for that product.

For Notices, Warnings, and Compliance information for XR-320 and X2-120, please see the X2 and XR300 Series Notices and Regulatory Guide.

For Notices, Warnings, and Compliance information for all other APs, please see “Notices (XR-1000 to XR-6000 Indoor Models)” on page 571.

This appendix contains the following information:

- **“Notices” on page 553**
- **“EU Directive 1999/5/EC Compliance Information” on page 562**
- **“Compliance Information (Non-EU)” on page 569**
- **“Safety Warnings” on page 570**
- **“Translated Safety Warnings” on page 571**
- **“Software License and Product Warranty Agreement” on page 572**
- **“Hardware Warranty Agreement” on page 572**

Notices

Wi-Fi Alliance Certification



www.wi-fi.org

FCC Notice for XD4-240 (XD4240)

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 a 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.

FCC Notice for All Other Devices Covered by This Appendix

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 RF 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 safety measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the 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 wireless technician for help.

For All Devices Covered by This Appendix

The rest of the information in this Appendix applies to all Xirrus XA, XD and XR500/600 Series APs, except as noted.

! *FCC 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, with operation 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 unwanted operation.

For all models available in the USA/Canada market, only channels 1~11 can be operated in the 2.4GHz band. Selection of other channels is not possible.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

This device is restricted for indoor use.

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

IMPORTANT NOTE: FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To ensure compliance with FCC and Industry Canada RF exposure requirements, this device must be installed in a location where the antennas of the device will have a minimum distance of at least 30 cm (12 inches) from all persons, except that XD2 models must have a minimum distance of at least 20 cm (8 inches) from all persons, and the antennas of XA4 models must have a minimum distance of at least 34 cm (13.6 inches) from all persons. Using higher gain antennas and types of antennas not certified for use with this product is not allowed. The device shall not be co-located with another transmitter.

High Power Radars

High power radars are allocated as primary users (meaning they have priority) in the 5250MHz to 5350MHz and 5650MHz to 5850MHz bands. These radars could cause interference and/or damage to LE-LAN devices.

Non-Modification Statement

Unauthorized changes or modifications to the device are not permitted. Use only the supplied internal antenna, or external antennas supplied by the manufacturer. Modifications to the device will void the warranty and may violate FCC regulations.

Cable Runs for Power over Ethernet (PoE)

The AP must be connected to PoE networks without routing cabling to the outside plant—this ensures that cabling is not exposed to lightning strikes or possible cross over from high voltage.

Battery Warning

- ! *Caution! The AP contains a battery which is not to be replaced by the customer. Danger of Explosion exists if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.*

UL Statement

Use only with listed ITE product.

Industry Canada Statement (XA, XD Series)

This device complies with Industry Canada license-exempt RSS standards (RSS 247), and standards for Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSs) and License-Exempt Local Area Network (LE-LAN) Devices. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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.

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

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.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with IC multi-transmitter product procedures.

Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionnement en association avec une autre antenne ou transmetteur.

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 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.

Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

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 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

For indoor use only.

Pour une utilisation en intérieur uniquement.

IMPORTANT NOTES (XA, XD Series):

IC Radiation Exposure Statement:

To ensure compliance with Industry Canada RF exposure requirements, this device must be installed in a location where the antennas of XD Series devices will have a minimum distance of at least 30 cm (12 inches) from all persons; for XA4 models the minimum distance from antennas is 34 cm (13.6 inches). Using higher

gain antennas and types of antennas not certified for use with this product is not allowed. The device shall not be co-located with another transmitter.

Installez l'appareil en veillant à conserver une distance d'au moins 30 cm (pour XA4: 34 cm) entre les éléments rayonnants et les personnes. Cet avertissement de sécurité est conforme aux limites d'exposition définies par la norme CNR-102 et relative aux fréquences radio.

External Antennas (for XA4 only)

This radio transmitter (IC: 5428A - XDR240, IC: 5428A - XDR241) 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.

Le présent émetteur radio (IC: 5428A - XDR240, IC: 5428A - XDR241) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal 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.

IC: 5428A - XDR240

Ant.	Brand	Model Name (P/N)	Antenna Type	Connector	Gain (dBi)	
					2.4GHz	5GHz
1	WNC	EW2458-02	Dipole Antenna	Reversed-SMA	2	3
2	Laird	PDQ24499	Directional Antenna	Reversed-SMA	8.6	9.4

IC: 5428A - XDR241

Ant.	Brand	Model Name (P/N)	Antenna Type	Connector	Gain (dBi)
					5GHz
1	WNC	EW2458-02	Dipole Antenna	Reversed-SMA	3
2	Laird	PDQ24499	Directional Antenna	Reversed-SMA	9.4

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 doit se conformer à la limite de p.i.r.e.

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.

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.

Industry Canada Statement (except for XA4 and XD Series)

This device complies with RSS-210 of the Industry Canada 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.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet 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:

(i) 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;

(ii) high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

When operating the XR-600 Series in the band 5250-5350 MHz with a maximum e.i.r.p. greater than 200 mW in Canada, please adjust antenna/EUT to comply with the following e.i.r.p. elevation mask, where θ is the angle above the local horizontal plane (of the Earth) as shown below:

(i) -13 dB(W/MHz) for $0^\circ \leq \theta < 8^\circ$

(ii) -13 - 0.716 (θ -8) dB(W/MHz) for $8^\circ \leq \theta < 40^\circ$

(iii) -35.9 - 1.22 (θ -40) dB(W/MHz) for $40^\circ \leq \theta \leq 45^\circ$

(iv) -42 dB(W/MHz) for $\theta > 45^\circ$

Avertissement:

(i) les dispositifs fonctionnant dans la bande 5 150-5 250 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;

(ii) 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 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

IMPORTANT NOTE (Series other than XA and XD):

IC Radiation Exposure Statement:

To ensure compliance with Industry Canada RF exposure requirements, this device must be installed in a location where the antennas of the device will have a minimum distance of at least 30 cm (12 inches) from all persons. Using higher gain antennas and types of antennas not certified for use with this product is not allowed. The device shall not be co-located with another transmitter.

Installez l'appareil en veillant à conserver une distance d'au moins 30 cm entre les éléments rayonnants et les personnes. Cet avertissement de sécurité est conforme aux limites d'exposition définies par la norme CNR-102 at relative aux fréquences radio.

EU Directive 1999/5/EC Compliance Information



This Appendix contains Notices, Warnings, and Compliance information for the XA, XD and XR500/600 Series only. For other models, see the notes at the beginning of this appendix.

This section contains compliance information for the Xirrus Wireless AP family of products. The compliance information contained in this section is relevant to the European Union and other countries that have implemented the EU Directive 1999/5/EC.

Declaration of Conformity

- Cesky [Czech]** Toto zahzení je v souladu se základními požadavky a ostatními odpovídajícími ustanoveními Směrnice 1999/5/EC.
- Dansk [Danish]** Dette udstyr er i overensstemmelse med de væsentlige krav og andre relevante bestemmelser i Direktiv 1999/5/EF.
- Deutsch [German]** Dieses Gerät entspricht den grundlegenden Anforderungen und den weiteren entsprechenden Vorgaben der Richtlinie 1999/5/EU.
- Eesti [Estonian]** See seande vastab direktiivi 1999/5/EU oluliste nõuetele ja teistele asjakohastele sätetele.
- English** This equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
- Español [Spain]** Este equipo cumple con los requisitos esenciales así como con otras disposiciones de la Directiva 1999/5/CE.
- Ελληνική [Greek]** Αυτός ο εξοπλισμός είναι σε συμμόρφωση με τις ουσιαστικές απαιτήσεις και άλλες σχετικές διατάξεις της Οδηγίας 1999/5/EC.

- Français [French]** Cet appareil est conforme aux exigences essentielles et aux autres dispositions pertinentes de la Directive 1999/5/EC.
- Íslenska [Icelandic]** Þetta tæki er samkvæmt grunnkröfum og öðrum viðeigandi ákvæðum Tilskipunar 1999/5/EC.
- Italiano [Italian]** Questo apparato é conforme ai requisiti essenziali ed agli altri principi sanciti dalla Direttiva 1999/5/CE.
- Latviski [Latvian]** Šī iekārta atbilst Direktīvas 1999/5/EK būtiskajā prasībām un citiem ar to saistītajiem noteikumiem.
- Lietuvių [Lithuanian]** Šis įrenginys tenkina 1999/5/EB Direktyvos esminius reikalavimus ir kitas šios direktyvos nuostatas.
- Nederlands [Dutch]** Dit apparant voldoet aan de essentiële eisen en andere van toepassing zijnde bepalingen van de Richtlijn 1999/5/EC.
- Malti [Maltese]** Dan l-apparant huwa konformi mal-htigiet essenzjali u l-provedimenti l-oħra rilevanti tad-Direttiva 1999/5/EC.
- Magyar [Hungarian]** Ez a készülék teljesíti az alapvető követelményeket és más 1999/5/EK irányelvben meghatározott vonatkozó rendelkezéseket.
- Norsk [Norwegian]** Dette utstyret er i samsvar med de grunnleggende krav og andre relevante bestemmelser i EU-direktiv 1999/5/EF.
- Polski [Polish]** Urządzenie jest zgodne z ogólnymi wymaganiami oraz szczególnymi mi warunkami określony mi Dyrektywą. UE:1999/5/EC.
- Português [Portuguese]** Este equipamento está em conformidade com os requisitos essenciais e outras provisões relevantes da Directiva 1999/5/EC.

- Slovensko [Slovenian]** Ta naprava je skladna z bistvenimi zahtevami in ostalimi relevantnimi popoji Direktive 1999/5/EC.
- Slovensky [Slovak]** Toto zariadenie je v zhode so základnými požiadavkami a inými príslušnými nariadeniami direktiv: 1999/5/EC.
- Suomi [Finnish]** Tämä laite täyttää direktiivin 1999/5//EY olennaiset vaatimukset ja on siinä asetettujen muiden laitetta koskevien määräysten mukainen.
- Svenska [Swedish]** Denna utrustning är i överensstämmelse med de väsentliga kraven och andra relevanta bestämmelser i Direktiv 1999/5/EC.

Assessment Criteria

The following standards were applied during the assessment of the product against the requirements of the Directive 1999/5/EC:

- Radio: EN 301 893 and EN 300 328 (if applicable)
- EMC: EN 301 489-1 and EN 301 489-17
- Safety: EN 60950, EN 62311 and EN 50385

CE Marking

For the Xirrus Wireless AP, the CE mark and Class-2 identifier opposite are affixed to the equipment and its packaging:



Russian Certification Marking

For the Xirrus XR-500, XR-520H, XR-2000, and XR-4000 Series Wireless APs, the approval mark is affixed to the equipment:



WEEE Compliance



- Natural resources were used in the production of this equipment.
- This equipment may contain hazardous substances that could impact the health of the environment.
- In order to avoid harm to the environment and consumption of natural resources, we encourage you to use appropriate take-back systems when disposing of this equipment.
- The appropriate take-back systems will reuse or recycle most of the materials of this equipment in a way that will not harm the environment.
- The crossed-out wheeled bin symbol (in accordance with European Standard EN 50419) invites you to use those take-back systems and advises you not to combine the material with refuse destined for a land fill.
- If you need more information on collection, re-use and recycling systems, please contact your local or regional waste administration.
- Please contact Xirrus for specific information on the environmental performance of our products.

National Restrictions

In the majority of the EU and other European countries, the 2.4 GHz and 5 GHz bands have been made available for the use of Wireless LANs. The following table provides an overview of the regulatory requirements in general that are applicable for the 2.4 GHz and 5 GHz bands.

Frequency Band (MHz)	Max Power Level (EIRP) (mW)	Indoor	Outdoor
2400–2483.5	100	X	X **
5250–5350 *	200	X	N/A
5470–5725*	1000	X	X

**Dynamic frequency selection and Transmit Power Control is required in these frequency bands.*

***France is indoor use only in the upper end of the band.*

The requirements for any country may change at any time. Xirrus recommends that you check with local authorities for the current status of their national regulations for both 2.4 GHz and 5 GHz wireless LANs.

The following countries have additional requirements or restrictions than those listed in the above table:

Belgium

The Belgian Institute for Postal Services and Telecommunications (BIPT) must be notified of any outdoor wireless link having a range exceeding 300 meters. Xirrus recommends checking at www.bipt.be for more details.

Draadloze verbindingen voor buitengebruik en met een reikwijdte van meer dan 300 meter dienen aangemeld te worden bij het Belgisch Instituut voor postdiensten en telecommunicatie (BIPT). Zie www.bipt.be voor meer gegevens.

Les liaisons sans fil pour une utilisation en extérieur d'une distance supérieure à 300 mètres doivent être notifiées à l'Institut Belge des services Postaux et des Télécommunications (IBPT). Visitez www.bipt.be pour de plus amples détails.

Greece

A license from EETT is required for the outdoor operation in the 5470 MHz to 5725 MHz band. Xirrus recommends checking www.eett.gr for more details.

Η δη ιουργβάικτ ωνεξωτερικο ρουστη ζ νησυ νοτ των 5470–5725 MHz ε ιτρ ετάιωνο ετάά όάδειά της EETT, ου ορηγεβτάι στερά ά ό σ φωνη γν η του ΓΕΕΘΑ. ερισσότερες λε τομ ρειεωστο www.eett.gr

Italy

This product meets the National Radio Interface and the requirements specified in the National Frequency Allocation Table for Italy. Unless this wireless LAN product is operating within the boundaries of the owner's property, its use requires a "general authorization." Please check with www.comunicazioni.it/it/ for more details.

Questo prodotto é conforme alla specifiche di Interfaccia Radio Nazionali e rispetta il Piano Nazionale di ripartizione delle frequenze in Italia. Se non viene installato all'interno del proprio fondo, l'utilizzo di prodotti wireless LAN richiede una "autorizzazione Generale." Consultare www.comunicazioni.it/it/ per maggiori dettagli.

Norway, Switzerland and Liechtenstein

Although Norway, Switzerland and Liechtenstein are not EU member states, the EU Directive 1999/5/EC has also been implemented in those countries.

Calculating the Maximum Output Power

The regulatory limits for maximum output power are specified in EIRP (radiated power). The EIRP level of a device can be calculated by adding the gain of the antenna used (specified in dBi) to the output power available at the connector (specified in dBm).

Integrated Antennas

Xirrus Wireless APs (except for XA4 APs) employ integrated antennas that cannot be removed and which are not user accessible. Nevertheless, as regulatory limits are not the same throughout the EU, users may need to adjust the conducted power setting for the radio to meet the EIRP limits applicable in their country or region. Adjustments can be made from the product's management interface—either Web Management Interface (WMI) or Command Line Interface (CLI).

External Antennas (for XA4 only)

- **WARNING:** In order to comply with radio frequency (RF) exposure limits, the antennas for this product should be positioned no less than 34 cm from your body or nearby persons.
- **WARNING:** Do not locate the antenna near overhead power lines or other electric light or power circuits, or where it can come into contact with such circuits. When installing the antenna, take extreme care not to come into contact with such circuits, because they may cause serious injury or death. For proper installation and grounding of the antenna, please refer to national and local codes (for example, U.S.:NFPA 70, National Electrical Code, Article 810, Canada: Canadian Electrical Code, Section 54).
- 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.

Operating Frequency

The operating frequency in a wireless LAN is determined by the access point. As such, it is important that the access point is correctly configured to meet the local regulations. See [National Restrictions](#) in this section for more information.

If you still have questions regarding the compliance of Xirrus products or you cannot find the information you are looking for, please contact us at:

Xirrus, Inc.
2101 Corporate Center Drive

Thousand Oaks, CA 91320

USA

Tel: 1.805.262.1600

1.800.947.7871 Toll Free in the US

Fax: 1.866.462.3980

www.xirrus.com

Compliance Information (Non-EU)



This Appendix contains Notices, Warnings, and Compliance information for the XA, XD and XR500/600 Series only. For other models, see the notes at the beginning of this appendix.

This section contains compliance information for the Xirrus Wireless AP family of products. The compliance information contained in this section is relevant to the listed countries (outside of the European Union and other countries that have implemented the EU Directive 1999/5/EC).

Declaration of Conformity—Brazil

For XR-500 Only

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

**ANATEL**
Agência Nacional de Telecomunicações
2402-13-5402



(01) 0 7898945098205

Declaration of Conformity

Mexico XR-520: Dictamen #: 1402D00742
XR-600: Dictamen #: 1402CE08098



XR-520: Cofetel Cert #: RCPXIXR13-1003

Thailand This telecommunication equipment conforms to NTC technical requirement.

Safety Warnings



This Appendix contains Notices, Warnings, and Compliance information for the XA, XD and XR500/600 Series only. For other models, see the notes at the beginning of this appendix.

Safety Warnings

Read all user documentation before powering this device. All Xirrus interconnected equipment should be contained indoors. This product is not suitable for outdoor operation. Please verify the integrity of the system ground prior to installing Xirrus equipment. Additionally, verify that the ambient operating temperature does not exceed 50°C (40°C for the XR500/600 Series).

Circuit Breaker Warning

The indoor wireless AP relies on the building's installation for over current protection. Ensure that a fuse or circuit breaker no larger than 120 VAC, 15A (U.S.) or 240 VAC, 10A (International) is used on all current-carrying conductors.

- ! **Explosive Device Proximity Warning**
Do not operate the wireless AP near unshielded blasting caps or in an explosive environment unless the device has been modified to be especially qualified for such use.
- ! **Lightning Activity Warning**
Do not work on the Wireless AP or connect or disconnect cables during periods of lightning activity.

Translated safety warnings appear below.

Translated Safety Warnings



This Appendix contains Notices, Warnings, and Compliance information for the XA, XD and XR500/600 Series only. For other models, see the notes at the beginning of this appendix.

Avertissements de Sécurité

- ! **Sécurité**
Lisez l'ensemble de la documentation utilisateur avant de mettre cet appareil sous tension. Tous les équipements Xirrus interconnectés doivent être installés en intérieur. Ce produit n'est pas conçu pour être utilisé en extérieur. Veuillez vérifier l'intégrité de la terre du système avant d'installer des équipements Xirrus. Vérifiez également que la température de fonctionnement ambiante n'excède pas 50°C (40°C pour XR-520).
- ! **Proximité d'appareils explosifs**
N'utilisez pas les Wireless APs à proximité d'amorces non blindées ou dans un environnement explosif, à moins que l'appareil n'ait été spécifiquement modifié pour un tel usage.

Foudre

N'utilisez pas les Wireless APs et ne branchez pas ou ne débranchez pas de câbles en cas de foudre.

Disjoncteur

Les Wireless APs dépend de l'installation du bâtiment pour ce qui est de la protection contre les surintensités. Assurez-vous qu'un fusible ou qu'un disjoncteur de 120 Vca, 15 A (États-Unis) ou de 240 Vca, 10 A (International) maximum est utilisé sur tous les conducteurs de courant.

Software License and Product Warranty Agreement

For Software License and Product Warranty information, please see <http://www.xirrus.com/support/eula/>.

Hardware Warranty Agreement

For Hardware Warranty information, please see <http://www.xirrus.com/support/eula/>.