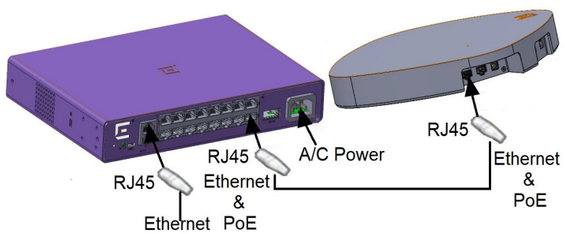
Extreme Wireless 802.11be

Wi-Fi 7 Indoor AP5020 Solution

Overview of AP5020

The AP5020 is a 802.11ax Wi-Fi 7E, 6 GHz, 5 GHz band, and 2.4 GHz band AP for high-density indoor environments. The AP supports IEEE 802.11be Orthogonal Frequency-Division Multiple Access (OFDMA) multi-user access. The AP can be installed on a ceiling rail, on a non-standard ceiling, or on a wall.



Technical Specifications

The AP5020 access point has the following features and specifications.

Radios
- 3 radios (2.4GHz, 5 GHz, and 6 GHz).
- 2 IoT radios (Thread, Zigbee®, Bluetooth 5.4 Low Energy, IEEE802.15.4).

Ports
Two Ethernet ports with RJ45 connectors:
- 1 x 100/1,000/2,500/5,000/10,000 Mbps auto-sensing link speed Ethernet port, PoE PD.
- 1 x 100/1,000/2,500/5,000 Mbps autosensing link speed Ethernet port, PoE PD in or 802.3af 15.4W PSE out mode (requires 802.3bt on Eth0).

One USB 2.0 port:
- Type A, 5V/400mA with PoE 802.3at or 5V/1,000mA with PoE 802.3bt

Security
- One Kensington security slot.
- Trusted Platform Module (TPM).

Power Options
- Power draw: 802.3at PoE: typical 21W, max. 25.5W (802.3at profile) without PoE out or USB
- Power draw: 802.3bt: max. 35W with 5W USB
- 12V DC/3A. DC power has priority when both DC and PoE power sources are available.
- PoE failover or optional PSE out supported

Physical Dimensions
- 10.16. in. x10.16 in. x 1.62 in. (258mm x 258mm x 41mm).
- Weight: 3.57 lbs (1.62 kgs).

Internal Antenna:
- (4) Dual band 2.4 GHz and 5 GHz
- (4) Single band 6 GHz
- (2) 5 GHz/6 GHz sensor
- (3) IoT sensor

Temperature:
- Operating: 0°C to 50°C (0°F to 122°F)
- Storage: 0°C to 70°C (32°F to 158°F)
- Humidity: 0% to 95% (non-condensing)

Enclosure: Plastic Top, Aluminum Bottom

Regulatory and Compliance Information Safety Guidelines

This section contains notices that are intended to protect your personal safety and prevent damage to the equipment.

Electrical Hazard: Only qualified personnel should perform installation procedures. Within the context of the safety notes in this documentation, qualified persons are defined as persons who are authorized to commission, ground and label devices, systems, and circuits in accordance with established safety practices and standards. A qualified person understands the requirements and risks involved with installing electrical equipment in accordance with national codes.

Federal Communications Commission (FCC) Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, it 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 the one the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)This device may not cause harmful interference, and (2)This device must accept any interference received, including interference that may cause undesired operation.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.
For 5925-7125 MHz transmitter operation in Low Power Indoor mode:
1. FCC regulations restrict the operation of this device to indoor use only.
2. The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet in the 5.925-6.425 GHz band.
3. Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

For 5925-6425 MHz and 6525-6875 MHz transmitter operation in Standard power access point mode:
1. The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft.
2. Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

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

Warning: FCC Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 54 cm between the radiator and your body.

United Kingdom (UK) and European Union (EU) Radiation Warning Statement

Warning: EU/UK 20 cm radiation distance This equipment complies with EU/UK radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Selling Countries:

AT	BE	BG	HR	CY	CZ	DK
EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL
PT	RO	SK	SI	ES	SE	UK(NI)

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.
The device is restricted to indoor use only when operating in the 5945 to 6425MHz frequency range.
The frequency and the maximum transmitted power in EU and UK are listed below:

AP5020EU	AP5020UK
2412-2472MHz: 19.98 dBm	2412-2472MHz: 19.98 dBm
2402-2480MHz (BR/EDR): 9.95 dBm	2402-2480MHz (BR/EDR): 9.95 dBm
2402-2480MHz (LE): 9.95 dBm	2402-2480MHz (LE): 9.95 dBm
5180-5240MHz: 22.97 dBm	5180-5240MHz: 22.97 dBm
5260-5320MHz: 22.98 dBm	5260-5320MHz: 22.98 dBm
5500-5700: 29.97 dBm	5500-5700: 29.97 dBm
5745-5825MHz: 13.96 dBm	5745-5825MHz: 13.96 dBm
5955-6415MHz: 22.98 dBm	5925-6425 MHz: 22.9dBm

Extreme Networks UK Address

Extreme Networks, UK Ltd.
250 Longwater Avenue Green Park
1st Floor,
Reading, UK

Extreme Networks EU Importer Address

Extreme Networks, Ireland Ops Ltd.
Rineanna House Shannon Industrial Estate
Shannon, V14CA36, Ireland

Industry Canada Notice

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

Warning: 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: 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.

Avertissement: 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.

This device complies with ISED's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.
Low power indoor access point operation subject to following conditions:
1. Operation shall be limited to indoor use only.
2. Operation on oil platforms, automobiles, trains, maritime vessels and aircraft shall be prohibited except for on large aircraft flying above 3,048 m (10,000 ft)

Standard power access points subject to following conditions:
1. Operation on oil platforms, automobiles, trains, maritime vessels and aircraft shall be prohibited.
2. The antenna height shall be determined by the installer or operator of the standard-power access point or fixed client device, or by automatic means. This information shall be stored internally in the device. Provision of accurate device information is mandatory.

Le présent appareil est conforme aux CNR d' ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.
Fonctionnement du point d'accès intérieur à faible consommation sous réserve des conditions suivantes :
1. Le fonctionnement doit être limité à une utilisation en intérieur uniquement.
2. L'exploitation sur les plates-formes pétrolières, les automobiles, les trains, les navires maritimes et les avions est interdite, sauf sur les gros avions volant au-dessus de 3 048 m (10 000 ft).

Points d'accès à l'alimentation standard soumis aux conditions suivantes :
1. L'exploitation sur les plates-formes pétrolières, les automobiles, les trains, les navires et les avions est interdite.
2. La hauteur de l'antenne doit être déterminée par l'installateur ou l'opérateur du point d'accès à puissance standard ou de l'appareil client fixe, ou par des moyens automatiques. Ces informations doivent être stockées en interne dans l'appareil. La fourniture d'informations précises sur l'appareil est obligatoire.

Country of Manufacture

China
Manufacturer: Sercomm Corporation
Address: No.8, Tangzhuang Road, Suzhou Industrial Park, Jiangsu, China.

Philippines
Manufacturer: Sercomm Philippines, Inc
Address: Lot 4, Innovation Drive, CIP 1, Canlubang, 4027, City of Calamba Laguna, Philippines

Taiwan
Manufacturer: Sercomm Chunan
Address: No. 81, YuYi Road, Chu-Nan Miao-Li 350, Taiwan

Thailand

1. Regulatory Statement:
เครื่องโทรคมนาคมและอุปกรณ์นี้มีความสอดคล้องตามมาตรฐานหรือข้อกำหนดทางเทคนิคของ กสทช.
2. RF Exposure Statement:
เครื่องวิทยุคมนาคมนี้มีระดับการแผ่คลื่นแม่เหล็กไฟฟ้าสอดคล้องตามมาตรฐานความปลอดภัยต่อสุขภาพของมนุษย์จากการใช้เครื่องวิทยุคมนาคมที่คณะกรรมการกิจการโทรคมนาคมแห่งชาติประกาศกำหนด

SAR Statement

เครื่องวิทยุคมนาคมนี้ ได้รับยกเว้น ไม่ต้องได้รับใบอนุญาตให้มี ใช้ซึ่งเครื่องวิทยุคมนาคมหรือตั้งสถานีวิทยุคมนาคมตามประกาศ กสทช. เรื่อง เครื่องวิทยุคมนาคม และสถานีวิทยุคมนาคมที่ได้รับยกเว้นไม่ต้องได้รับใบอนุญาต วิทยุคมนาคมตามพระราชบัญญัติวิทยุคมนาคม พ.ศ. 2498

กสทช. | โทรคมนาคม
กำกับดูแลเพื่อประชาชน
Call Center 1200 (โทรฟรี)

Japan

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取扱説明書に従って正しい取り扱いをして下さい。

VCCI－B

Brazil

1. Este produto está homologado pela ANATEL, de acordo com os procedimentos regulamentados pela Resolução nº. 242/2000 e atende aos requisitos técnicos aplicados. Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados. Para maiores informações, consulte o site da ANATEL – www.anatel.gov.br.

2. O uso deste equipamento é restrito a ambientes fechados e proibido em plataformas petrolíferas, carros, trens, embarcações e no interior de aeronaves abaixo de 3.048 m (10.000 pés).

Declaration of Conformity in Language of the European Community

English	Hereby, Extreme Networks, declares that the radio equipment type (AP5020) is in compliance with Directive 2014/53/EU. For full text of the EU Declaration of Conformity, please contact Extreme Regulatory Compliance at compliancerequest@extremenetworks.com
Finnish	Täten Extreme Networks vakuuttaa, että Radio laite tyyppi (AP5020) on direktiivin 2014/53/EU mukainen.EU vaatimustenmukaisuusvakuutuksen täydellisestä tekstistä ota yhteyttä äärimmäisiin viranomais säädöksiin osoitteessa compliancerequest@extremenetworks.com
Dutch	Extreme Networks verklaart hierbij dat het type radioapparatuur (AP5020) in overeenstemming is met richtlijn 2014/53/EU.Voor de volledige tekst van de EU-conformiteitsverklaring u contact opnemen met extreme regelgeving op compliancerequest@extremenetworks.com
French	Par la présente, Extreme Networks déclare que le type d'équipement radio (AP5020) est conforme à la directive 2014/53/UE.Pour le texte intégral de la Déclaration de conformité de l'UE, veuillez communiquer avec Extreme Regulatory Compliance à compliancerequest@extremenetworks.com
Swedish	Härmed intygar Extreme Networks att radioutrustning typ (AP5020) överensstämmer med direktiv 2014/53/EU.För fullständig text av EU-försäkran om överensstämmelse, vänligen kontakta Extreme regelefterlevnad på compliancerequest@extremenetworks.com
Danish	Herved erklærer Extreme Networks, at radioudstyrs typen (AP5020) er i overensstemmelse med direktiv 2014/53/EU.For den fulde ordlyd af EU-overensstemmelseserklæringen bedes du kontakte Extreme Regulatory Compliance på compliancerequest@extremenetworks.com
German	Dabei erklärt Extreme Networks, dass der Funkgerätetyp (AP5020) mit der Richtlinie 2014/53/EU im Einklang steht.Für den vollständigen Wortlaut der EU-Konformitätserklärung wenden Sie sich bitte an extreme Regulatory Compliance unter compliancerequest@extremenetworks.com
Greek	Με την παρούσα, ακραία δίκτυα δηλώνουν ότι ο τύπος του ραδιοεξοπλισμού (AP5020) συμμορφώνεται με την οδηγία 2014/53/ΕΕ.Για το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ, παρακαλούμε επικοινωνήστε με την ακραία κανονιστική συμμόρφωση στο compliancerequest@extremenetworks.com
Icelandic	Hérlendis, Extreme Networks, lýsa því yfir að útvarpsbúnaðargerðin (AP5020) sé í samræmi við tilskipun 2014/53/ESB.Fyrir fullan texta í ESB yfirlýsingu um samræmi, vinsamlegast hafðu samband við Extreme Reglufylgni á compliancerequest@extremenetworks.com
Italian	Di conseguenza, Extreme Networks dichiara che il tipo di apparecchiature radio (AP5020) è conforme alla direttiva 2014/53/EU.Per il testo integrale della Dichiarazione di conformità dell'UE, contattare Extreme Regulatory Compliance presso compliancerequest@extremenetworks.com
Spanish	Por la presente, Extreme Networks declara que el tipo de equipo radioeléctrico (AP5020) cumple con la Directiva 2014/53/UE.Para obtener el texto completo de la Declaración de conformidad de la UE, póngase en contacto con Extreme Regulatory Compliance en compliancerequest@extremenetworks.com
Portuguese	Por este meio, a Extreme Networks declara que o tipo de equipamento de rádio (AP5020) está em conformidade com a Diretiva 2014/53/UE.Para obter o texto integral da Declaração de Conformidade da UE, contacte o cumprimento regulamentar extremo em compliancerequest@extremenetworks.com
Maltese	B ' dan, netwerks estremi, jiddikjara li t-tip ta ' tagħmir tar-radju (AP5020) huwa konformi mad-Direttiva 2014/53/UE.Għat-test sħiħ tad-dikjarazzjoni ta ' konformità tal-UE, jekk jogħġbok ikkuntattja lill-konformità regolatorja compliancerequest@extremenetworks.com

Mexico

La operacion de este equipo esta sujeta a las siguientes dos condiciones:

1 es posible que este equipo o dispositivo no cause interferencia perjudicial y

2 este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operacion no deseada.

Taiwan

取得審驗證明之低功率射頻器材，非經核准，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。低功率射頻器材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。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材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。
應避免影響附近雷達系統之操作。

China Compliance Statement

核准编号CMIIT ID在产品铭牌位置标识 。 6 GHz is only available in specific countries. It is not available in China. 6 GHz 仅在特定国家可用。在中国不可用。

Taiwan RoHs Statement

單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr^{+6})	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
金屬零件 (Metal Parts)	○	○	○	○	○	○
電路模組 (Circuit Modules)	–	○	○	○	○	○
電纜及電纜組件 (Cables & Cable Assemblies)	○	○	○	○	○	○
塑料和聚合物零件 (Plastic and Polymeric parts)	○	○	○	○	○	○

備考1.〝超出0.1 wt %〞及〝超出0.01 wt %〞係指限用物質之百分比含量超出百分比含量基準值。
Note 1："Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.

備考2.〝○〞係指該項限用物質之百分比含量未超出百分比含量基準值。
Note 2："○" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考3.〝—〞係指該項限用物質為排除項目。
Note 3：The "—" indicates that the restricted substance corresponds to the exemption.

European Waste Electrical and Electronic Equipment (WEEE) Notice

In accordance with Directive 2012/19/EU of the European Parliament on waste electrical and electronic equipment (WEEE):
1. The symbol above indicates that separate collection of electrical and electronic equipment is required.
2. When this product has reached the end of its serviceable life, it cannot be disposed of as unsorted municipal waste. It must be collected and treated separately.
3. It has been determined by the European Parliament that there are potential negative effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment.
It is the users' responsibility to utilize the available collection system to ensure WEEE is properly treated. Information on the product take back program, the treatment and recycling facilities, and detailed information regarding the components, materials, and location of hazardous substances is available upon request free of charge by contacting Green@extremenetworks.com.

Legal

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Extreme networks

AP5020

REGULATORY AND COMPLIANCE GUIDE

Scan to Download the ExtremeCloud IQ Companion Mobile Application

Commission, monitor, and troubleshoot devices easily with **ExtremeCloud IQ** Companion Mobile Application (supported on iOS and Android).

Use your mobile device camera to scan the serial number, capture installation images, assign or change device location, and network policy. The **ExtremeCloud IQ** Companion Mobile Application enables you to access the device CLI for troubleshooting and view device and client status.

ExtremeCloud IQ Companion Android Mobile Application

ExtremeCloud IQ Companion iOS Mobile Application

Scan for Product Support Details

ExtremeCloud IQ Companion Mobile Application Onboarding

Documentation

Product Videos

P/N 9038029-00 Rev AF