Extreme Wireless 802.11be
Wi-Fi 7 Indoor AP5022FX Solution

Overview of AP5022FX
The AP5022FX is an indoor Quad radio Wi-Fi 7 (4x4:4) AP, 6 GHz, 5 GHz band, and 2.4 GHz. It has a dedicated full time sensor (2x2), dual IOT radio with integrated Bluetooth, Zigbee, and Thread capabilities, dual 5 GHz, dual 6 GHz, Multi-Rate ports, internal antennas. The AH-ACC-BKT-AX-TB mount is included. The AP can be installed on a ceiling rail, on a non-standard ceiling, or on a wall.

Technical Specifications

The AP5022FX access point has the following features and specifications.

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

Ports
Two Ethernet ports with RJ45 connectors:
- ETH0: 100/1,000/2,500/5,000/10,000 Mbps auto-sensing link speed Ethernet port, PoE PD.
- ETH1: 100/1,000/2,500/5,000/10,000 Mbps auto-sensing 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/1A 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
  - Max. 35W with 5W USB and w/o PSE out
  - Max. 60W with 5W USB and PSE out
- 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
- 10.6. in. x 10.6 in. x 1.81 in. (269.24mm x 269.24mm x 45.97mm)
- Weight: 3.57 lbs (1.62 kgs).

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

Temperature:
- Operating: -20°C to 50°C (-7°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

Note: South Korea, Mexico, Taiwan, and Brazil require the use of Cat6 shielded cable.

Supported Antennas

The following antennas are supported on the AP5022FX:
- **AI-TP05360**: MIMO- Directional Panel Antenna, 4.4dBi (2.4 and 5GHz UNII-1,UNII-2A), 5.2 dBi (5GHz UNII-2C), 5 dBi (5G UNII-3), 4.7dBi (6GHz UNII-7) and 2.8dBi (6GHz UNII-8)
- **AI-TQ08055**: Sector Antenna , 7 dBi (2.4GHz) and 6 dBi (5 and 6Ghz)
- **AIO-HQ17020**: MIMO- Directional Panel Antenna ,17 dBi (5 and 6GHz)
- **AIO-DQ15021**-RPSMA: MIMO- Directional Panel Antenna, 11.1 dBi (2.4GHz) and 15 dBi (5GHz)
- **AI-TS06360**: Dipole Antenna, 3.04 dBi (BT and 802.15.4)
- **AIO-HM25007** (For FCC/IC only): Spherical lens, 16.12dBi (UNII-1), 16.52dBi (UNII-2A), 16.92dBi (UNII-2C), 16.52 dBi (UNII-3), 13.29 dBi (UNII-5), 13.59 dBi(UNII-6), 13.69 dBi (UNII-7), 13.89 dBi(UNII-8)

See the *AP5022, AP5022S6D, and AP5022FX Indoor Access Point Installation Guide* for a complete antenna list.
For WiFi 6GHz Standard power access point: 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.

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 **72 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:

AP5022FX EU	AP5022FX UK
2402-2480MHz (BT): 9.88 dBm	2402-2480MHz (BT): 9.88 dBm
2405-2480MHz (802.15.4): 9.93 dBm	2405-2480MHz (802.15.4): 9.93 dBm
2412-2472 MHz: 19.99 dBm	2412-2472 MHz: 19.99 dBm
5180-5240MHz: 22.99 dBm	5180-5240MHz: 22.99 dBm
5260-5320MHz: 22.99 dBm	5260-5320MHz: 22.99 dBm
5500-5700: 29.99 dBm	5500-5700: 29.99 dBm
5745-5825MHz: 13.97 dBm	5745-5825MHz: 22.99 dBm
5955-6415MHz: 22.99 dBm	5925-6425 MHz: 22.99 dBm
6000-8500 MHz: 15.44 dBm	6000-8500 MHz: 15.44dBm

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: 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.
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 40cm between the radiator & your body.
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 40cm de distance entre la source de rayonnement et votre corps.

RSS-248 issue 3 for 6E Statement

- Devices shall not be used for control of or communications with unmanned aircraft systems.
- Devices shall not be used on oil platforms.
- Devices shall not be used on aircraft, except for the low-power indoor access points, indoor subordinate devices, low-power client devices, and very low-power devices operating in the 5925-6425 MHz band, that may be used on large aircraft as defined in the Canadian Aviation Regulations, while flying above 3,048 metres (10,000 feet).
- Operation shall be limited to indoor use only.

- Les dispositifs ne doivent pas être utilisés pour commander des systèmes d'aéronef sans pilote ni pour communiquer avec de tels systèmes.
- Les dispositifs ne doivent pas être utilisés sur les plateformes de forage pétrolier.
- Les dispositifs ne doivent pas être utilisés dans les aéronefs, à l'exception des points d'accès intérieurs de faible puissance, des dispositifs subordonnés intérieurs, des dispositifs clients de faible puissance et des dispositifs de très faible puissance fonctionnant dans la bande de 5 925 à 6 425 MHz, qui peuvent être utilisés dans les gros aéronefs tel qu'il est défini dans le Règlement de l'aviation canadien, et ce, lorsqu'ils volent à une altitude supérieure à 3 048 mètres (10 000 pieds).
- Le fonctionnement doit être limitée à une utilisation à l'intérieur seulement.

Country of Manufacture

Vietnam
Manufacturer: WNC VIETNAM CO., LTD.
Address: Land Lot CN01, Dong Van III Industrial Zone, Dong Van Ward, Ninh Binh Province, Vietnam

Taiwan
Manufacturer: WNC Corporation (S1 manufacturing site)
Address: 5 Lihsin Rd. VI, Hsinchu Science Park, Hsinchu 300, Taiwan

Thailand

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

Japan

この装置は，クラスB情報技術装置です。この装置は，家庭環境で使用することを目的としていますが，この装置がラジオやテレビジョン受信機に近接して使用されると，受信障害を引き起こすことがあります。
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 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).

O produto poderá operar na faixa de 5150-5350MHz somente em ambientes fechado (indoor).

SAR Statement

Declaration of Conformity in Language of the European Community

English	Hereby, Extreme Networks, declares that the radio equipment type (AP5022FX-WW) is in compliance with Directive 2014/53/EU and Radio Equipment Regulations 2017. For full text of the EU Declaration of Conformity, please contact Extreme Regulatory Compliance at compliancerequest@extremenetworks.com
Finnish	Täten Extreme Networks ilmoittaa, että radiolaitetyyppi (AP5022FX-WW) on EU-direktiivin 2014/53/EU ja radiolaitteiden asetusten 2017 mukainen. EU vaatimustenmukaisuusvakuutuksen täydellisestä tekstistä ota yhteyttä äärimmäisiin viranomais säädöksiin osoitteessa compliancerequest@extremenetworks.com
Dutch	Hierbij verklaart Extreme Networks dat het type radioapparatuur (AP5022FX-WW) voldoet aan Richtlijn 2014/53/EU en de Radioapparatuurverordening 2017. 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 (AP5022FX-WW) est conforme à la Directive 2014/53/UE et aux Règlements sur les équipements radio de 2017. Pour le texte intégral de la Déclaration de conformité de l'UE, veuillez communiquer avec Extreme Regulatory Compliance à compliancerequest@extremenetworks.com
Swedish	Härmed deklarerar Extreme Networks att radioutrustningstypen (AP5022FX-WW) uppfyller direktiv 2014/53/EU och radioutrustningsförordningen 2017. För fullständig text av EU-försäkran om överensstämmelse, vänligen kontakta Extreme regelefterlevnad på compliancerequest@extremenetworks.com
Danish	Hermed erklærer Extreme Networks, at radioudstyrstypen (AP5022FX-WW) er i overensstemmelse med direktivet 2014/53/EU og radioudstyrsreglerne 2017. For den fulde ordlyd af EU-overensstemmelseserklæringen bedes du kontakte Extreme Regulatory Compliance på compliancerequest@extremenetworks.com
German	Hiermit erklärt Extreme Networks, dass der Funkgerätetyp (AP5022FX-WW) den Richtlinien 2014/53/EU und den Funkgerätebestimmungen 2017 entspricht. Für den vollständigen Wortlaut der EU-Konformitätserklärung wenden Sie sich bitte an extreme Regulatory Compliance unter compliancerequest@extremenetworks.com
Greek	Με το παρόν, η Extreme Networks δηλώνει ότι ο τύπος ραδιοεξοπλισμού (AP5022FX-WW) συμμορφώνεται με την Οδηγία 2014/53/ΕΕ και τους Κανονισμούς Ραδιοεξοπλισμού 2017. Για το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ, παρακαλούμε επικοινωνήστε με την ακραία κανονιστική συμμόρφωση στο compliancerequest@extremenetworks.com
Icelandic	Hér með lýsir Extreme Networks því yfir að tegund útvarpstækis (AP5022FX-WW) uppfyllir tilskipun 2014/53/EU og reglugerðir um útvarpstæki 2017. Fyrir fullan texta í ESB yfirlýsingu um samræmi, vinsamlegast hafðu samband við Extreme Reglufylgni á compliancerequest@extremenetworks.com
Italian	Con la presente, Extreme Networks dichiara che il tipo di apparecchiatura radio (AP5022FX-WW) è conforme alla Direttiva 2014/53/UE e ai Regolamenti sulle apparecchiature radio del 2017. 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 de radio (AP5022FX-WW) cumple con la Directiva 2014/53/UE y con el Reglamento de Equipos de Radio de 2017. 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 meio deste, a Extreme Networks declara que o tipo de equipamento de rádio (AP5022FX-WW) está em conformidade com a Diretiva 2014/53/UE e com os Regulamentos de Equipamentos de Rádio de 2017. Para obter o texto integral da Declaração de Conformidade da UE, contacte o cumprimento regulamentar extremo em compliancerequest@extremenetworks.com
Malti	B'dan, Extreme Networks, tiddikjara li t-tip ta' apparat tar-radju (AP5022FX-WW) huwa skont id-Direttiva 2014/53/UE u r-Regolamenti dwar l-Apparati tar-Radjio tas-2017. 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. Se restringe el funcionamiento de este equipo solo para uso en interiores,

2. A este equipo no deben conectarse antenas externas,

3. Este equipo no debe ser resistente a condiciones climáticas adversas, no debe utilizar baterías y la fuente de alimentación debe estar conectada directamente a la toma de corriente eléctrica.

4. A este equipo no deben conectarse antenas externas,

5. Este equipo no debe ser resistente a condiciones climáticas adversas, no debe utilizar baterías y la fuente de alimentación debe estar conectada directamente a la toma de corriente eléctrica.

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。This product shall be powered by a power supply that complies with the applicable standard requirements (domestic certification). At least one recommended brand and model of the power supply shall be specified.

此產品建議使用符合標準規定(國內驗證)之該電源供應器（Phihong ,POE60U-BTA,）供電，且該電源供應器的電氣規格資料(輸出規格: 56V / 1.07A)

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。

（一）符合“微功率短距离无线电发射设备目录和技术要求”的具体条款和使用场景，采用的天线类型和性能，控制、调整及开关等使用方法；

（二）不得擅自改变使用场景或使用条件、扩大发射频率范围、加大发射功率（包括额外加装射频功率放大器），不得擅自更改发射天线；

（三）不得对其他合法的无线电台（站）产生有害干扰，也不得提出免受有害干扰保护；

（四）应当承受辐射射频能量的工业、科学及医疗（ISM）应用设备的干扰或其他合法的无线电台（站）干扰；

（五）如对其他合法的无线电台（站）产生有害干扰时，应立即停止使用，并采取措施消除干扰后方可继续使用；

（六）在航空器内和依据法律法规、国家有关规定、标准划设的射电天文台、气象雷达站、卫星地球站（含测控、测距、接收、导航站）等军民用无线电台（站）、机场等的电磁环境保护区域内使用微功率设备，应当遵守电磁环境保护及相关行业主管部门的规定；

（七）禁止在以机场跑道中心点为圆心、半径5000 米的区域内使用各类模型遥控器；

（八）微功率设备使用时温度和电压的环境条件。

使用微功率短距离无线电发射设备应当符合国家无线电管理有关规定

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

Legal Notices
Extreme Networks, Inc. reserves the right to make changes in specifications and other information contained in this document and its website without prior notice. The reader should in all cases consult representatives of Extreme Networks to determine whether any such changes have been made. The hardware, firmware, software or any specifications described or referred to in this document are subject to change without notice.

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Extreme networks

AP5022FX

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 9039398-00 Rev AB