

FORTINET®



QuickStart Guide



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Cautions and Warnings

Environmental specifications

Ambient operating temperature: 0C to 40C

Refer to specific Product Model Data Sheet for Environmental Specifications (Operating Temperature, Storage Temperature, Humidity, and Altitude).

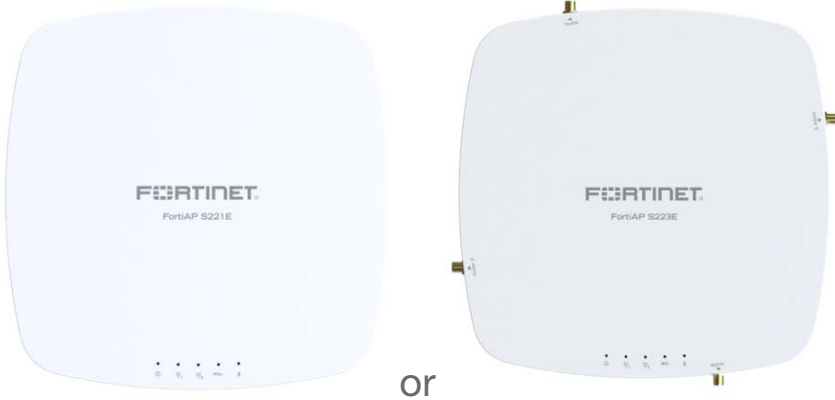
Référez à la Fiche Technique de ce produit pour les caractéristiques environnementales (Température de fonctionnement, température de stockage, humidité et l'altitude).

Safety

Caution: This equipment is to be used in a Network Environment 0 per IECTR 62101. This product is connected only to PoE networks without routing to the outside plant.

Attention: Ce matériel doit être utilisé dans un Environnement Réseau 0 par IECTR 62101. Ce produit est uniquement connecté aux réseaux PoE sans installation externe de routage.

Box Includes

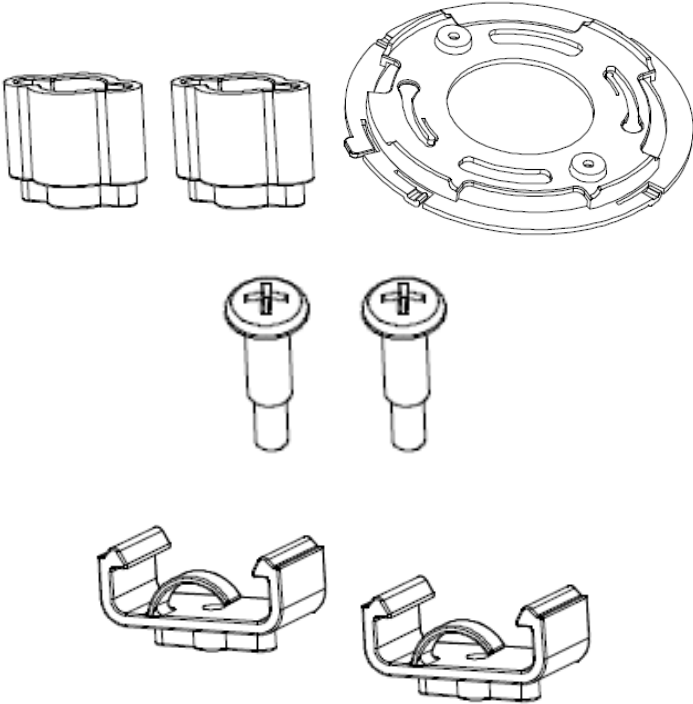


or

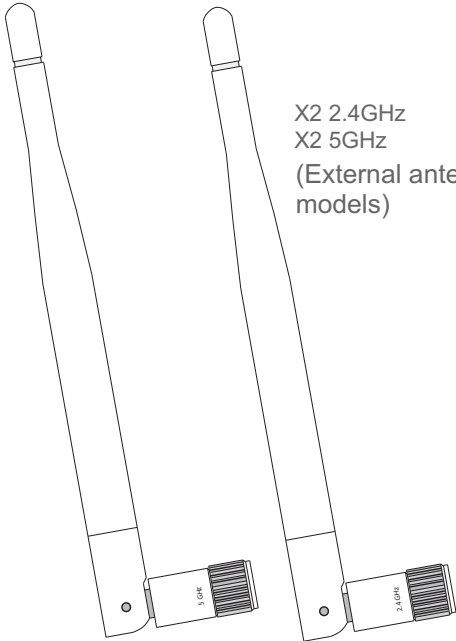
FortiAP device



QuickStart Guide



Wall Mounting Hardware



X2 2.4GHz
X2 5GHz
(External antenna models)

Antenna

Before You Begin

Write down details typically provided by your network administrator or ISP.

Static IP address

IP address _____

Subnet Mask _____

Default Gateway _____

Primary/Secondary DNS _____

DHCP

It is normal to not require a hostname, but your ISP might require it.

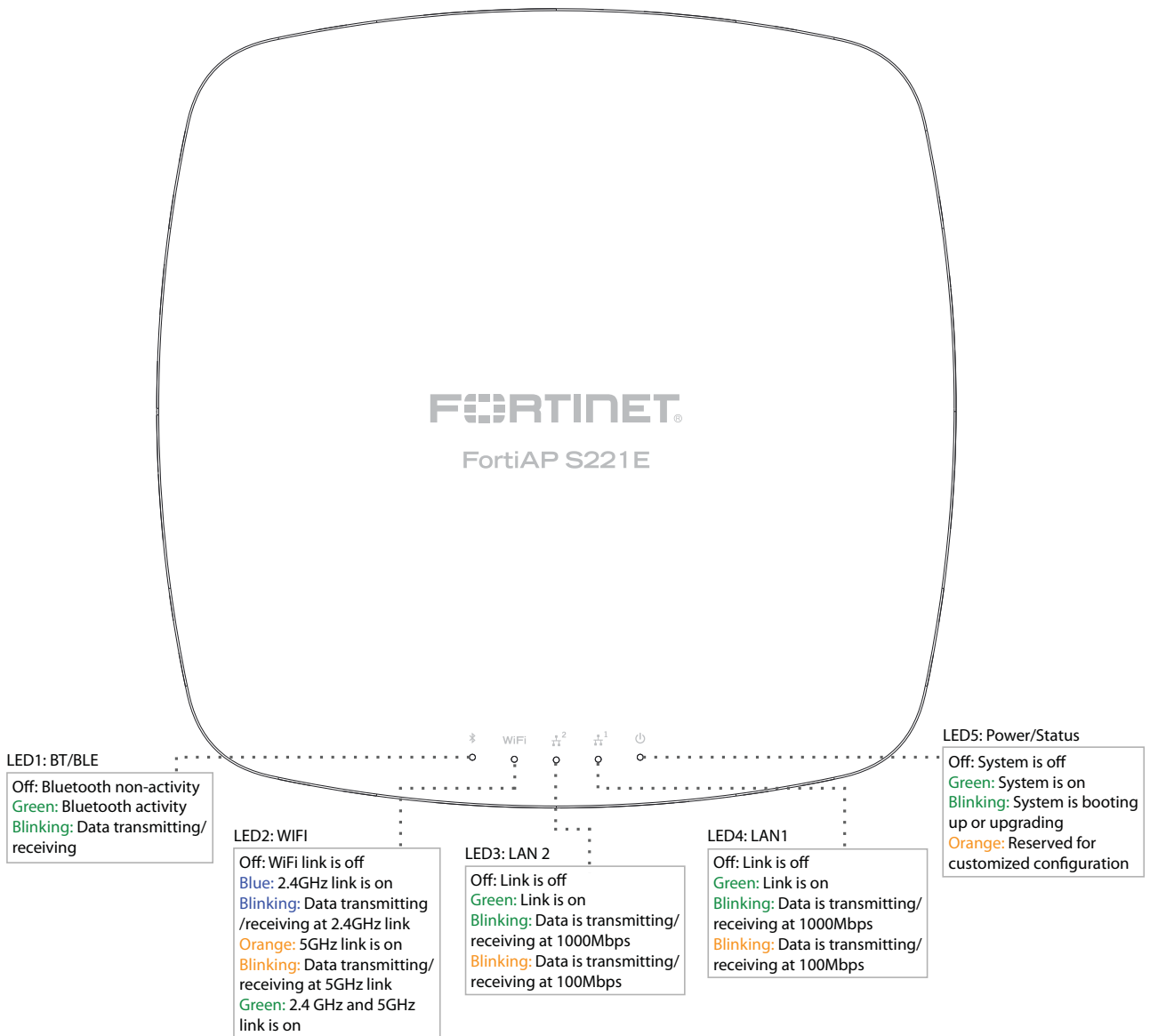
Hostname _____



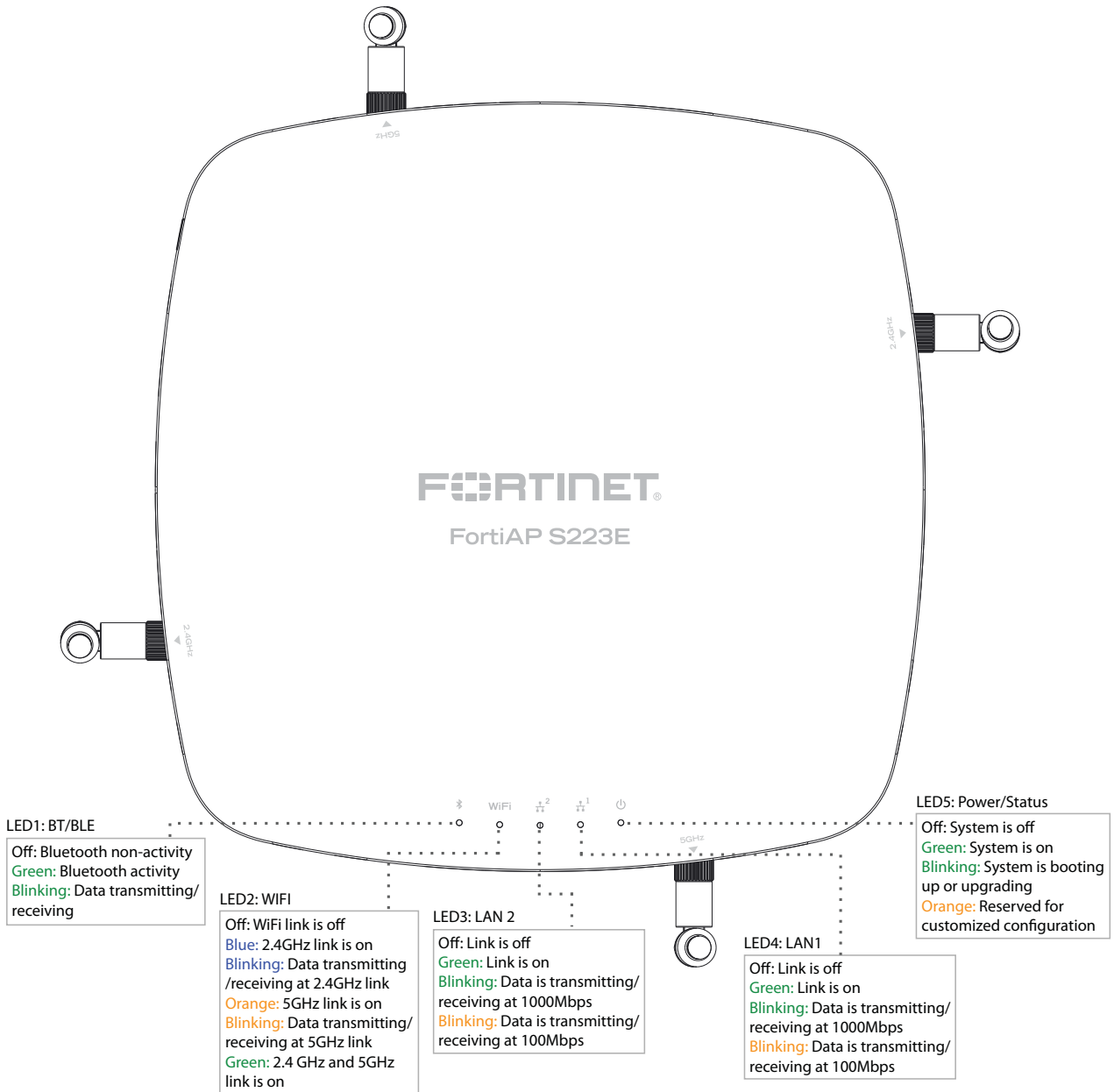
QuickStart Guide Video

[https://video.fortinet.com/video/177/
fortigate-and-fortiap](https://video.fortinet.com/video/177/fortigate-and-fortiap)

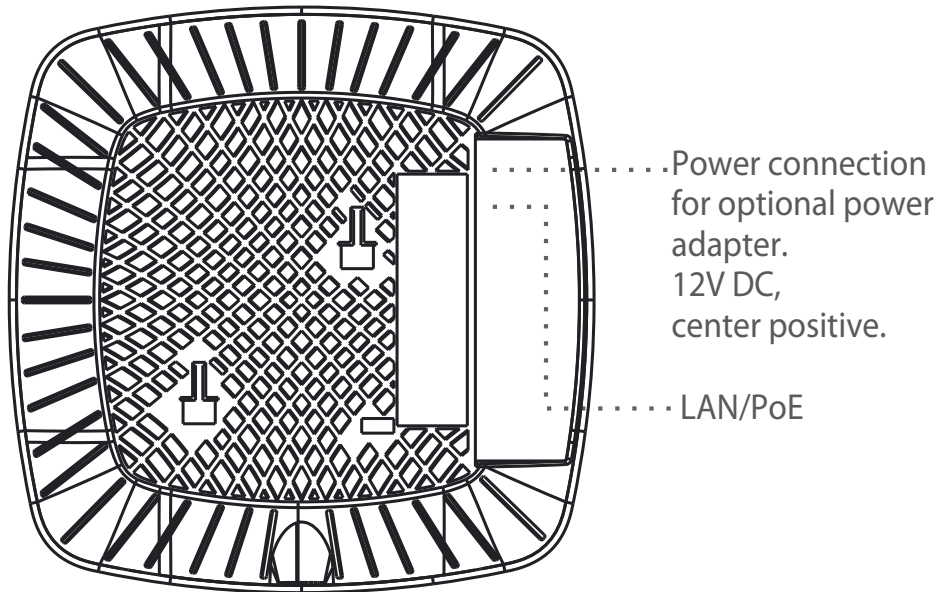
Internal Antenna Model Device Front :



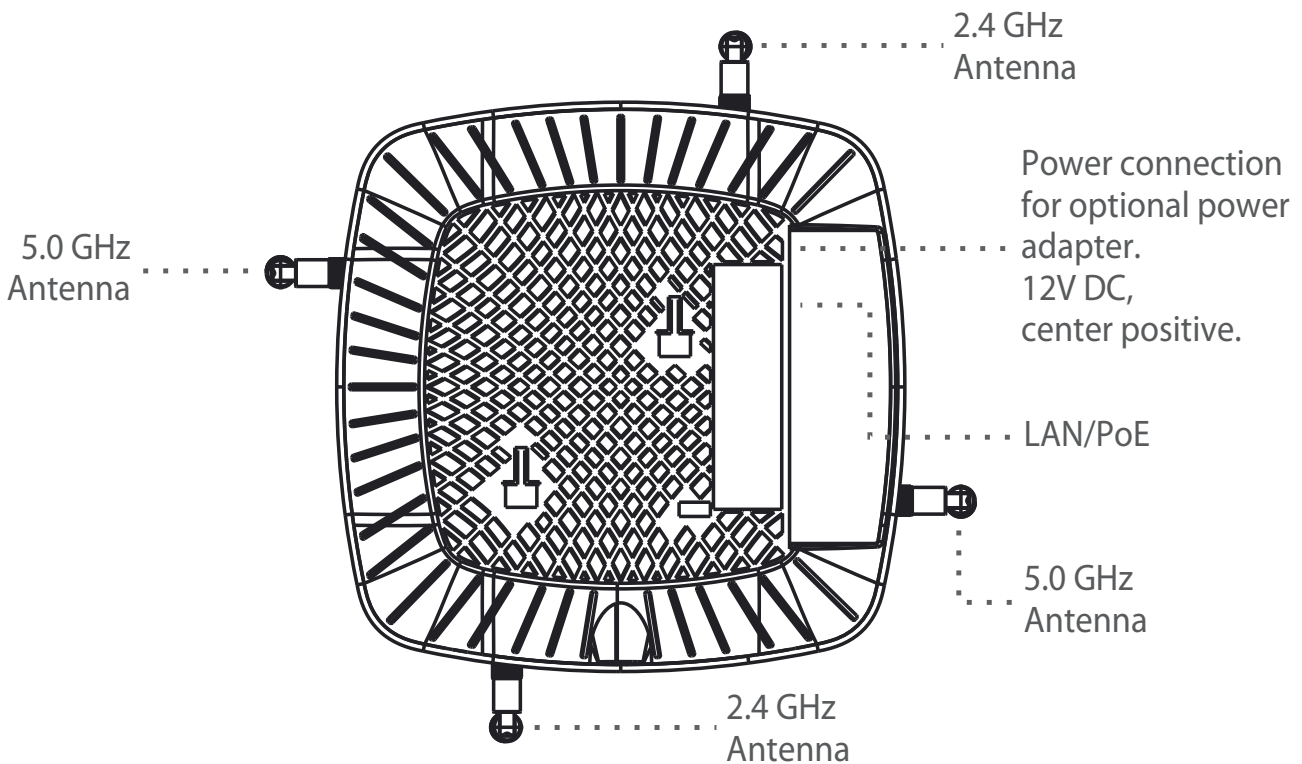
External Antenna Model Devices Front :



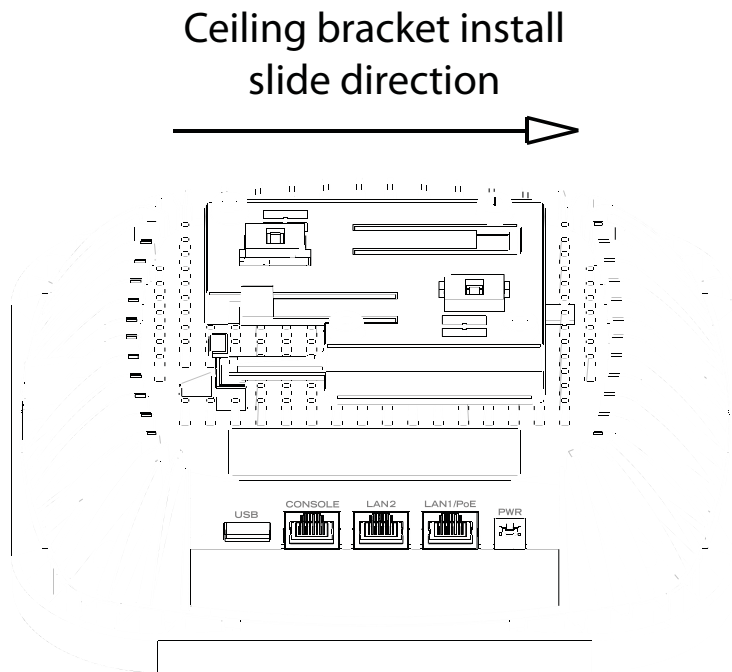
Internal Antenna Model Device Rear :



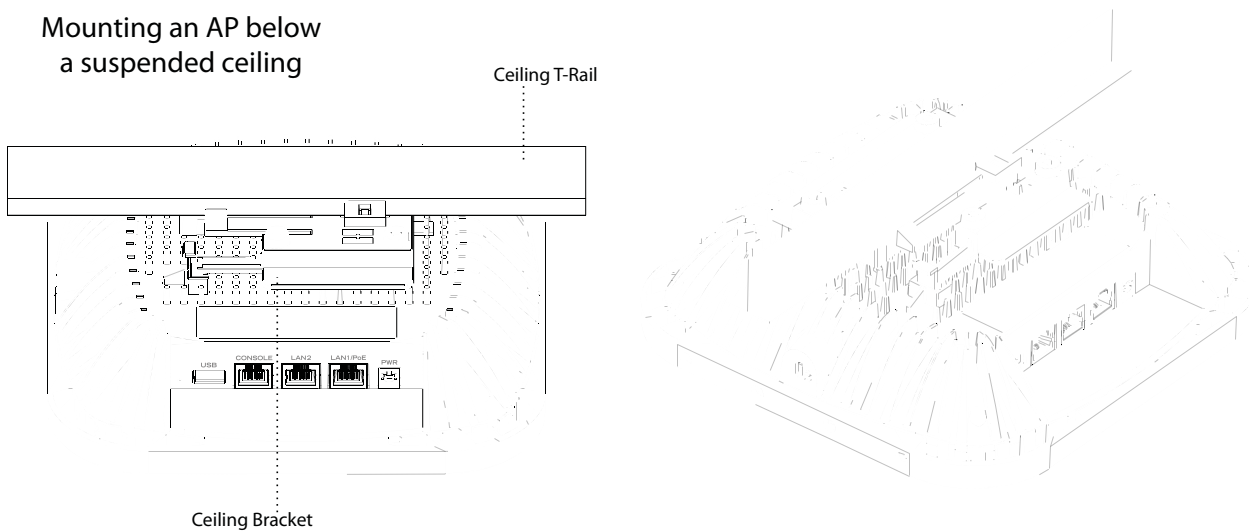
External Antenna Model Device Rear:



1 Installation



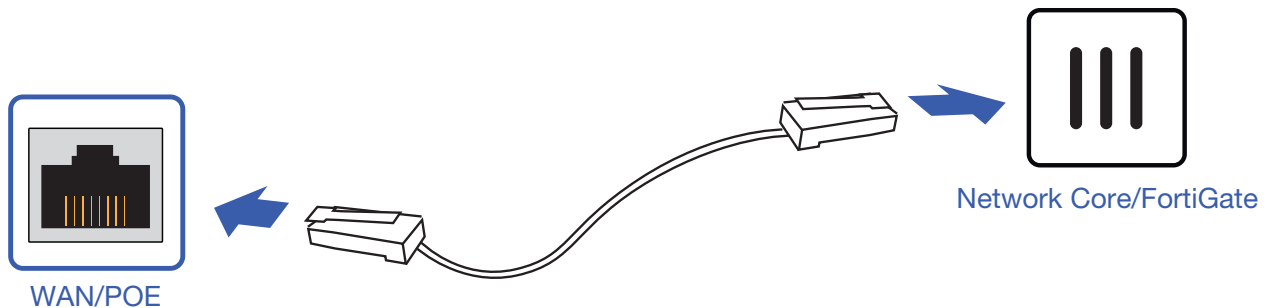
Mounting an AP below
a suspended ceiling



The Device can be mounted on a wall or ceiling using the mounting hardware provided.

The electrical wall box must be pre-installed.

② Basic Connection



Connect the FortiAP device to a FortiGate controller or an Internet connection.

Ensure that the Power over Ethernet (PoE) cable is connected to an applicable port on your FortiGate device or PoE injector.

Caution: Adequate grounding must be provided to the FortiAP unit and the PoE injector, in compliance with your local electrical code or regulations.

Warning: This device complies with IEEE 802.3af PoE specification. Do not use any PoE injectors that are not IEEE 802.3af compliant as they may damage your device.

3 FortiAP Setup

Deployment through a FortiGate

Ensure that you are running the Fortinet recommended version of software. Please check support.fortinet.com for more information.

If FortiGate is on the same network as the FortiAP:

1. Use FortiGate to preauthorize the FortiAP device.
2. Refer to the “Access Point Deployment” section of the FortiWiFi and FortiAP Configuration Guide found at <http://forti.net/ap-docs>.
3. Plug the FortiAP into your local Ethernet connection. The FortiAP will self-configure.

Or

1. Instead of preauthorizing, you can use the FortiGate to authorize the FortiAP device after you have connected the FortiAP to the network.
2. Within two minutes of connecting the FortiAP to the FortiGate, the device appears on the Managed FortiAP page in the Web-based Manager: authorize and assign a profile to the device.

Access Point	State	Connected Via	SSIDs	Channel	Clients	OS Version	FortiAP Profile	Radio	Group
PS221E3K1600001	Online	192.168.1.50 - SW-WAN2-INT	Radio 1: M PS221E3K1600001_1_1 (FAP_VAP_1_1) Radio 2: M PS221E3K1600001_1_2 (FAP_VAP_1_2)	Radio1: 6 Radio2: 153	Radio 1: 0 Radio 2: 0	PS221E-v5.4-bulk4120	S221E_Profile_1		0
PS223E3K16000016	Online	192.168.1.51 - SW-WAN2-INT	Radio 1: M PS223E3K16000016_2_1 (FAP_VAP_2_1) Radio 2: M PS223E3K16000016_2_2 (FAP_VAP_2_2)	Radio1: 11 Radio2: 40	Radio 1: 0 Radio 2: 0	PS223E-v5.4-bulkM187	S223E_Profile_2		0

If FortiGate is not on the same network as the FortiAP:

1. Log into FortiAP directly (IP address: 192.168.1.2) with username `admin` and no password, and specify the IP address of the controlling FortiGate.
2. Connect to FortiAP via the CLI using the instructions in the “Connecting to FortiAP CLI” section of the FortiWiFi and FortiAP Configuration guide.
3. Specify the IP address of the controlling FortiGate:

```
config capwap wtp acIpAddr 0.0.0.0
```

where 0.0.0.0 is the address of the FortiGate.

4. The FortiAP device connects to FortiGate, and then you can authorize the FortiAP.

Cautions and Warnings

Environmental specifications

Ambient operating temperature: 0C to 40C

Refer to specific Product Model Data Sheet for Environmental Specifications (Operating Temperature, Storage Temperature, Humidity, and Altitude)

Référez à la Fiche Technique de ce produit pour les caractéristiques environnementales (Température de fonctionnement, température de stockage, humidité et l'altitude).

Safety

Battery – Risk of explosion if the battery is replaced by an incorrect type. Do not dispose of batteries in a fire. They may explode. Dispose of used batteries according to your local regulations.

IMPORTANT: Switzerland: Annex 4.10 of SR814.013 applies to batteries.

Batterie – Risque d'explosion si la batterie est remplacée par un type incorrect. Ne jetez pas les batteries au feu. Ils peuvent exploser. Jetez les piles usagées conformément aux réglementations locales. IMPORTANT: Suisse: l'annexe 4.10 de SR814.013 s'appliquent aux batteries.

警告

本電池如果更換不正確會有爆炸的危險

請依製造商說明書處理用過之電池

Caution: This equipment is to be used in a Network Environment 0 per IECTR 62101. This product is connected only to PoE networks without routing to the outside plant.

Attention: Ce matériel doit être utilisé dans un Environnement Réseau 0 par IECTR 62101. Ce produit est uniquement connecté aux réseaux PoE sans installation externe de routage.

This product is intended to be supplied by a Listed Direct Plug-In Power Unit marked LPS or Class 2 and rated 12 Vdc, 2A or by 54 Vdc from PoE source.

Le produit doit être alimenté par un bloc d'alimentation à courant continu homologué UL de 12 Vdc, 2A nominal marqué LPS ou Class 2 ou par une source d'alimentation par Ethernet de 54 Vdc (PoE).

Regulatory Notices

Federal Communication Commission (FCC) - USA

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received; including interference that may cause undesired operation.

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 residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, 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 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.

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator

and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Caution: Operation of this device is restricted to indoor use only.

For operation within 5.15 ~ 5.25GHz frequency range, it is restricted to indoor environment.

This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Industry Canada Equipment Standard for Digital Equipment (ICES) - Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Innovation, Science and Economic Development (ISED) - Canada

This device complies with ISED license-exempt RSS standard(s). 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' ISED 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 equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20cm de distance entre la source de rayonnement et votre corps.

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.

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.

Attention: Le dispositif de la bande 5150-5250 MHz est réservé à un usage intérieur afin de réduire l'interférence nuisible potentielle aux systèmes mobiles par satellite co-canal.

This device has been designed to operate with an antenna having a maximum gain of 4.95 dBi for 2.4GHz and 5.83 dBi for 5GHz. Antenna having a higher gain is strictly prohibited per regulations of ISED. The required antenna impedance is 50 ohms.

Under ISED regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by ISED. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Ce dispositif a été conçu pour fonctionner avec une antenne ayant un gain maximal de 4.95 dBi pour 2,4 GHz et 5.83 dBi pour 5GHz. Une antenne ayant un gain supérieur sont strictement interdites par la réglementation d'ISED. L'impédance d'antenne requise est de 50 ohms.

Conformément à la réglementation d'ISED, cet émetteur radio peut fonctionner seulement avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par ISED. Dans le but de réduire les risques de brouillage radioélectrique aux 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 réussie.

This radio transmitter (IC: 7280B-2507T021) has been approved by ISED to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (IC: 7280B-2507T021) a été approuvé par ISED 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.

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 fonctionner en association avec une autre antenne ou transmetteur.

Brand Holder	Quantity	Antenna Type	Connector	Gain (dBi)	
				2.4GHz	5GHz
Internal antenna model					
Senao Networks, Inc	1	PIFA	IPEX	4.36	-
Senao Networks, Inc	1	PIFA	IPEX	4.95	-
Senao Networks, Inc	1	PIFA	IPEX	-	5.64
Senao Networks, Inc	1	PIFA	IPEX	-	5.83

Bluetooth

Senao Networks, Inc	1	PIFA	IPEX	3.67	-
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Brand Holder	Quantity	Antenna Type	Connector	Gain (dBi)	
				2.4GHz	5GHz

External antenna model

Senao Networks, Inc	2	Dipole	RP SMA Plug	4.58	-
Senao Networks, Inc	2	Dipole	RP SMA Plug	-	5.35

Bluetooth

Senao Networks, Inc	1	PIFA	IPEX	3.67	-
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European Conformity (CE) - EU

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.



The product transmits within the frequency ranges and less than or equal to the power listed below:

2412-2472MHz less than 20dBm

5180-5240MHz less than 23dBm

5260-5320MHz less than 23dBm *

5500-5700MHz less than 28dBm *

Note: * Only with DFS bands certification.

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