

QuickStart Guide

FortiAP 234G

FAP-234G

Before you begin

Register your device to access FortiGuard updates, cloud management, firmware upgrades, technical support and warranty coverage.

<https://support.fortinet.com>



This guide covers: FAP-234G


December 7, 2023


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The Essentials

Default Logins

 <https://192.168.1.2>
Username: **admin**
Password: **leave blank**

 <https://fortilan.forticloud.com>
Username: **user-defined**
Password: **user-defined**

Admin Guide

For up-to-date FortiAP setup and configuration information, such as creating a FortiAP profile, visit <https://docs.fortinet.com/product/fortiap>

Customer Service

For contracts, licensing, product registration and account management, contact FortiCare Support at <https://www.fortinet.com/support/contact>

Self-service Resources

Access our knowledge base, forums, videos and technical experts at <https://www.fortinet.com/support/support-services/forticare-support>

Thank you for choosing Fortinet

Package Contents

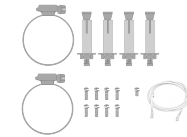
FortiAP 234G
FAP-234G



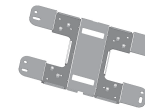
QuickStart Guide



FortiAP Device



Mounting Kit
(2x pole straps,
4x mounting bolts, 8x screws,
1x grounding cable and screw)



Wall Mount
Bracket



Pole Mount
Bracket

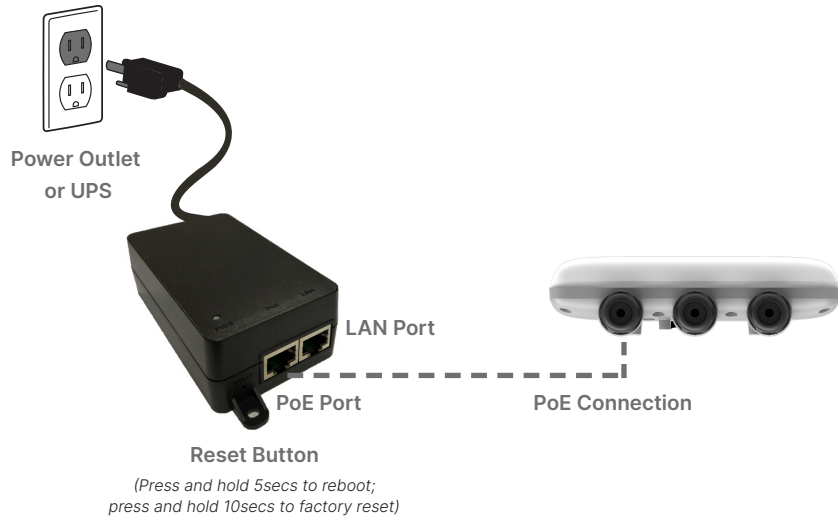


PoE Injector and AC Cord
(100V-220V AC input, 54V DC output)

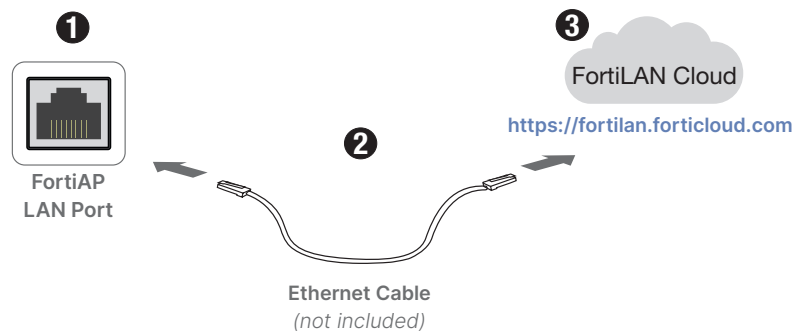
Setup Options

Power the device with the provided 802.3af/at PoE injector or FortiGate PoE port.

PoE Installation

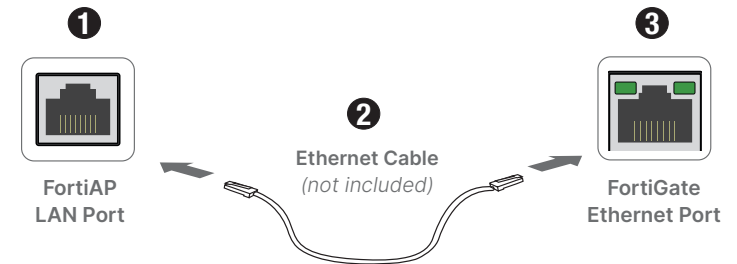


FortiLAN Cloud



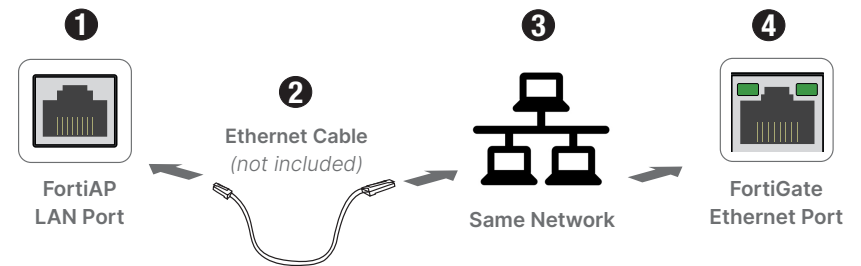
Note: Use your FortiCloud credentials to log in, then click Inventory, Import AP Key and enter the Cloud Key on the device sticker

Direct Connection



Note: To self-configure, preauthorize the FortiAP on your FortiGate. Otherwise once connected, wait for the FortiAP to appear on the Managed FortiAP page in FortiOS.

Network Connection



Note: Connect to the FortiAP using 192.168.1.2 with username *admin* and set a password. Specify the FortiGate IP using:

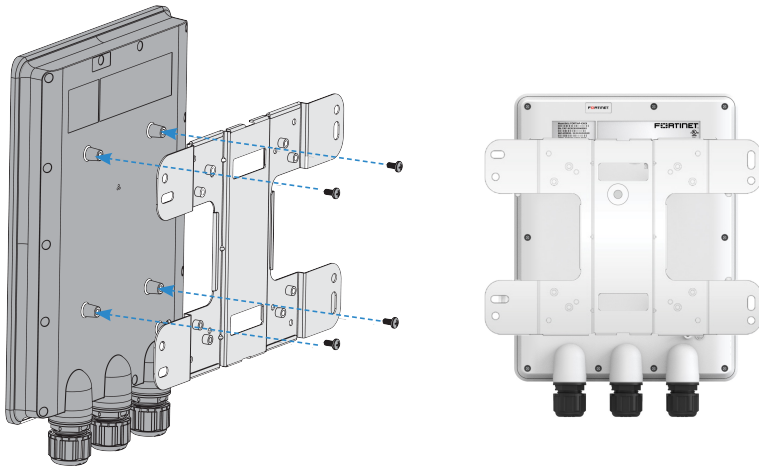
```
cfg -a AC_IPADDR=0.0.0.0
cfg -c
```

where 0.0.0.0 is the FortiGate IP.

Wall Installation

Your device mounts on a wall using the provided wallmount bracket and screws.

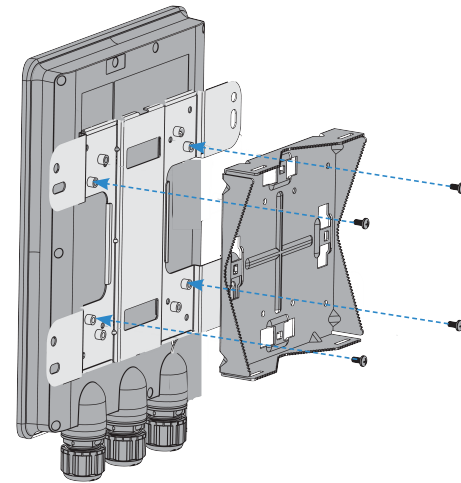
1. Mark the location of the mounting bolts using the wallmount bracket
2. Drill holes and hammer the bolts into the drilled holes
3. Attach the wallmount bracket to the device using the provided mounting screws
4. Secure the device on the wall using the mounting bolts



Pole Installation

Your device comes with a pole mount bracket, straps and screws. You can mount the device to a pole vertically.

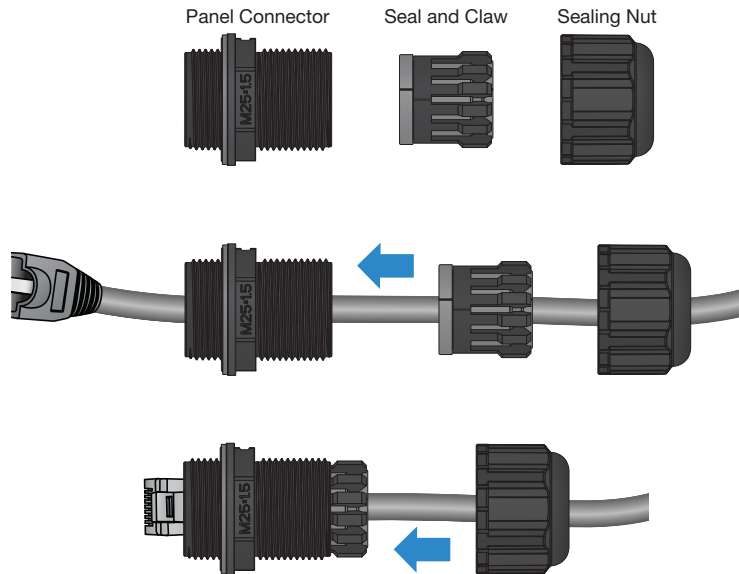
1. Attach the wallmount bracket, then pole mount bracket to the device using the provided mounting screws
2. Loop the pole straps through the bracket slots, then around the pole
3. Tighten the straps



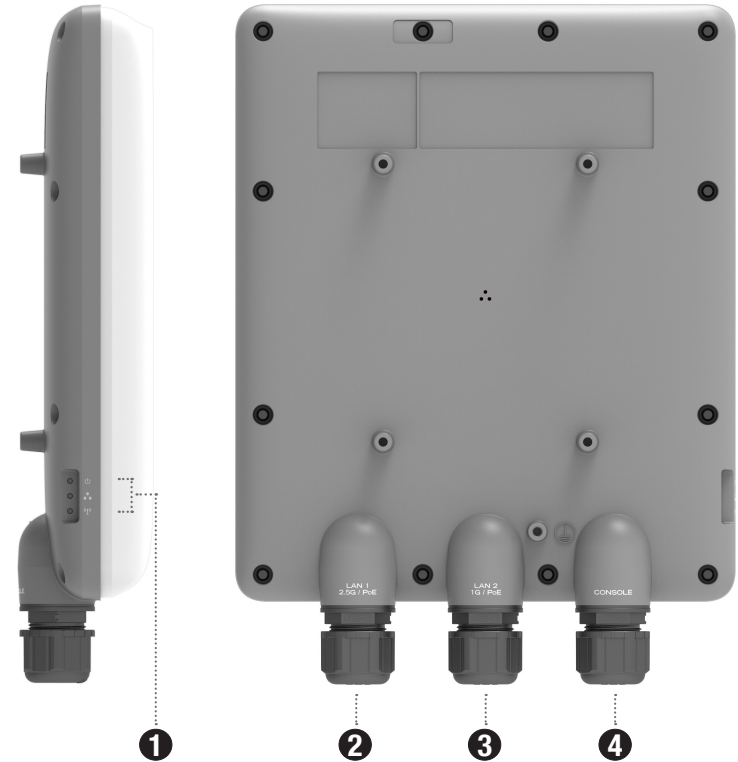
Waterproof Cabling

Your device comes with IP67 rated Ethernet cable glands.

1. Unscrew the sealing nut from the panel connector and remove the seal and claw
2. Thread the RJ45 plug through the sealing nut, then the panel connector
3. Wrap the seal and claw around the cable between the sealing nut and connector
4. Insert the RJ45 plug into the port and screw the panel connector onto the threads
5. Slide the seal and claw along the cable into the panel connector
6. Thread the coupling ring onto the panel connector and tighten it



Interfaces



1 LED STATUS

Power

- Green:** Powered on; connected to a controller
- Amber:** Powered on; not connected to a controller
- Off:** Powered off

WiFi

- Green:** SSID broadcasting
- Blinking Green:** Data activity
- Off:** WiFi not broadcasting

LAN

- Green:** Connected
- Blinking Green:** Data activity
- Off:** Not connected

2 LAN1 / PoE (RJ-45) 2.5 Gbps 802.3at PoE Ethernet interface

3 LAN2 / PoE (RJ-45) 1 Gbps Ethernet interface

4 CONSOLE (RJ-45) CLI management; Reset button above port

Cautions and Warnings

Environmental specifications

Ambient operating temperature: -30°C to 60°C

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

Warning: Equipment intended for installation in Restricted Access Location.

Avertissement: équipement destiné à être installé dans un endroit à accès restreint.

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 54Vdc, 0.6A from PoE source. Le produit doit être alimenté par un bloc d'alimentation à courant continu homologué UL de 54Vdc, 0.6A nominal marqué LPS ou Class 2 ou par une source d'alimentation par Ethernet de 54Vdc (PoE).

Grounding – To prevent damage to your equipment, connections that enter from outside the building should pass through a lightning/surge protector, and be properly grounded. Use an electrostatic discharge workstation (ESD) and/or wear anti-static wrist strap while you work. In addition to the grounding terminal of the plug, on the back panel, there is another, separate terminal for earthing.

Mise à la terre - Pour éviter d'endommager votre équipement, les connexions qui entrent de l'extérieur du bâtiment doivent passer par un parafoudre / surtension et être correctement mises à la terre. Utilisez une station de travail à décharge électrostatique (ESD) et / ou portez un bracelet antistatique pendant que vous travaillez. En plus de la borne de mise à la terre de la fiche, sur le panneau arrière, il y a une autre borne séparée pour la mise à la terre.

Regulatory Notices

Federal Communication Commission (FCC) – USA

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 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 62cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Antenna Elevation

The elevation gain shall be configured in the cases of outdoor deployment, dipole antenna use, and transmitting power in the 5150MHz-5250MHz UNII-1 band. It is defined as the maximum antenna gain at 30 to 150 degrees above the horizon. FAP-234G conforms to U.S. FCC limitations that the maximum allowable 21dBm EIRP power for an elevation below 30 degrees. The maximum limits determined in the testing to limit the EIRP below 21dBm for outdoor use in UNII-1 band are hardcoded in the firmware. See Appendix C in FCC Report #FR380143AM. The antenna information is provided in the antenna test report.

RF variables and settings

By default two RF variables are defined for every network. One for indoor APs and one for outdoor APs. FAP-234G within a network can be configured to the corresponding RF settings via the FortiAP profile.

Creating a FortiAP Profile

Refer to the Configuration Guide in creating a FortiAP profile at <https://docs.fortinet.com/product/fortiap>

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

Innovation, Science and Economic Development (ISED) – 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 contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
 2. This device must accept any interference, including interference that may cause undesired operation of the device.
- L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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;
 2. 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 38cm 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 38cm 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.

Caution: The maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.

Attention: Le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5 250-5 350 MHz et 5 470-5 725 MHz doit se conformer à la limite de p.i.r.e.; le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725-5 825 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.

(iii) where applicable, antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 shall be clearly indicated..

(iii) lorsqu'il y a lieu, les types d'antennes (s'il y en a plusieurs), les numéros de modèle de l'antenne et les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, énoncée à la section 6.2.2.3, doivent être clairement indiqués.

This radio transmitter (IC: 7280B-51018E01231 / Model: FAP-234G) 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-51018E01231 / Model: FAP-234G) 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 antennas(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.

Professional Installation Instructions

- 1. Installation personal**
This product is designed for specific application and needs to be installed by a qualified personal who has RF and related rule knowledge. The general user shall not attempt to install or change the setting.
- 2. Installation location**
The product shall be installed at a location where the radiating antenna can be kept 62/38cm from nearby person in normal operation condition to meet regulatory RF exposure requirement.
- 3. Antenna**
Use only the antennas which have been approved by the applicant. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC/IC limit and is prohibited.
- 4. Installation procedure**
Please refer to user's manual for the detail.
- 5. Warning**
Please carefully select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to serious federal penalty.

Instructions d'installation professionnelle

- 1. Installation**
Ce produit est destiné à un usage spécifique et doit être installé par un personnel qualifié maîtrisant les radiofréquences et les règles s'y rapportant. L'installation et les réglages ne doivent pas être modifiés par l'utilisateur final.
- 2. Emplacement d'installation**
En usage normal, afin de respecter les exigences réglementaires concernant l'exposition aux radiofréquences, ce produit doit être installé de façon à respecter une distance de 62/38cm entre l'antenne émettrice et les personnes.
- 3. Antenne**
Utiliser uniquement les antennes approuvées par le fabricant. L'utilisation d'autres antennes peut conduire à un niveau de rayonnement essentiel ou non essentiel dépassant les niveaux limites définis par FCC/IC, ce qui est interdit.
- 4. Procédure d'installation**
Consulter le manuel d'utilisation.
- 5. Avertissement**
Choisir avec soin la position d'installation et s'assurer que la puissance de sortie ne dépasse pas les limites en vigueur. La violation de cette règle peut conduire à de sérieuses pénalités fédérales.

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.



Note: * Only with DFS bands certification.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Simplified EU Declaration of Conformity

This declaration is only valid for Fortinet products (including, combinations of software, firmware and hardware) provided by Fortinet or Fortinet's authorized partners to the end customer directly for use within the EU or countries that have implemented the EU Directives and/or spectrum regulation. Any Fortinet products not obtained directly from Fortinet or Fortinet's authorized partners may not comply with EU Directives and Fortinet makes no assurances for such products.

Български
Този продукт е в съответствие с Директива 2014/53/ЕС.

Česky
Tento produkt je v souladu se směrnicí 2014/53/EU.

Dansk
Dette produkt er i overensstemmelse med direktiv 2014/53/EU.

Deutsch
Dieses Produkt entspricht der Richtlinie 2014/53/EU.

Eesti
See toode vastab direktiivile 2014/53/EL.

English
This product is in compliance with Directive 2014/53/EU.

Español
Este producto cumple con la Directiva 2014/53/UE.

Ελληνική
Το προϊόν αυτό συμμορφώνεται με την Οδηγία 2014/53/ΕΕ.

Français
Ce produit est conforme à la Directive 2014/53/UE.

Hrvatski
Ovaj proizvod je u skladu s Direktivom 2014/53/EU.

Italiano
Questo prodotto è conforme alla Direttiva 2014/53/EU.

Latviski
Šis produkts atbilst Direktīvai 2014/53/EU.

Lietuvių
Šis gaminys atitinka direktyvą 2014/53/ES.

Malti
Dan il-prodott huwa konformi mad-Direttiva 2014/53/UE.

Magyar
Ez za termék megfelel a 2014/53/EU irányelvnek.

Nederlands
Dit product is in overeenstemming met Richtlijn 2014/53/EU.

Norsk
Dette produktet er i samsvar med direktiv 2014/53/EU.

Polski
Ten produkt jest zgodny z dyrektywą 2014/53/UE.

Português
Este produto está em conformidade com a Diretiva 2014/53/UE.

Rumunski
Acest produs este în conformitate cu Directiva 2014/53/UE.

Slovensky
Tento produkt je v súlade so smernicou 2014/53/EÚ.

Slovensko
Ta izdelek je v skladu z Direktivo 2014/53/EU.

Suomi
Tämä tuote on direktiivin 2014/53/EU mukainen.

Svenska
Denna produkt överensstämmer med direktiv 2014/53/EU.

Note: The full declaration of conformity for this product is available at the link below:
<https://site.fortinet.com/ProductRegulatory/EU>

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range in the following 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) | |

Compliance with 2014/53/EU Radio Equipment Directive (RED)

In accordance with Article 10.8(a) and 10.8(b) of the RED, the following table provides information on the frequency bands used and the maximum RF transmit power of the product for sale in the EU:

UK Conformity Assessed (UKCA) – United Kingdom

The product transmits within the frequency ranges and less than or equal to the power listed below:
2402-2480MHz less than 20dBm
2405-2480MHz less than 20dBm
2412-2472MHz less than 20dBm
5180-5240MHz less than 23dBm
5260-5320MHz less than 23dBm *
5500-5700MHz less than 30dBm *
5745-5825MHz less than 14dBm
5725-5875MHz less than 30dBm
5725-5875MHz less than 13.5dBm
5955-6415MHz less than 23dBm

Note: * Only with DFS bands certification.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This product is in compliance with **Statutory Instrument 1206 Radio Equipment Regulations 2017**

The full Declaration of Conformity for this product is available in the link below:
<https://site.fortinet.com/ProductRegulatory/UK>



