FortiAP 831F

QuickStart Guide

January 2, 2025

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For Product License Agreement / EULA and Warranty Terms, visit https://www.fortinet.com/content/dam/fortinet/assets/legal/EULA.pdf

Product Registration

Thank you for purchasing a Fortinet Device.

Register to access:

- Cloud Management
- FortiGuard Updates
- Firmware Upgrades
- Technical Support
- Warranty Coverage

Please register your FortiAP:

Vous devez enregistrer le produir:

Debe registrar el producto:

登録のお願い:

请马上注册:

https://support.fortinet.com

Box Includes

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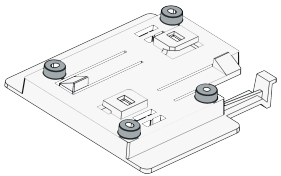
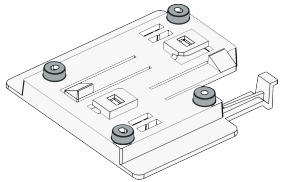
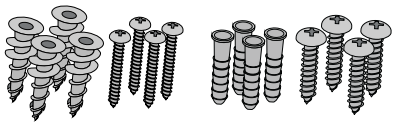


15/16" Ceiling Mounting Bracket



9/16" Ceiling Mounting Bracket

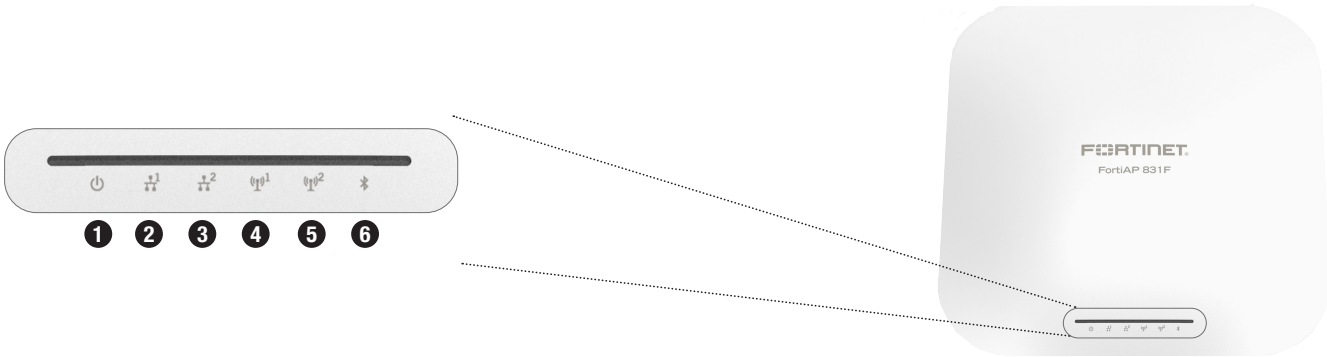


8 x Mounting Screws with 8 x Anchors

Interfaces

1. **LAN2/POE 1G (RJ-45)** 1 Gbps 802.3at PoE Ethernet interface
2. **LAN1/POE 5G (RJ-45)** 5 Gbps 802.3at PoE Ethernet interface
3. **CONSOLE (RJ-45)** CLI management computer interface
4. **OPTIONAL POWER (Not Included)** 12V DC 3A adapter
5. **USB (3.1)** Type A for future use
6. **RESET** resets the device

LED Indicators



1 Power

- **Off**: Device off
- **Green**: Device on
- **Blinking Green**: Booting up or upgrading
- **Amber**: Reserved for customizations

2 LAN 1 (5 Gbps 802.3at PoE RJ45)

- **Off**: Link off
- **Green**: Link on
- **Blinking Green**: Transmitting at 5 Gbps
- **Blinking Amber** Transmitting at 2.5 Gbps or lower speeds

3 LAN 2 (1 Gbps 802.3at PoE RJ45)

- **Off**: Link off
- **Green**: Link on
- **Blinking Green**: Transmitting at 1Gbps
- **Blinking Amber** Transmitting at 100 Mbps

4 WiFi

- **Off**: Radio 1 and 2 off
- **Blue**: Radio 1 on
- **Blinking Blue**: Radio 1 transmitting
- **Amber**: Radio 2 on
- **Blinking Amber**: Radio 2 transmitting
- **Green**: Radio 1 and 2 on
- **Blinking Green**: Radio 1 and 2 transmitting

5 WiFi and Scanning

- **Off**: Radio 3 off; Scanning off
- **Blue**: Radio 3 on
- **Blinking Blue**: Radio 3 transmitting data
- **Amber**: Scanning on
- **Green**: Radio 3 on; Scanning on
- **Blinking Green**: Radio 3 transmitting data; Scanning on

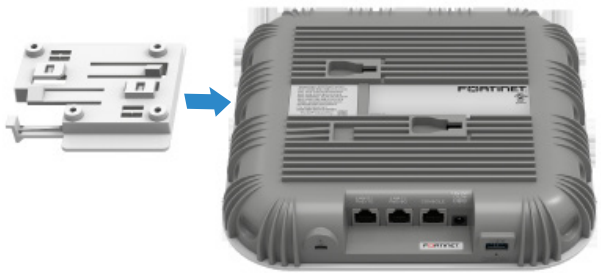
6 BLE and ZigBee

- **Off**: BLE and ZigBee off
- **Blue**: BLE on
- **Blinking Blue**: BLE transmitting data
- **Amber**: ZigBee on
- **Blinking Amber**: ZigBee transmitting data
- **Green**: BLE and ZigBee on
- **Blinking Green**: BLE and ZigBee transmitting data

Ceiling Installation

The FortiAP mounts on a ceiling using the provided T-rail mounting brackets which come in two standard sizes: 1.43cm (9/16in) and 2.38cm (15/16in)

1. Select the bracket for the T-rail size: 1.43cm (9/16in) or 2.38cm (15/16in)
2. With the ports facing you, slide the bracket left to right



3. Hold the device against the ceiling T-rail and push until it snaps into place

Device Setup

Set up your device locally or on the cloud. Choose one of the following options to complete your setup and configure your device.

Cloud Setup

FortiAP Cloud

FortiAPCloud is a cloud-based FortiAP management solution and log retention service. It provides centralized reporting, traffic analysis, configuration management, and log retention.

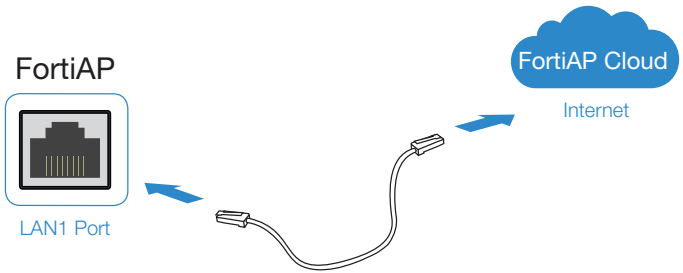
Local Setup

FortiGate Deployment

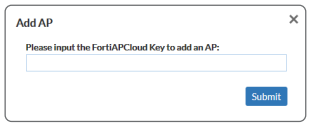
Your FortiAP can be preauthorized and configured using a FortiGate. You can also authorize your FortiAP after you have connected it to the same network.

If the FortiGate is not on the same network as the FortiAP, you can log directly into the AP and use FortiAP CLI configuration and diagnostics commands found on docs.fortinet.com to setup the information to find the controller.

FortiAP Cloud



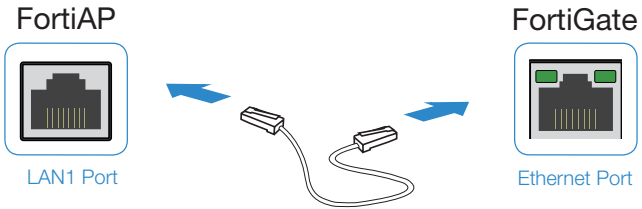
1. Log in to http://www.fortiapcloud.com using your FortiCloud credentials
2. Click Inventory, then click Import AP Key



3. Input the Cloud Key located on the sticker on your device

Info: Refer to the "Access Point Configuration" section of the FortiWiFi and FortiAP Configuration Guide found at https://docs.fortinet.com/product/fortiap

FortiAP Deployment



If the FortiGate is on the same network as the FortiAP:

1. Preauthorize your FortiAP device using your FortiGate
2. Plug the FortiAP into your local Ethernet connection
3. The FortiAP will self-configure

Or

1. Instead of preauthorizing, authorize the FortiAP device after you have connected the FortiAP to the network
2. Within two minutes of connecting the FortiAP to your FortiGate, the device will appear on the Managed FortiAP page in the GUI to authorize and assign a profile

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

1. Log in to the FortiAP directly (IP address: 192.168.1.2) with username admin and no password, and specify the IP address of the controlling FortiGate
2. To specify the IP address of the controlling FortiGate:

   ```
   cfg -a AC_IPADDR_1=0.0.0.0
   cfg -c
   ```

   where `0.0.0.0` is the address of the FortiGate
3. The FortiAP device connects to the FortiGate, and then you can authorize the FortiAP

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-vous à la Fiche Technique de ce produit pour les caractéristiques environnementales (Température de fonctionnement, température de stockage, humidité et 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.

This product is intended to be supplied by a Listed Direct Plug-In Power Unit marked LPS or Class 2 and rated 12Vdc, 3A or by 54Vdc, 0.6A from PoE source.

Le produit doit être alimenté par un bloc d'alimentation à courant continu homologué UL de 12Vdc, 3A nominal marqué LPS ou Class 2 ou par une source d'alimentation par Ethernet de 54Vdc, 0.6A (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 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 22cm 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 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 24cm between the radiator and 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 24cm 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-41417T07866 / Model: FAP-831F) 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-41417T07866 / Model: FAP-831F) 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 it's 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 fonctionnement en association avec une autre antenne ou transmetteur.

Antenna Type	PIFA					
Antenna Connnector	IPEX					
	Gain (dBi)					
Antenna No.	**2400MHz**	**2450MHz**	**2500MHz**	**UNII-1 & UNII-2A**	**UNII-2C**	**UNII-3**
Antenna 1-4	4.14	4.49	4.34	–	–	–
Antenna 5-12	–	–	–	5.88	6.27	5.96
Antenna 13 Scan	3.88	4.69	4.25	4.42	4.6	4.6
Antenna Type	DiPole					
Antenna Connnector	IPEX					
Antenna 14 BLE/ Scanning	4.32	5.2	5.09	–	–	–

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:
2402–2480 MHz less than 20 dBm
2405–2480 MHz less than 20 dBm
2412-2472 MHz less than 20 dBm
5180-5240 MHz less than 23 dBm
5260–5320 MHz less than 23 dBm *
5500–5700 MHz less than 30 dBm *

Note: * Only with DFS bands certification.

This equipment should be installed and operated with minimum distance 20cm between the radiator and 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

National Telecommunications Commission (NCC) – Taiwan

1. 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。
2. 應避免影響附近雷達系統之操作。
3. 本器材須經專業工程人員安裝及設定，始得設置使用，且不得直接販售給一般消費者。

Agência Nacional de Telecomunicações (ANATEL) – Brazil

Este produto não é apropriado para uso em ambientes domésticos, pois poderá causar interferências eletromagnéticas que obrigam o usuário a tomar medidas necessárias para minimizar estas interferências."

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados. www.gov.br/anatel/pt-br/

Este produto está homologado pela ANATEL, de acordo com os procedimentos regulamentados pela Resolução 242/2000, e atende aos requisitos técnicos aplicados.

Para maiores informações, consulte o site da ANATEL
www.gov.br/anatel/pt-br/

Voluntary Control Council for Interference (VCCI) – 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。

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