



3 IP Configuration

Connect one of the LAN ports of the device to the Ethernet port of your computer, and the device automatically attempts to obtain an IP address from the DHCP server. If you do not use DHCP, you can configure a static IP address.

To configure a static IP address:

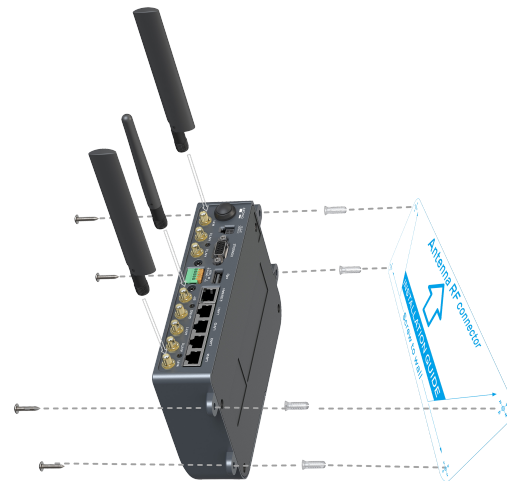
1. Use an Ethernet cable to connect one of the LAN ports to the Ethernet port of your computer.
2. Set the computer Ethernet port to DHCP mode, and connect it to port1, port2, or port3.
3. Open your web browser and point to the default FortiExtender web GUI address:
<http://192.168.200.99>
4. In both the username and password fields, type **admin** and press the **Enter key on your keyboard**. (**Note: If you are logging into the device for the first time, you will be prompted to change the default password. We strongly recommend that you change the password right away.**)
5. Go to Networking>Interface, where you'll see all the system interfaces.
6. Select a desired interface, set it to "static" mode, configure the static IP address, and click Save.

4 Installation

FortiExtenderVehicle 511G is designed for placement inside an automotive vehicle. Refer to the following diagram for proper placement and mounting.

Fasten onto the wall of your vehicle

1. Peel off the drill template sticker, and stick it in a desired location on the wall.
2. Use the template to mark and drill the pilot holes.
3. If desired, insert the anchors into the holes.
4. Align the device with the holes or anchors.
5. Insert the screws into the holes or anchors and tighten.

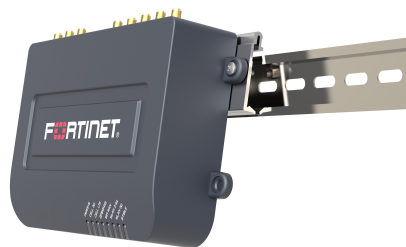


Mount on DIN rail (optional)

1. Align the top two holes on the device with the matching holes on the DIN rail clip.
Make sure the spring on the clip is at the top.
2. Insert screws into the aligned holes and tighten them securely.



3. Hook the assembled device onto the DIN rail and press until it clicks into place.



Cautions and Warnings

Environmental specifications

Ambient operating temperature: -40°C to 70°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: Le matériel est conçu pour être installé dans un endroit où l'accès est restreint.

Skilled person must install the equipment.
L'équipement doit être installé par une personne qualifiée

For use in a vehicle in US/Canada, a UL Listed (UL 2089) battery adapter shall be used.
Pour usage dans un véhicule au États Unis/Canada, un adaptateur de batterie homologué UL (UL 2089) doit être utilisé.

This product is intended to be supplied by a Listed power adapter marked LPS/PS2 or Class 2 and rated 12Vdc, 3A for indoor use only.
Ce produit est destiné à être alimenté par un adaptateur d'alimentation marqué LPS/PS2 ou Classe 2 et évalué 12Vdc, 3A pour usage intérieur seulement.

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.

This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.
This radio transmitter (FCC: TVE-241102) has been approved by FCC 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.

Professional Installation Instruction

1. Installation personnel
This product is designed for specific application and needs to be installed by qualified personnel who has RF and related rule knowledge. The general user shall not attempt to install or change the settings.
2. Installation location
The product shall be installed at a location where the radiating antenna can be kept 20cm from nearby person in normal operation condition to meet Regulatory RF exposure requirement. The installation applies to both indoor and outdoor location.
3. External antenna(s)
Use only the antenna(s) that have been approved by the manufacturer. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power that may lead to the violation of FCC/ISED limit and is prohibited.
4. Warning
Please carefully select the installation position and ensure that the final output power does not exceed the limit set forth in relevant rules. The violation of the rule could lead to serious federal penalty.

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

CAN ICES-003 (B) / NMB-003 (B)

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.
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.

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

Le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz et 5470-5725 MHz doit se conformer à la limite de p.i.r.e.;

The 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.

Les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, et énoncée à la section 6.2.2 3), doivent être clairement indiqués.

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.

This equipment complies with ISSED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 26cm between the radiator & your body.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISSED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 26cm de distance entre la source de rayonnement et votre corps.

This radio transmitter (IC: 7280B-241102) has been approved by ISSED 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-241102) a été approuvé par ISSED 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 No.	Manufacturer	Model	Antenna Type	Connector	Antenna Peak Gain
1	WHA YU	ANT DIPOLE 2/5/6GHz C496- 510189-A BLACK	Dipole	Reverse SMA	2.4 GHz: 2.08 dBi 5 GHz: 2.41 dBi
2	WHA YU	ANT DIPOLE 2/5/6GHz C496- 510189-A BLACK	Dipole	Reverse SMA	2.4 GHz: 2.08 dBi 5 GHz: 2.41 dBi
3	WHA YU	ANT DIPOLE 2GHz C496-510188-A BLACK	Dipole	Reverse SMA	2.4 GHz (BLE): 1.8 dBi

Professional Installation Instruction

- Installation personnel**
This product is designed for specific application and needs to be installed by qualified personnel who has RF and related rule knowledge. The general user shall not attempt to install or change the settings.
- Installation location**
The product shall be installed at a location where the radiating antenna can be kept 20 cm from nearby person in normal operation condition to meet Regulatory RF exposure requirement. The installation applies to both indoor and outdoor location.
- External antenna(s)**
Use only the antenna(s) that have been approved by the manufacturer. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power that may lead to the violation of FCC/ISED limit and is prohibited.
- Warning**
Please carefully select the installation position and ensure that the final output power does not exceed the limit set forth in relevant rules. The violation of the rule could lead to serious federal penalty.

Instructions d'installation professionnelle

- Installation**
Ce produit est conçu pour un usage spécifique et doit être installé par un personnel qualifié maîtrisant les radiofréquences et règle similaires. L'utilisateur ne doit pas tenter d'installer ou de modifier les paramètres.
- 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 20 cm entre l'antenne émettrice et. L'installation s'applique aux emplacements intérieur et extérieur.
- Antenne externe (s)**
Utiliser uniquement l'antenne (s) 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/ISED, ce qui est interdit.
- 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.



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

Standard	Frequency Range	Max. Transit Power
Bluetooth	2402-2480 MHz	10 dBm (EIRP)
WLAN	2.4GHz: 2412-2472MHz	20 dBm (EIRP)
WLAN	5GHz: 5180-5240MHz	23 dBm (EIRP) *
WLAN	5GHz: 5260-5320MHz	23 dBm (EIRP) *
WLAN	5GHz: 5500-5700MHz	30 dBm (EIRP) *
WLAN	5GHz: 5745-5825MHz	14 dBm (EIRP)

Standard	Frequency Range	Transit Power
WCDMA	Band 1: 1920-1980MHz (Uplink); 2110-2170MHz (Downlink) Band 8: 880-915MHz (Uplink); 925-960MHz (Downlink)	24 dBm (Conducted)
LTE	Band 1: 1920-1980MHz(Uplink); 2110-2170MHz(Downlink) Band 3: 1710-1785MHz(Uplink); 1805-1880MHz(Downlink) Band 7: 2500-2570MHz(Uplink); 2620-2690MHz(Downlink) Band 8: 880-915MHz(Uplink);925-960MHz(Downlink) Band 20: 832-862MHz(Uplink); 791-821MHz(Downlink) Band 28: 703-748MHz(Uplink); 758-803MHz(Downlink) Band 34: 2010-2025MHz Band 38: 2570-2620MHz Band 40: 2300-2400MHz Band 41: 2496-2690MHz Band 42: 3400-3600MHz Band 43: 3600-3800MHz	24 dBm (Conducted)
	Band 41: 2496-2690MHz	27 dBm (Conducted)
5G NR	n1: 1920-1980MHz(Uplink); 2110-2170MHz(Downlink) n3: 1710-1785MHz(Uplink); 1805-1880MHz(Downlink) n7: 2500-2570MHz(Uplink); 2620-2690MHz(Downlink) n8: 880-915MHz(Uplink);925-960MHz(Downlink) n20: 832-862MHz(Uplink); 791-821MHz(Downlink) n28: 703-748MHz(Uplink); 758-803MHz(Downlink) n38: 2570-2620MHz n40: 2300-2400MHz n41: 2496-2690MHz n77: 3300-4200MHz n78: 3300-3800MHz	24 dBm (Conducted)
	n41: 2496-2690MHz n77: 3300-4200MHz n78: 3300-3800MHz	29 dBm (Conducted)

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.

Český
Tento produkt je v souladu se směrnici 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
Questo prodotto è conforme alla Direttiva 2014/53/EU.

Lietuvių
Šis gaminys atitinka direktyvą 2014/53/ES.

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

Magyar
Ez a 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
Denne produkt överensstämmer med direktiv 2014/53/EU.

Note: The full Declaration of Conformity for this product is available in 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)

Waste Electrical and Electronic Equipment (WEEE)

This symbol means that according to local laws and regulations your product and/or its battery shall be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Proper recycling of your product will protect human health and the environment.

UK Conformity Assessed (UKCA) – United Kingdom



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

Standard	Frequency Range	Max. Transit Power
Bluetooth	2402-2480 MHz	10 dBm (EIRP)
WLAN	2.4GHz: 2412-2472MHz	20 dBm (EIRP)
WLAN	5GHz: 5180-5240MHz	23 dBm (EIRP)
WLAN	5GHz: 5260-5320MHz	23 dBm (EIRP) *
WLAN	5GHz: 5500-5700MHz	30 dBm (EIRP) *
WLAN	5GHz: 5745-5825MHz	14 dBm (EIRP)

Standard	Frequency Range	Transit Power
WCDMA	Band 1: 1920-1980MHz (Uplink); 2110-2170MHz (Downlink) Band 8: 880-915MHz (Uplink); 925-960MHz (Downlink)	24 dBm (Conducted)
LTE	Band 1: 1920-1980MHz (Uplink); 2110-2170MHz (Downlink) Band 3: 1710-1785MHz (Uplink); 1805-1880MHz (Downlink) Band 7: 2500-2570MHz (Uplink); 2620-2690MHz (Downlink) Band 8: 880-915MHz (Uplink); 925-960MHz (Downlink) Band 20: 832-862MHz (Uplink); 791-821MHz (Downlink) Band 28: 703-748MHz (Uplink); 758-803MHz (Downlink) Band 34: 2010-2025MHz Band 38: 2570-2620MHz Band 40: 2300-2400MHz Band 41: 2496-2690MHz Band 42: 3400-3600MHz Band 43: 3600-3800MHz	24 dBm (Conducted)
	Band 41: 2496-2690MHz	27 dBm (Conducted)
5G NR	n1: 1920-1980MHz (Uplink); 2110-2170MHz (Downlink) n3: 1710-1785MHz (Uplink); 1805-1880MHz (Downlink) n7: 2500-2570MHz (Uplink); 2620-2690MHz (Downlink) n8: 880-915MHz (Uplink); 925-960MHz (Downlink) n20: 832-862MHz (Uplink); 791-821MHz (Downlink) n28: 703-748MHz (Uplink); 758-803MHz (Downlink) n38: 2570-2620MHz n40: 2300-2400MHz n41: 2496-2690MHz n77: 3300-4200MHz n78: 3300-3800MHz	24 dBm (Conducted)
	n41: 2496-2690MHz n77: 3300-4200MHz n78: 3300-3800MHz	29 dBm (Conducted)

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>

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

	UK (NI)
--	---------

Fortinet Customer Service and Support

Create a support account, register and manage your products, download updates, firmware images, and release notes, and create technical support tickets.

<https://support.fortinet.com>

Fortinet Document Library

Up-to-date versions of Fortinet publications for the entire family of Fortinet products.

<https://docs.fortinet.com>

Training Services

Course descriptions, availability, schedules, and location of training programs in your area.

<https://training.fortinet.com>

Technical Discussion Forums

Communicate with other customers and Fortinet partners about Fortinet products, services, and configuration issues.

<https://forum.fortinet.com>

FortiGuard Threat Research and Response

Up-to-date information on vulnerabilities and threats, includes a virus scanner, IP signature look-up, and web filtering tools.

<https://fortiguard.com>

Fortinet.com