

快速入門指南

FortiGate 50G 5G Series

FG-50G-5G, FG-51G-5G

要

點

保護您的網路

在 <https://support.fortinet.com> 註冊以獲取最新的威脅防護更新

GUI

- 1 使用乙太網路線（未隨附）將Port 1連接到電腦上的乙太網路連接埠或 USB-RJ45 乙太網路轉接器
- 2 開啟瀏覽器造訪 <https://192.168.1.99>

CLI

- 1 將控制台電纜（未隨附）連接至控制台端口
- 2 使用 9600-8-N-1 開啟終端應用程式

預設登入

(((•))) <https://192.168.1.99>
Username: **admin**
Password: **leave blank**

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

Fortinet文件庫

有關入門文件管理指南、最新硬體手冊和參考資源，請造訪 <https://docs.fortinet.com/>

FortiGate Cloud

在 <https://fortigate.forticloud.com> 體驗簡化的雲端配置、零接觸部署、組態管理和報告

FortiExplorer Go

快速設定、部署和管理您的Fortinet Security Fabric Platform，在iOS與Android上免費下載：<https://docs.fortinet.com/product/fortiexplorer-go/>



包裝內容

FortiGate 50G-5G Series

FG-50G-5G, FG-51G-5G



1x FortiGate Device



1x QuickStart Guide



3x AC Adapter Plugs
(US, EU, UK)



1x DC Power Adapter



1x Ethernet Cable



5x Antennas
(4x 5G, 1x GPS)

設置

FortiExplorer Go



Install
FortiExplorer Go

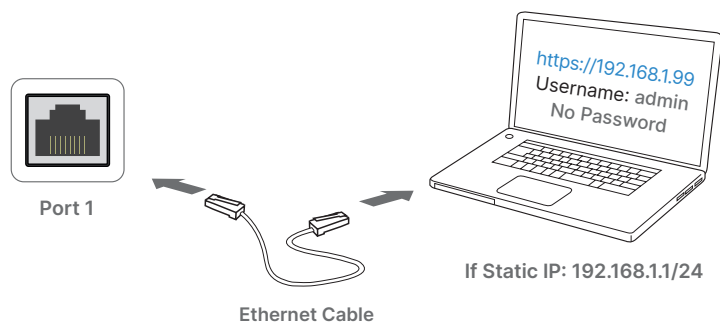


Enable
Bluetooth

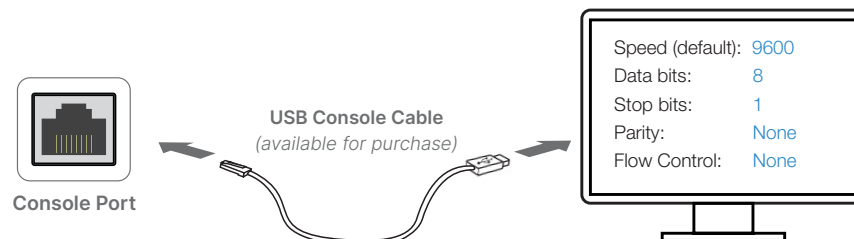


Follow the on-screen
instructions

GUI

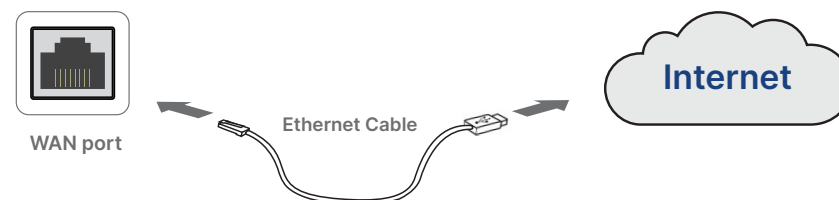


CLI



FortiGate Cloud

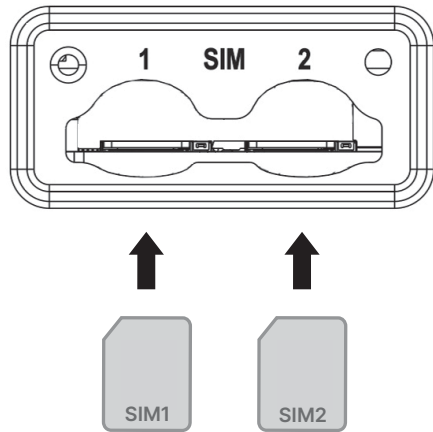
使用您的Fortinet憑證登入 <https://fortigate.forticloud.com>，然後按一下**Add FortiGate**並輸入 Cloudkey



雙 5G Nano SIM 插槽

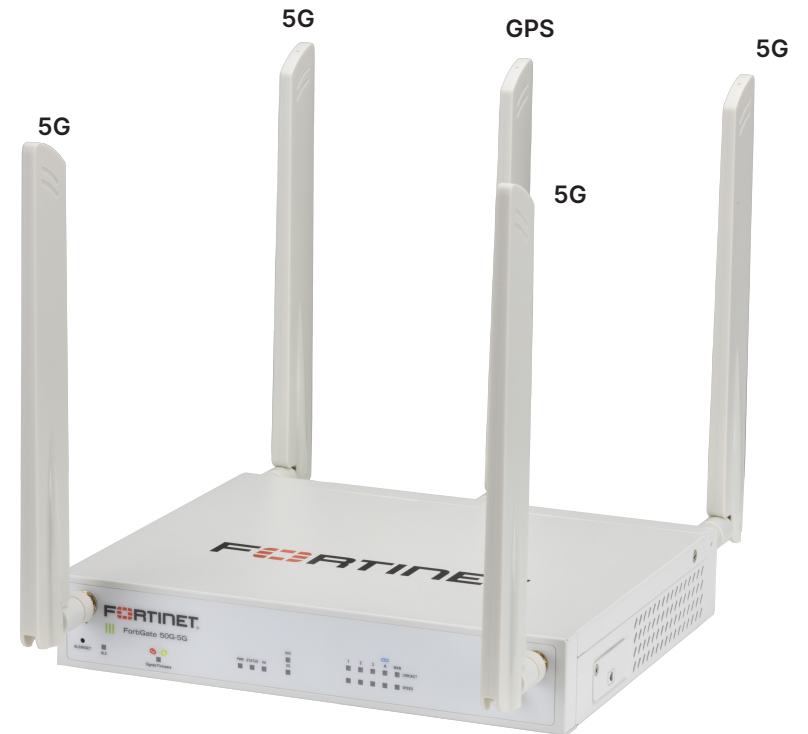
SIM 類型為 4FF - Nano SIM。支持工規和商規卡。

請參閱<https://docs.fortinet.com> 上的Admin guide進行配置。

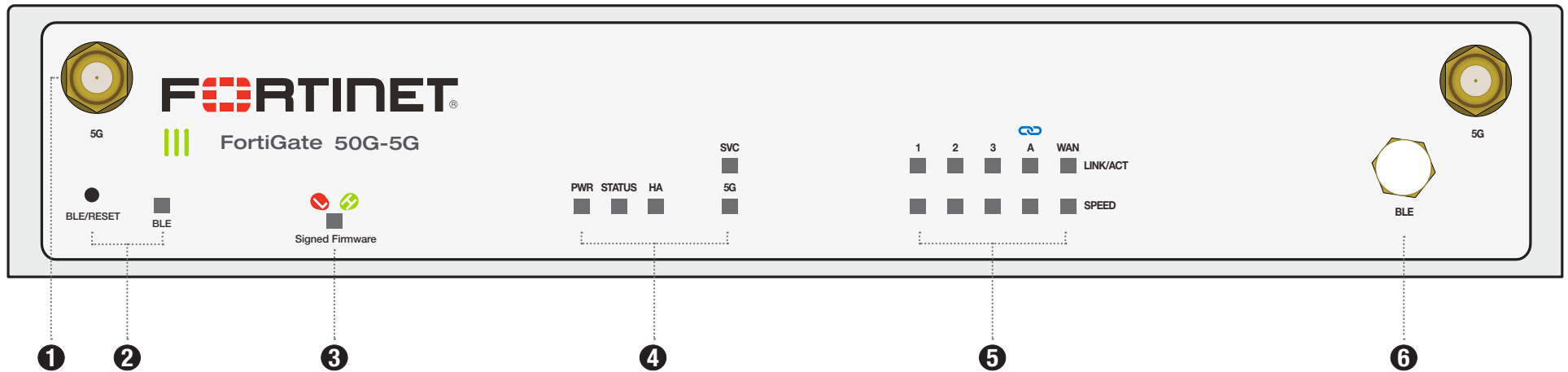


天線安裝

將提供的天線連接到 SMA 連接。



Front FG-50G-5G Series



1 Antenna Connector (5x SMA)

2 BLE / RESET Press to enable BLE; press and hold for system reset during STATUS reset window

- **Blue:** BLE on
- **Flashing Blue:** BLE in discovery
- **Off:** BLE off

3 SIGNED FIRMWARE BIOS Security Level

Controlled by Signed Firmware Switch, see Admin Guide at <https://docs.fortinet.com>

- **High:** Unsigned firmware blocked (default)
- **Low:** Unsigned firmware allowed with a warning

4 PWR

- **Green:** Power detected
- **Off:** Power not detected

STATUS

- **Green:** Operating normally
- **Flashing Green:** Reset window
- **Off:** Device is off

HA

- **Green:** HA enabled (normal)
- **Amber:** HA enabled (failover)
- **Off:** HA disabled

5 Ethernet Ports LINK/ACT

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

6 BLE Antenna

SVC 5G/4G/3G Link

- **Green:** SVC connected
- **Off:** SVC not connected

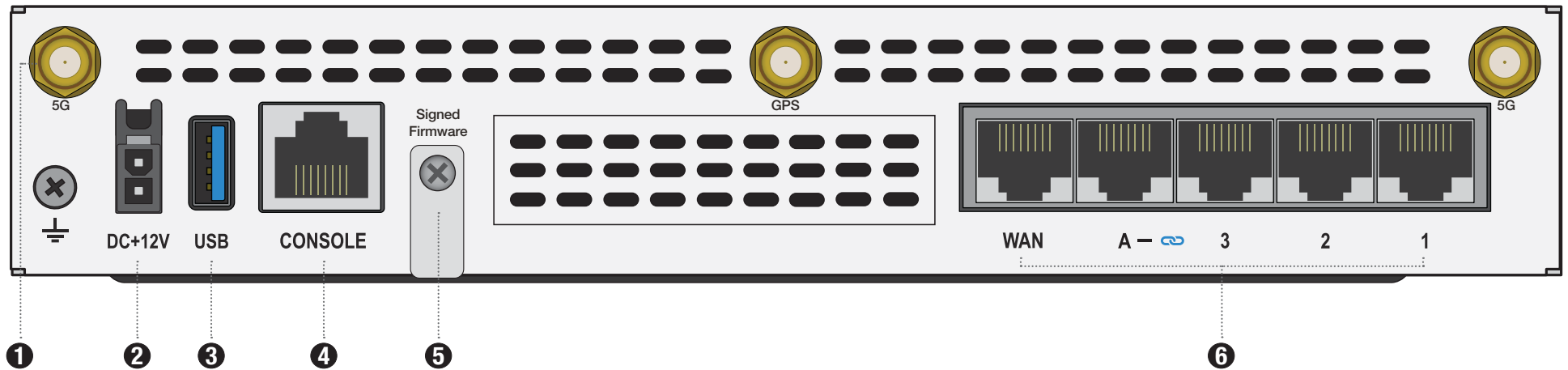
5G

- **Green:** 5G connected
- **Amber:** 4G/3G connected
- **Off:** Not connected

SPEED

- **Green:** 1 Gbps
- **Amber:** 100 Mbps
- **Off:** 10 Mbps or not connected

Rear FG-50G-5G Series



1 Antenna Connector (5x SMA)

2 Power Input 12V DC, 100-240V AC 50/60Hz adapter

3 USB 3.0 Port

4 CONSOLE (RJ45) CLI management

5 SIGNED FIRMWARE Switch

6 Ports (5x RJ45) WAN, A – FortiLink, 3, 2, 1

Cautions and Warnings

Environmental specifications

Ambient operating temperature: 0°C to 40°C

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

This product is intended to be supplied by a Listed pluggable A via Class I external power supply adapter by means of a power cord connected to a socket-outlet with earthing connection.

Ce produit est destiné à être alimenté par un adaptateur d'alimentation externe de classe I par l'intermédiaire d'un cordon d'alimentation enfichable de classe A qui doit être branché à une prise de courant avec terre.

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 an 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 matériel, assurez-vous que les branchements qui entrent à partir de l'extérieur du bâtiment passent par un parafoudre / parasurtenseur et sont correctement mis à la terre. Utilisez un poste de travail de décharge électrostatique (ESD) et / ou portez un bracelet anti-statique lorsque vous travaillez. Ce produit possède une borne de mise à la terre qui est prévu à l'arrière du produit, à ceci s'ajoute la mise à la terre de la prise.

This product has a separate protective earthing terminal provided on the back of the product in addition to the grounding terminal of the attachment plug. This separate protective earthing terminal must be permanently connected to earth with a green with yellow stripe conductor minimum size # 22AWG and the connection is to be installed by a qualified service personnel.

Ce produit a une borne de mise à la terre séparé sur le dos de l'appareil, en plus de la borne de mise à la terre de la fiche de raccordement. Cette borne de mise à la terre séparée doit être connecté en permanence à la terre avec un conducteur vert avec la taille bande jaune de minimum # 22AWG et la connexion doit être installé par un personnel qualifié.

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 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

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.

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 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 20cm de distance entre la source de rayonnement et votre corps.

This radio transmitter (Contains IC: 7280B-110T17) 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 (Contains IC: 7280B-110T17) 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 fonctionnement en association avec une autre antenne ou transmetteur.

Antenna No.	Manufacturer	Model	Antenna Type	Connector	Antenna Peak Gain
1	Joymax	IHF-2120MPX9-W018	monopole	IPex MHF1	1.53 dBi for 2.4GHz(BLE)

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.



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 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
Šis produkts atbilst Direktīvai 2014/53/ES.

Lietuvių
Šis gaminys atitinka direktyvą 2014/53/ES.

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

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.

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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 in the link below:
<https://site.fortinet.com/ProductRegulatory/EU>

National Telecommunications Commission (NCC) – Taiwan

NCC警語
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。

電波功率密度MPE標準值為：1.0 mW/cm²，測測產品實測值為：0.169 mW/cm²，建議使用時設備天線至少距離人體20 公分。

減少電磁波影響，請妥適使用。

限用物質含有情況表 (RoHS Table) 請到以下 網址下載：
<https://www.fortinet.com/bssml>

英屬蓋曼群島商防特網股份有限公司台灣分公司
地址：台北市內湖區行愛路176號2樓
電話：(02) 27961666

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:

TECHNOLOGY	FREQUENCY RANGE	TRANSMIT POWER
Bluetooth	2402-2480MHz	Less than 10dBm (EIRP)
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	27 dBm (Conducted)
	n41: 2496-2690MHz n77: 3300-4200MHz n78: 3300-3800MHz	29 dBm (Conducted)

UK Conformity Assessed (UKCA) – United Kingdom

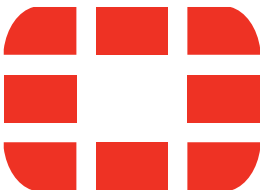
The product transmits within the frequency ranges and less than or equal to the power listed below:

TECHNOLOGY	FREQUENCY RANGE	TRANSMIT POWER
Bluetooth	2402-2480MHz	Less than 10dBm (EIRP)
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	n41: 2496-2690MHz n77: 3300-4200MHz n78: 3300-3800MHz	27 dBm (Conducted)
	n41: 2496-2690MHz n77: 3300-4200MHz n78: 3300-3800MHz	29 dBm (Conducted)

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>



December 4, 2024

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

FG-50G-5G-Series-QSG-20241204

