

QuickStart Guide

FortiGate Rugged 70G-5G-Dual

FGR-70G-5G-DUAL

The Essentials

Secure your Network

Register at <https://support.fortinet.com> for the latest threat protection updates

GUI

- 1 Connect Port 1 to an Ethernet port or USB-RJ45 Ethernet adapter on your computer using the provided Ethernet cable
- 2 Open a browser to <https://192.168.1.99>

CLI

- 1 Connect a console cable (not included) to the Console Port
- 2 Open a Terminal app using 9600-8-N-1

Default Login



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

Fortinet Documents Library

For getting started documentation, admin guides, up-to-date hardware manuals and reference resources, visit <https://docs.fortinet.com/>

FortiGate Cloud

Experience simplified cloud provisioning, security analytics, remote access, hosted log retention and reporting at <https://fortigate.forticloud.com>



FortiExplorer Go

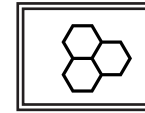
Rapidly provision, deploy and manage your Fortinet Security Fabric Platform, free on iOS and Android: <https://docs.fortinet.com/product/fortiexplorer-go/>



Package Contents

FortiGate Rugged 70G-5G-DUAL

FGR-70G-5G-DUAL



1x FGR-70G-5G-DUAL



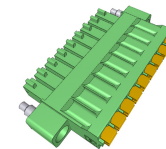
1x QuickStart Guide



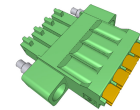
1x CAT5e Ethernet Cable



1x DIN Rail Bracket w/Screws
(4x M3x10)



1x Digital I/O Connector



1x DC Power Connector



9x Antennas
(8x WWAN, 1x GPS)

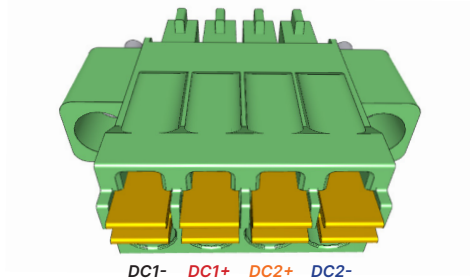
Power Installation

Warnings

- The redundant DC inputs support negative ground (+12V to +125V DC) and positive ground (-12V to -125V DC), 3A Max
- With the optional failover redundancy, if the primary DC input fails, the secondary DC input will supply power
- DC1+ and DC2+ are the higher voltage potential pins and DC1- and DC2- are the lower voltage potential pins
- Do not connect the DC+ terminal to a lower voltage potential than the DC- terminal
- The voltage between DC+ and DC- must be +12V to +125V DC
- The DC wire gauge maximum is 16 AWG; the minimum is 22 AWG
- Consult a professional electrician to install the device and determine a suitable wire gauge and length

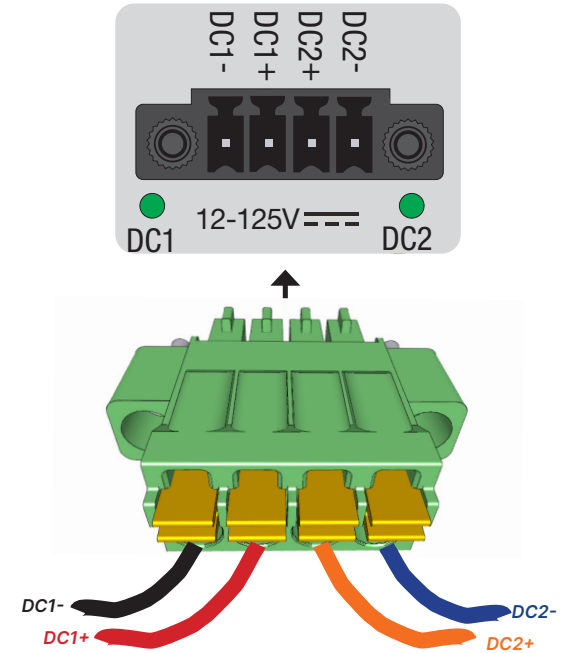
Connector Pinout

Connect DC1+ or DC2+ on the device terminal block to the DC power source, then connect the negative DC1- or DC2- on the terminal block. Terminal block does not support hot-plugging.



DC Input Power	DC+ Terminal	DC- Terminal
Negative Ground	+12V to +125V DC	Ground
Positive Ground	Ground	-12V to -125V DC

Wiring

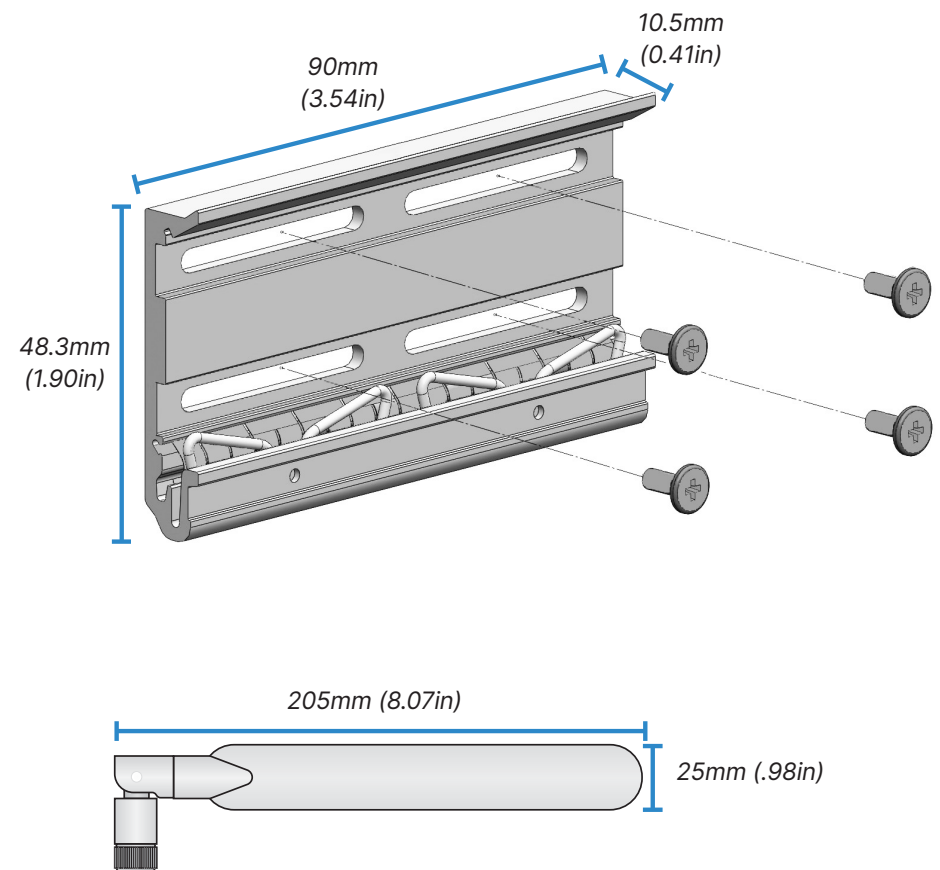
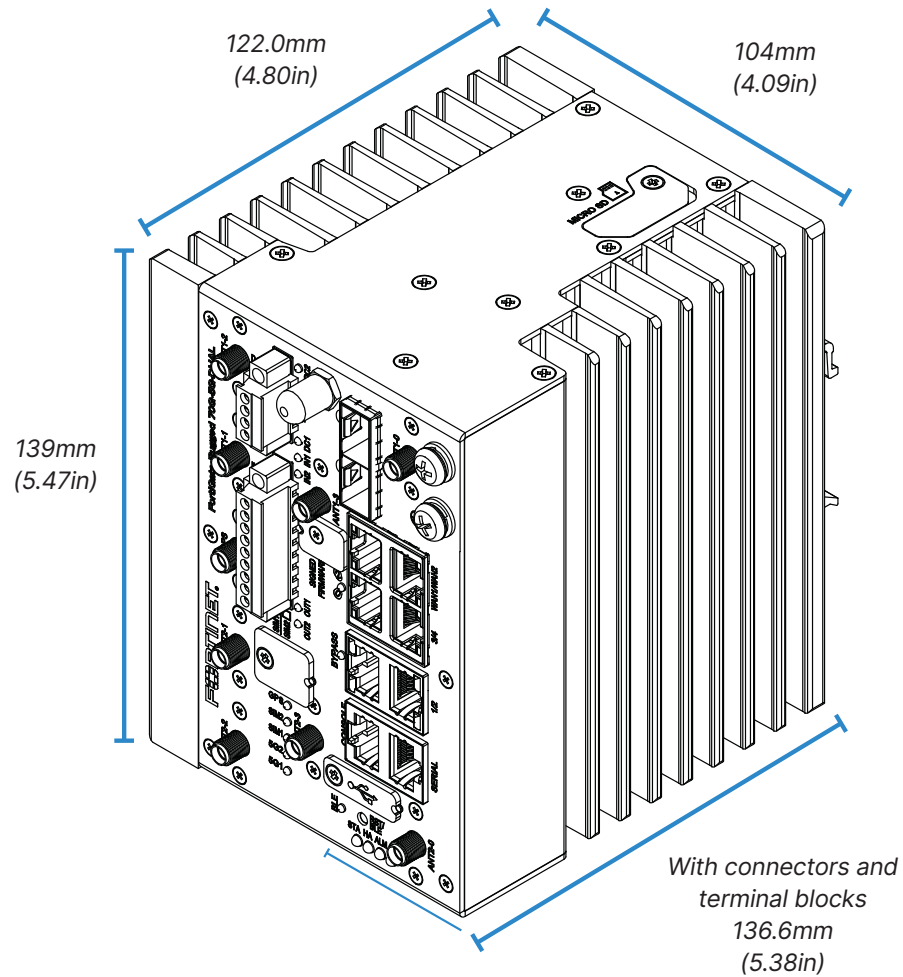


Grounding

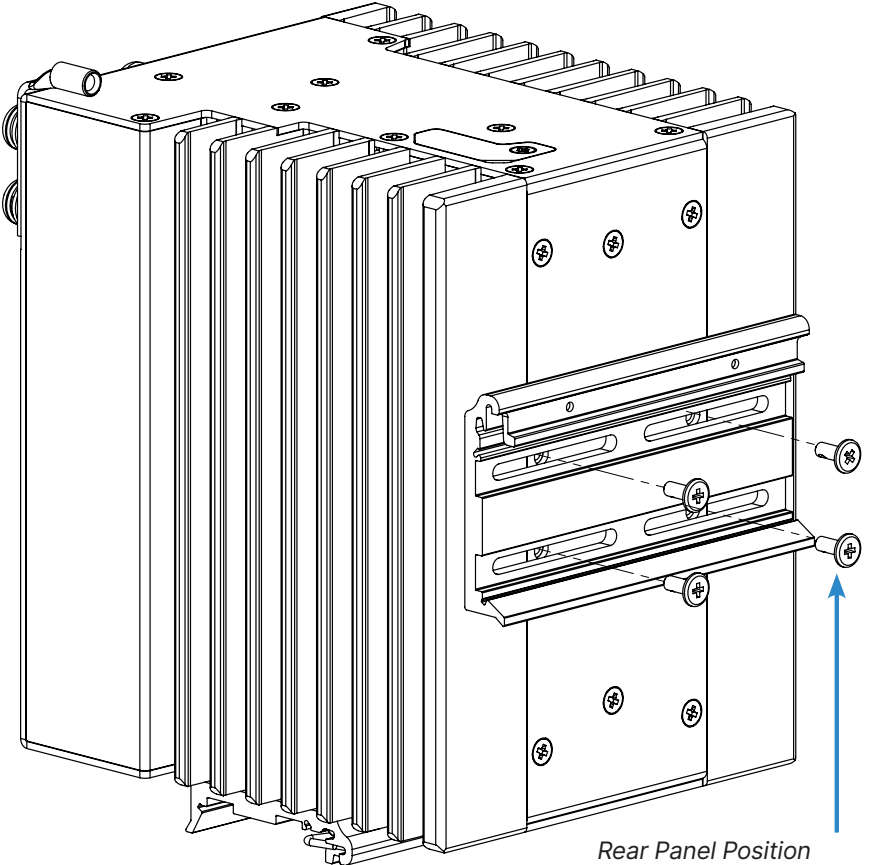
Optional but recommended, connect earth ground using the lug plate or grounding screw.

Dimensions

NOTE: Drawings are for dimensional purposes only. Refer to the following pages for connector details.

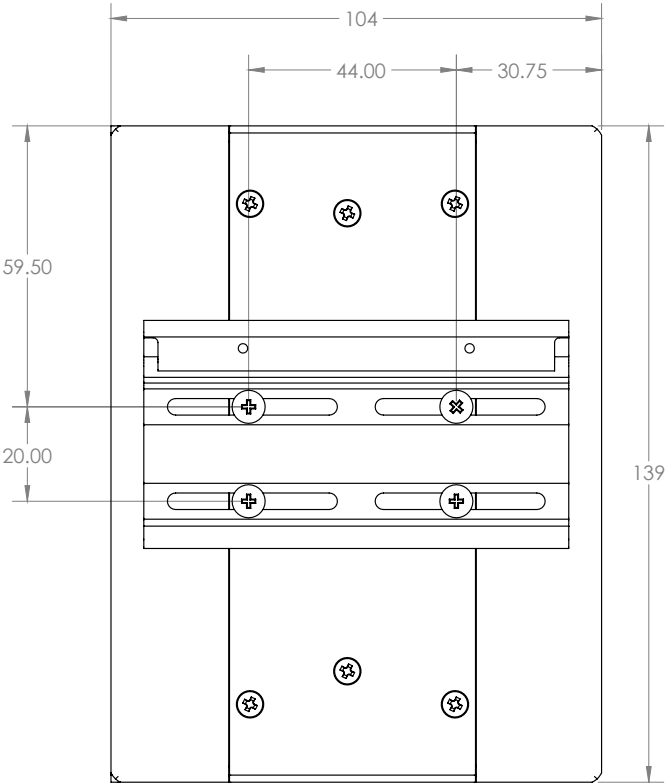


DIN Rail Mounting Bracket

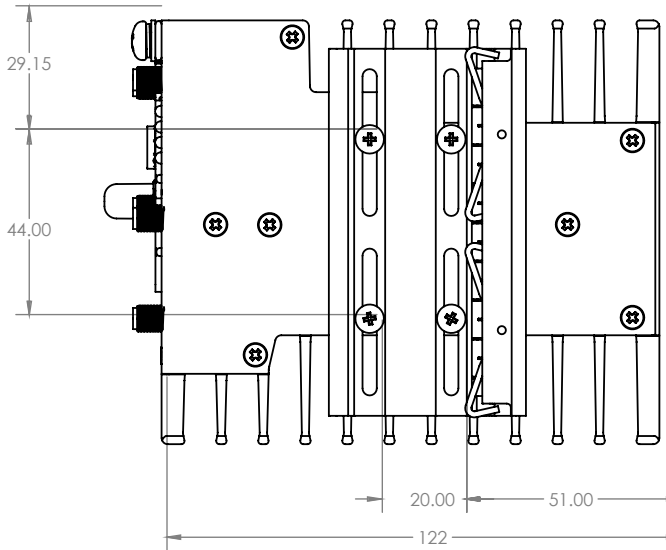


Side Panel Position

Rear Panel Position
(Includes 4x M3 Pan Head Screws)

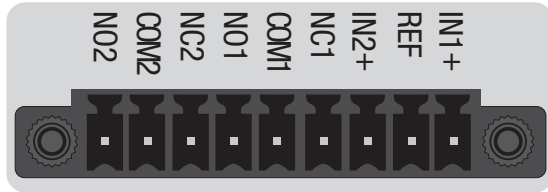


Rear Panel Position



Side Panel Position

Digital I/O Connector



Connector	Description
NO2	Normally Open 2 Terminal
COM2	Common 2 Terminal
NC2	Normally Closed 2 Terminal
NO1	Normally Open 1 Terminal
COM1	Common 1 Terminal
NC1	Normally Closed 1 Terminal
IN2+	Alarm Input 2
REF	Alarm Input 1/2 Reference Ground
IN1+	Alarm Input 1

BIOS Options

The default CPU speed is set to high performance mode. Low power mode can be set in the BIOS options. See the Admin Guide for more information at <https://docs.fortinet.com>

Dual 5G Nano SIM Slots

SIM type is 4FF - Nano SIM. Industrial SIM cards recommended for extreme temperature environments. Refer to the [datasheet](#) for supported operating temperatures. For wireless configuration, visit <https://docs.fortinet.com>



Micro SD Card Slot

Industrial SIM cards recommended for extreme temperature environments. Hot-swapping the Micro SD card is not supported. Power off the device before installing or uninstalling the Micro SD card. Micro SD card not included. Refer to the Admin Guide for SD card details at <https://docs.fortinet.com>



Setup

FortiExplorer Go



Install
FortiExplorer Go

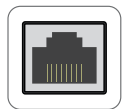


Enable
Bluetooth

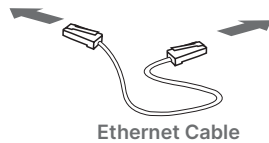


Follow the on-screen
instructions

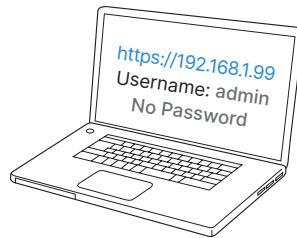
GUI



Ports 1-4



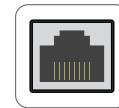
Ethernet Cable



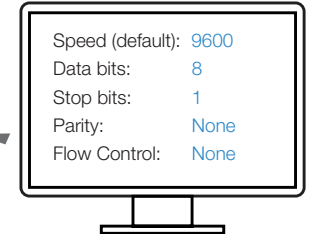
If Static IP: 192.168.1.1/24

<https://192.168.1.99>
Username: admin
No Password

CLI

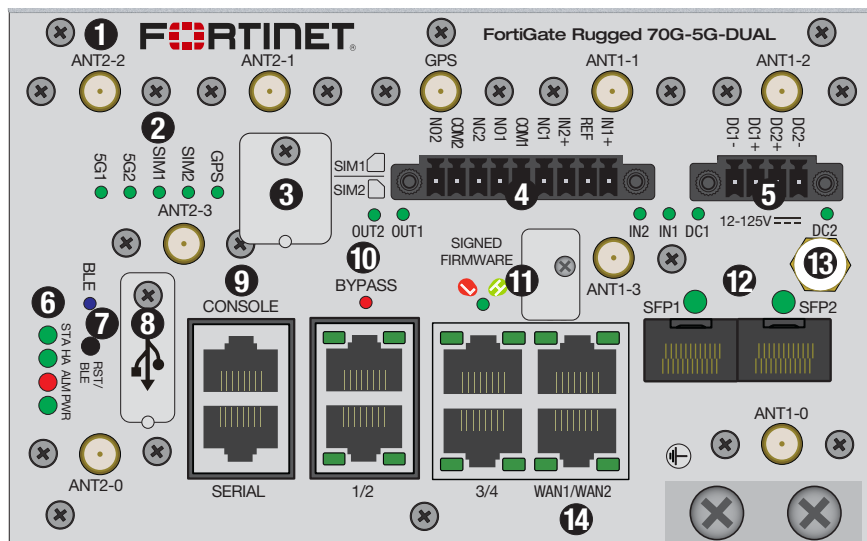


Console Port



Speed (default): 9600
Data bits: 8
Stop bits: 1
Parity: None
Flow Control: None

Front FGR-70G-5G-DUAL



1 Antenna Connector (9x SMA)

2 5G1, 5G2

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

3 5G SIM slots (2x Nano 4FF)

SIM1, SIM2

- **Green:** SIM card detected
- **Off:** SIM card not detected

GPS

- **Green:** On
- **Off:** Off

4 Alarm Inputs (IN1, IN2)

- **Green:** Alarm defined
- **Red:** Alarm detected
- **Off:** Alarm not defined

Alarm Outputs (OUT1, OUT2)

- **Green:** Alarm defined
- **Flashing Red:** Major alarm detected
- **Red:** Minor alarm detected
- **Off:** Alarm not defined

5 Power Connectors (DC1, DC2) Alarm disabled by default

- **Green:** Power detected
- **Red:** Alarm is on; no power detected
- **Off:** No power detected

6 STA

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

ALM

- **Red:** Major alarm detected
- **Amber:** Minor alarm detected
- **Off:** No alarm detected

7 RST / BLE Press to enable BLE; press and hold for system reset during STA reset window

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

8 USB 2.0 (USB-A)

9 CONSOLE (RJ45) CLI management

SERIAL (RJ45) Data port

10 Ports 1 to 4 (RJ45)

BYPASS Ports 1 & 2 only; bypass disabled by default

- **Green:** Bypass off
- **Red:** Bypass on

Speed (Left LED)

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

Activity/Link (Right LED)

- **Green:** Link established
- **Flashing Green:** Data activity
- **Off:** No link established

11 Signed Firmware BIOS Security Level

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

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

12 SFP1 & SFP2 (SFP)

- **Green:** Link established
- **Flashing Green:** Data activity
- **Off:** No link established

13 BLE Antenna

14 WAN1 (Top) & WAN2 (Bottom) (RJ45)

Speed (Left LED)

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

Activity/Link (Right LED)

- **Green:** Link established
- **Flashing Green:** Data activity
- **Off:** No link established

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



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:

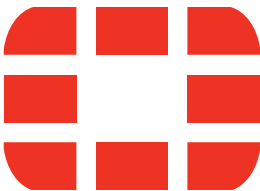
Standard	Frequency Range	Max. Transmit Power
Bluetooth	2402–2480 MHz	10 dBm (ERP)

Standard	Frequency Range	Transmit 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)	24 dBm (Conducted)
	Band 34: 2010-2025MHz Band 38: 2570-2620MHz Band 40: 2300-2400MHz Band 41: 2496-2690MHz Band 42: 3400-3600MHz Band 43: 3600-3800MHz	
	Band 41: 2496-2690MHz	27 dBm (Conducted)
	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)

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>



May 2, 2025

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