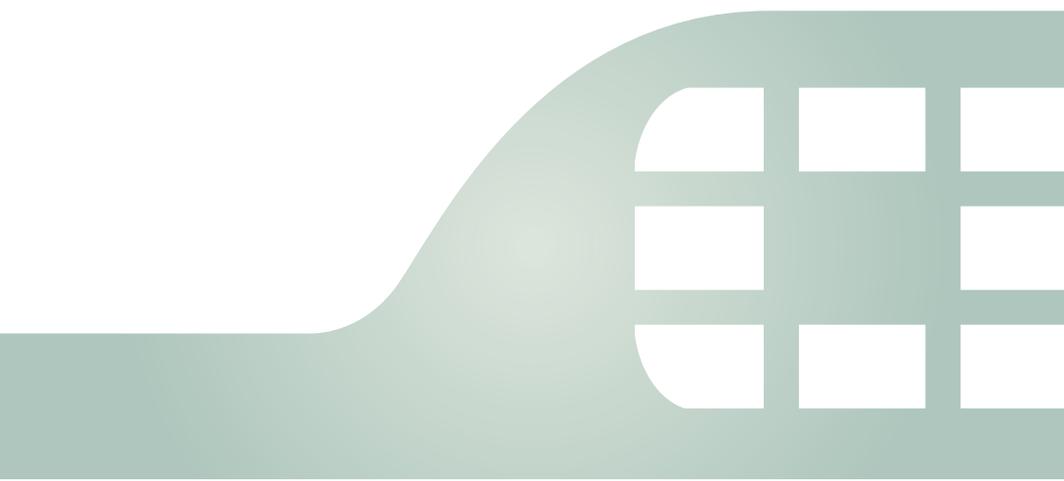




# FortiGate Rugged 60D

## QuickStart Guide



# Table of Contents

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August 21, 2019

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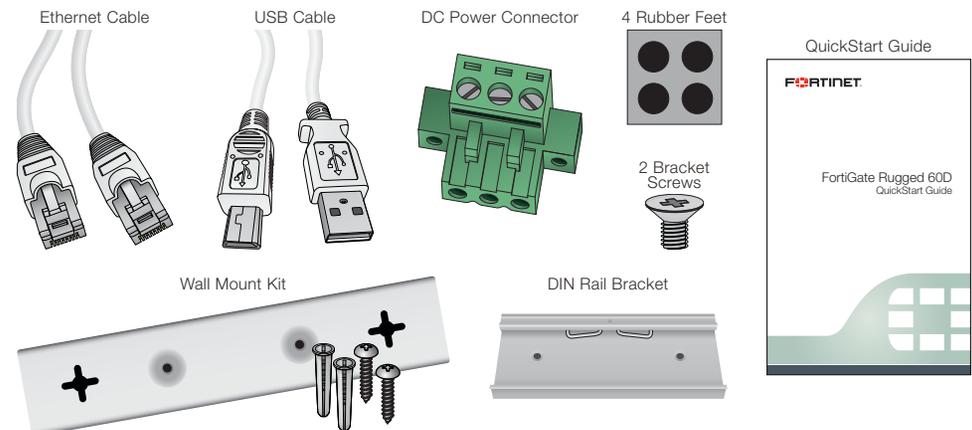
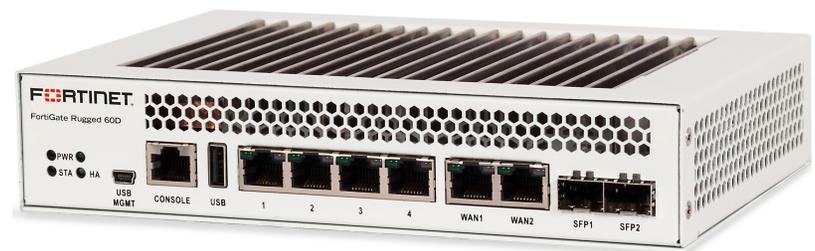
Package Contents	1
SFP Transceivers	2
Mounting Your Device	4
Connecting Your Device	7
FortiExplorer	8
Configuring Your Device	10
Technical Specifications	12
LED Specifications	13
Cautions and Warnings	14
Regulatory Compliance	16
Documentation and Links	18
Register Your Product	19
Product License Agreement	20

# Package Contents

Fortinet's consolidated security solutions provide an integrated set of core security and network services in a single, easy-to-manage, high-performance appliance that is capable of supporting a wide range of deployment scenarios.

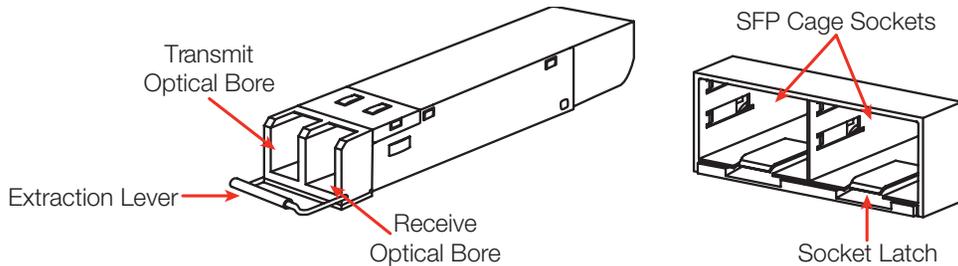
Your box contains the following:

- |                      |                  |
|----------------------|------------------|
| FortiGate Rugged 60D | 4 Rubber Feet    |
| QuickStart Guide     | Wall Mount Kit   |
| Ethernet Cable       | DIN Rail Bracket |
| USB Cable            | 2 Bracket Screws |
| DC Power Connector   |                  |



Note: Accessories may not be exactly as shown.

# SFP Transceivers



**Caution:** SFP transceivers are static sensitive devices. Use an ESD wrist strap or similar grounding device when handling transceivers.

**Caution:** Do not install or remove SFP transceivers while fiber-optic cables are still attached. This can cause damage to the cables, cable connectors, and the optical interfaces. It may also prevent the transceiver from latching correctly into the socket connector.

**Note:** Installing and removing SFP transceivers can shorten their useful life. Do not install or remove transceivers more than is necessary.

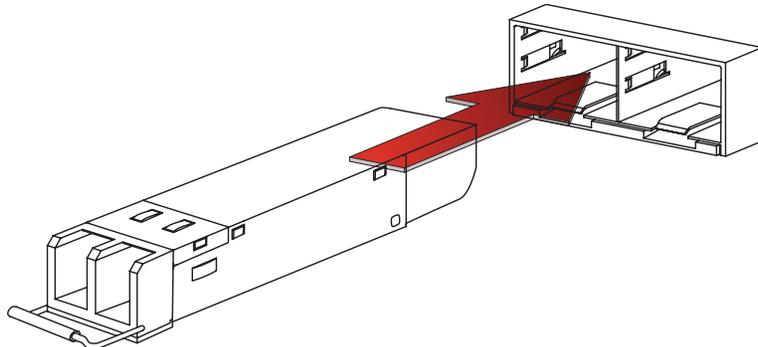
## To install the SFP transceivers:

1. Ensure that you are properly grounded.
2. Remove the caps from SFP cage sockets on the front panel of the unit.
3. Position the SFP transceiver in front of the cage socket opening and ensure that the transceiver is correctly oriented.

When the transceiver is correctly oriented, the extraction lever will be level with the socket latch.

**Note:** SFP cage socket orientation may vary. Ensure that the SFP transceiver module is correctly oriented each time that you are inserting a transceiver.

4. Hold the sides of the SFP transceiver and slide it into the cage socket until it clicks into place.

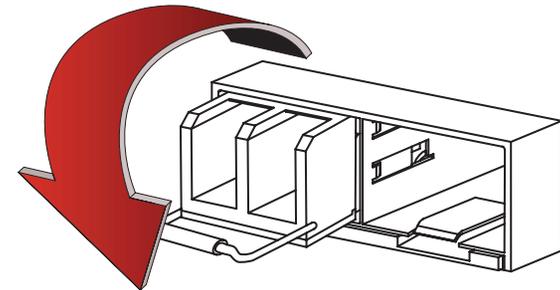


**Caution:** Do not force the SFP transceivers into the cage slots. If the transceiver does not easily slide in and click into place, it may not be aligned correctly or may be upside down. If this happens, remove the SFP transceiver, realign it or rotate it and slide it in again.

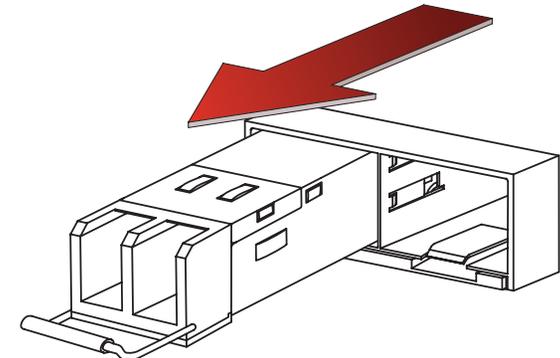
5. Press the transceiver firmly into the cage socket with your thumb.
6. Verify that the transceiver is latched correctly by grasping the sides of the transceiver and trying to pull it out without lowering the extraction lever.  
If the transceiver cannot be removed, it is installed and latched correctly.  
If the transceiver can be removed, reinsert it and press harder with your thumb.  
If necessary, repeat this process until the transceiver is securely latched into the cage socket.

## To remove the SFP transceivers:

1. Ensure that you are properly grounded.
2. If applicable, disconnect the fiber-optic cable from the transceiver connector and install a clean dust plug in the transceiver's optical bores.
3. Pull the extraction lever out and down to eject the transceiver.  
If you are unable to use your finger to open the lever, use a small flat-head screwdriver or other similar tool to open the lever.



4. Hold the sides of the transceiver and carefully pull it away from the cage socket.



5. Replace the cap on the SFP cage socket and place the removed SFP transceiver into an antistatic bag.

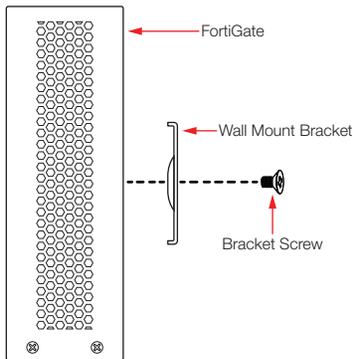
**Note:** Follow proper fiber-optic handling procedures when installing and removing SFP transceivers to ensure the devices remain clean and are not damaged.

# Mounting Your Device

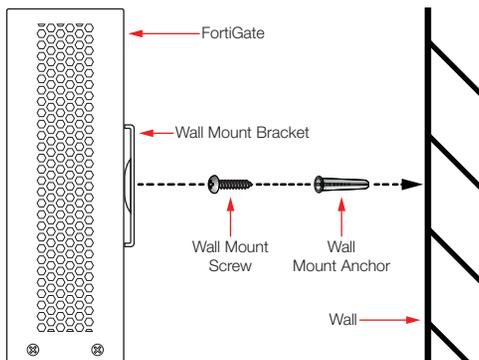
Using the provided hardware, the FortiGate device can be mounted on a wall or DIN rail, with the interfaces facing up or down as required. The device can also be mounted on a flat surface using the provided rubber feet.

## To attach the unit to a wall:

1. Select an appropriate location and, using the wall mount bracket in the provided wall mount kit, mark the location on the the wall where the anchors will be located.
2. Drill holes into the wall with an appropriately sized drill bit, then insert the provided anchors into the holes.
3. Screw the two screws provided in the wall mount kit into the two anchors, leaving enough of the screw exposed to ensure that the unit can be mounted on them.
4. Connect the wall mount bracket to the bottom of the device using the provided bracket screws.



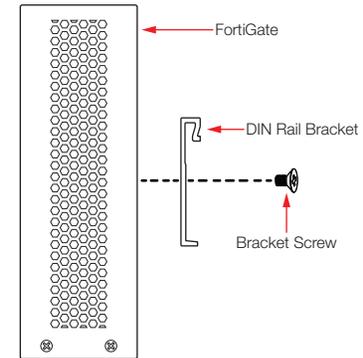
5. Mount the FortiGate device onto the screws and ensure that it is mounted securely.



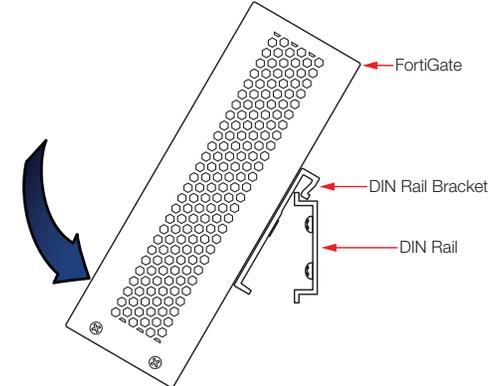
You can now proceed with connecting your FortiGate unit.

## To attach the unit to a DIN rail:

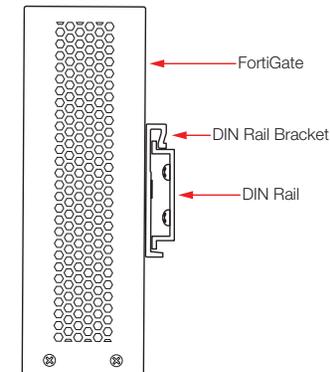
1. Connect the DIN rail bracket to the bottom of the device using the provided bracket screws.



2. Position the bottom of the device directly in front of the DIN rail, ensuring that the top of the DIN rail bracket hooks over the top of the DIN rail.



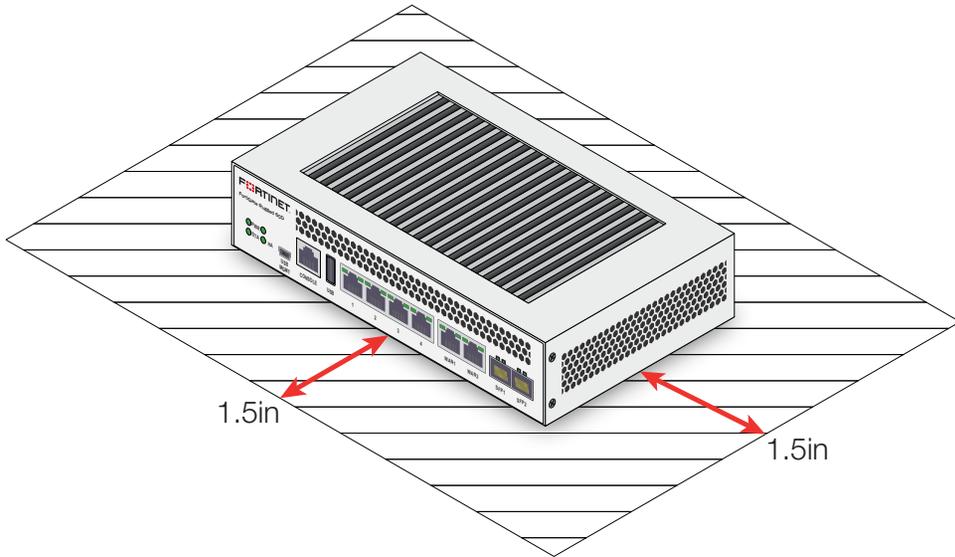
3. Rotate the device until the bottom of the DIN rail bracket sits against the bottom of the DIN rail.



You can now proceed with connecting your FortiGate unit.

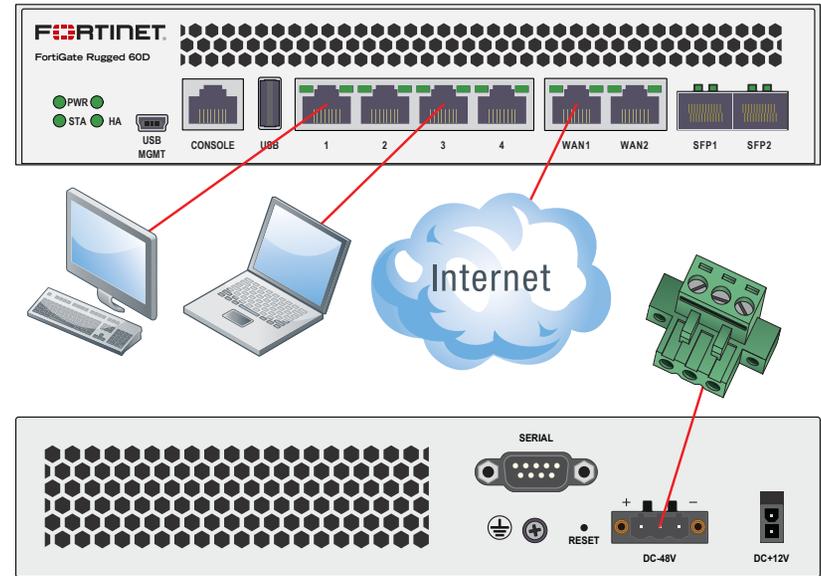
### To install the unit on a flat surface:

1. Ensure that the surface onto which the FortiGate unit to be installed is clean, level, and stable and that there is at least 1.5 inches (3.8cm) of clearance on all sides to allow for adequate airflow.
2. Attach the provided rubber feet to the bottom of the FortiGate unit.
3. Place the unit in the designated location.



4. Verify that the spacing around the FortiGate unit conforms to requirements and that the unit is level.  
You can now proceed with connecting your FortiGate unit.

## Connecting Your Device



Ensure the FortiGate unit is securely mounted or placed on a stable surface. Connect the following to the FortiGate unit:

1. Connect an Ethernet cable into the port labeled WAN1.
2. Connect the other end of your Ethernet cable to your Internet connection.
3. Connect an Ethernet cable to each workstation or laptop PC you wish to connect to the FortiGate unit.
4. Connect power to the unit using the provided DC power adapter, or an appropriate power adapter.

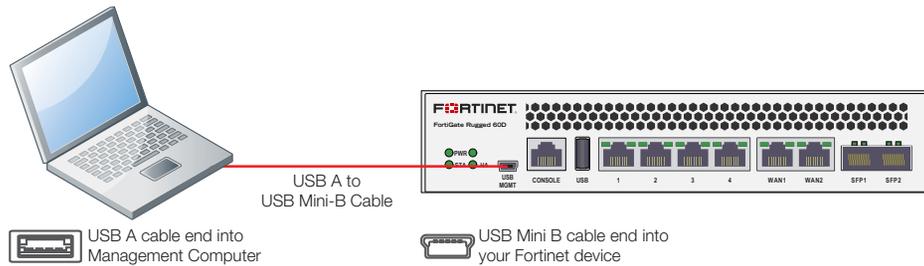
**Caution:** Consult a licensed electrician before connecting this product to a DC power source, or hire a licensed electrician to perform all connections.

**Caution:** Electrostatic discharge (ESD) can damage your Fortinet equipment.

# FortiExplorer

FortiExplorer provides a user-friendly tool that you can use to configure a FortiGate unit over a standard USB connection, rather than using a console cable or Ethernet connection.

**Caution: Do not connect the USB cable until after FortiExplorer has been installed.**



Note: When using FortiExplorer for the first time, ensure the FortiGate unit is using its factory default settings.

## Installing FortiExplorer

FortiExplorer is available for Microsoft Windows XP, Vista, 7, and 8. It is also available for Mac OS X v10.6 Snow Leopard and higher.

### Microsoft Windows Install

1. Double-click the .msi, or .exe file and follow the instructions on-screen.
2. Connect the USB cable to the FortiGate unit and then to the management computer.
3. The FortiExplorer Easy Configuration Utility opens when the USB cable is connected. Select Install the hardware automatically and select Next.
4. After a moment, FortiExplorer will launch.

### Mac OS X Install

1. Double-click the .dmg file and drag the FortiExplorer program file into the Applications folder.
2. Connect the USB cable to the FortiGate unit and then to the management computer.
3. Double-click the FortiExplorer icon to launch the application.

## Configuration Options

With FortiExplorer, you are provided a number of options on how to configure the FortiGate unit, depending on your level of comfort with various interfaces.

## Updating FortiExplorer and Firmware

FortiExplorer may be automatically updated from time to time.

You can also use FortiExplorer to check for new firmware for a FortiGate unit. To check for new firmware, select the FortiGate unit from the device list and select *Check for New Firmware*. FortiExplorer will also monitor firmware updates for your devices and provide an alert when one is available.

# Configuring Your Device

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The FortiGate unit requires some basic configuration to add it to your network. These basic steps include assigning IP addresses, DNS settings, and the default gateway. Until these steps are completed traffic will not flow through the device.

In addition to FortiExplorer, the FortiGate unit can be configured using the GUI or the Command Line Interface (CLI).

This section will step you through both methods of configuring the device. Use whichever method you are most comfortable with.

## To connect to the GUI:

1. Connect one of the FortiGate unit's Ethernet ports to a management computer using the provided Ethernet cable.
2. Configure the management computer to be on the same subnet as the internal interface of the FortiGate unit:
  - IP address: *192.168.1.2*
  - Netmask: *255.255.255.0*
3. To access the FortiGate unit GUI, start a browser of your choice and browse to *https://192.168.1.99*.
4. Type `admin` in the *Name* field, leave the *Password* field blank, and select *Login*.

You can now proceed with configuring your FortiGate unit.

See the FortiOS Handbook for more information (<http://docs.fortinet.com>).

## To Connect to the CLI:

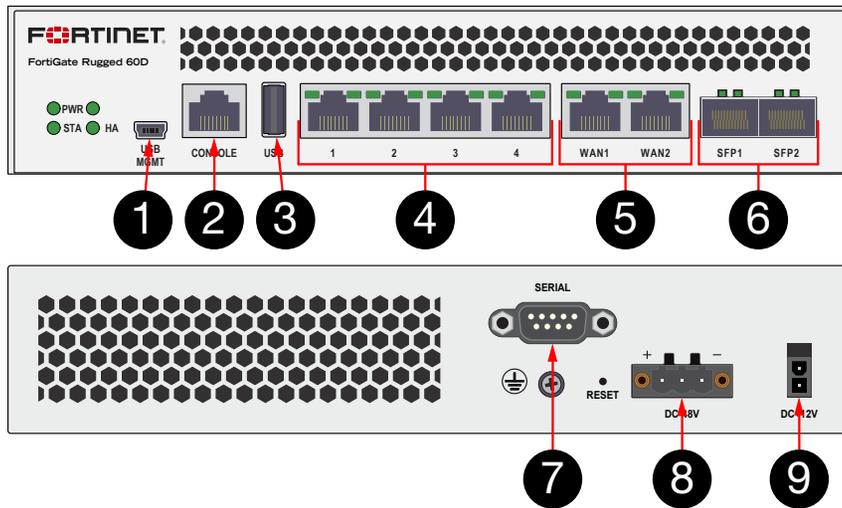
You can configure all FortiGate configuration options from the CLI using *config* commands. The CLI also includes *get*, *show*, *diagnose*, and *execute* commands for performing various configuration and monitoring tasks.

1. Connect the FortiGate unit console port to the management computer using the provided console cable.
2. Start a terminal emulation program on the management computer. Select the COM port and use the following settings:
  - Baud Rate: 9600
  - Data bits: 8
  - Parity: None
  - Stop bits: 1
  - Flow Control: None
3. Press *Enter* on your keyboard to connect to the CLI.
4. Type `admin` in the *Name* field, leave the *Password* field blank, and press *Enter*.

You can now proceed with configuring your FortiGate unit.

See the FortiGate CLI Reference for more information (<http://docs.fortinet.com/fortigate/reference>).

# Technical Specifications

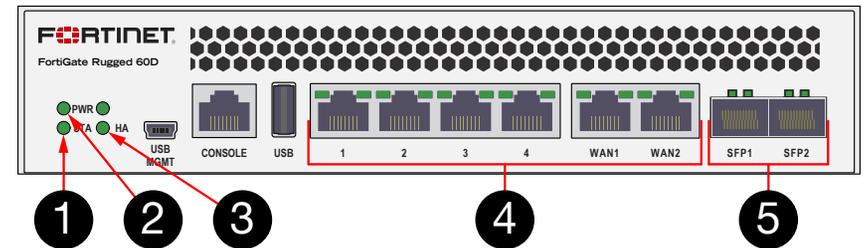


#	Interface	Type	Description
1	USB MGMT	USB mini-B	USB client port for management.
2	Console	RJ-45	Optional connection to the management computer. Provides access to the CLI.
3	USB	USB-A	USB server port for USB key, modem, or management functions.
4	Ethernet Ports 1 - 4	RJ-45	Gigabit Ethernet ports for connection to your network and the Internet.
5	WAN 1 & 2	RJ-45	Gigabit Ethernet Internet connection. Shared with SFP ports 1 & 2.
6	SFP 1 & 2	SFP	1Gbps small form-factor pluggable transceiver. Shared with WAN ports 1 & 2.
7	Serial Port	DB-9	Serial RS-232 communication port.
8	Power		-48V DC @ 0.6A.
9	Power		12V DC @ 2.5A.

**Note:** SFP ports 1 & 2 are shared with WAN ports 1 & 2. When an optical transceiver is inserted into an SFP port and linked up, the corresponding RJ-45 port cannot be used.

**Caution:** SFP ports should use UL listed Optical Transceiver products, rated Laser Class 1, 3.3V DC.

# LED Specifications



#	LED	State	Description
1	STATUS	Green	The unit is operating normally.
		Flashing Green	The unit is booting up.
2	POWER	Green	The unit is on.
		Off	The unit is off.
3	HA	Green	The unit is operating in HA mode.
		Off	The unit is not operating in HA mode.
4	Ethernet Ports Activity	Green	Port is connected.
		Flashing Green	Port is transmitting and receiving data.
		Off	Port is not connected.
4	Ethernet Port Speed	Green	Port is connected at 1Gbps.
		Amber	Port is connected at 100Mbps.
		Off	Port is connected at 10Mbps not connected.
5	SFP Ports Activity	Green	Port is connected.
		Flashing Green	Port is transmitting and receiving data.
		Off	Port is not connected.
5	SFP Ports Speed	Green	Port is connected at 1Gbps.
		Amber	Port is connected at 100Mbps.
		Off	Port is connected at 10Mbps not connected.

# Cautions and Warnings

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## 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)

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.

**Warning:** A readily accessible disconnect device shall be incorporated in the building installation wiring.

**Avertissement:** Un dispositif de déconnexion facilement accessible doit être incorporé dans l'installation électrique du bâtiment.

**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

## CAUTION:

There is a danger of explosion if a battery is incorrect replaced. Replace only with the same or equivalent type.

Dispose batteries of according to the manufacturer's instructions.

Disposing a battery into fire, a hot oven, mechanically crushing, or cutting it can result in an explosion.

Leaving a battery in an extremely hot environment can result in leakage of flammable liquid, gas, or an explosion.

If a battery is subjected to extremely low air pressure, it may result in leakage of flammable liquid, gas, or an explosion.

## WARNUNG:

Lithium-Batterie Achtung: Explosionsgefahr bei fehlerhafter Batteriewechsel. Ersetzen Sie nur den gleichen oder gleichwertigen Typ. Batterien gemäß den Anweisungen des Herstellers entsorgen.

Beseitigung einer BATTERIE in Feuer oder einen heißen Ofen oder mechanisches Zerkleinern oder Schneiden einer BATTERIE, die zu einer EXPLOSION führen kann

Verlassen einer BATTERIE in einer extrem hohen Umgebungstemperatur, die zu einer EXPLOSION oder zum Austreten von brennbarer Flüssigkeit oder Gas führen kann

Eine BATTERIE, die einem extrem niedrigen Luftdruck ausgesetzt ist, der zu einer EXPLOSION oder zum Austreten von brennbarer Flüssigkeit oder Gas führen kann.

This product is intended to be supplied by -48 Vdc from Secondary DC Mains Supply or by a UL Listed / IEC Certified ITE AC/DC adaptor rated output 12 Vdc, 2.5 A, (marked LPS or Class 2).

Ce produit est conçu pour être alimenté par -48 Vcc de secondaire DC Alimentation secteur ou par un adaptateur AC/DC certifié IEC ITE /Listé UL avec une puissance nominale 12 Vdc, 2.5 A, (LPS marquées ou de classe 2).

# 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 A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

**WARNING:** Any changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

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

CAN ICES-3 (A) / NMB-3 (A)

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Cet appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

## European Conformity (CE) - EU

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.



## Voluntary Control Council for Interference (VCCI) – Japan

この装置は、クラスA機器です。この装置を住宅環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

V C C I - A

## Product Safety Electrical Appliance & Material (PSE) – Japan

日本では電気用品安全法(PSE)の規定により、同梱している電源コードは本製品の専用電源コードとして利用し、他の製品に使用しないでください。

## Bureau of Standards Metrology and Inspection (BSMI) – Taiwan

The presence conditions of the restricted substance (BSMI RoHS table) are available at the link below:

限用物質含有情況表 (RoHS Table) 請到以下 網址下載:

<https://www.fortinet.com/bsmi>

此為甲類資訊技術設備，於居住環境中使用時，可能會造成射頻擾動，在此種情況下，使用者會被要求採取某些適當的對策。

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

## China

此为A级产品，在生活环境中，该产品可能会造成无线电干扰。这种情况下，可能需要用户对其采取切实可行的措施。

## 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."

Para maiores informações, consulte o site da ANATEL [www.anatel.gov.br](http://www.anatel.gov.br)

## Korea Certification (KC) – Korea

A급 기기 (업무용 방송통신기자재)

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기를 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

# Documentation and Links

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The following Fortinet web pages provide information and resources for your Fortinet product:

**1. Fortinet Customer Service & Support:** <https://support.fortinet.com>

On this page you can create a support account with Fortinet, register and manage your products, download updates, firmware images and release notes, and create technical support tickets.

**2. Fortinet Document Library:** <http://docs.fortinet.com>

This page provides the most up-to-date versions of Fortinet publications for the entire family of Fortinet products.

**3. Technical Discussion Forums:** <https://support.fortinet.com/forum>

This page allows you to communicate with other customers and Fortinet partners about Fortinet products, services, and configuration issues in a forum environment.

**4. Training Services:** <http://campus.training.fortinet.com>

This page provides course descriptions, availability, schedules, and locations of training programs in your area.

**5. FortiGuard Threat Research and Response:**

<http://www.fortiguard.com>

This page provides up-to-date information on vulnerabilities and threats, and includes a virus scanner, Internet Protocol (IP) signature look-up, web filtering tools, and related information.

## Comments on Technical Documentation

Please send comments or information about any errors or omissions in this or any Fortinet technical documents to [techdoc@fortinet.com](mailto:techdoc@fortinet.com).

# Register Your Product

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If you have not registered your Fortinet product, please register your product now.

## Register

Register your Fortinet product in order to receive:

- Technical Support
- New product features
- Protection from new threats

## Enregistrer

Vous devez enregistrer le produit pour recevoir:

- Support technique
- Nouvelles fonctionnalités du produit
- Protection contre de nouvelles menaces

## Registra

La registrazione ti permette di usufruire di:

- Supporto Tecnico
- Nuove funzionalita
- Protezione dalle ultime minacce

## Registrar

Debe registrar el producto para recibir:

- Apoyo técnico
- Nuevas funcionalidades del producto
- Protección contra ataques

## 登録のお願い

本日、フォーティネット製品の登録をしてください。

登録すると次のメリットがあります。

テクニカルサポート・新機能の追加・新しい脅威への防御

## 请马上注册

您的飞塔产品

您在注册以后才能得到技术支持、新产品特点信息、最新威胁防护

**Web:** <https://support.fortinet.com/>

**Toll free:** 1 866 648 4638

**Phone:** 1 408 486 7899

**Fax:** 1 408 235 7737

**Email:** [register@fortinet.com](mailto:register@fortinet.com)

# Product License Agreement

Fortinet Product License Agreement / EULA and Warranty Terms

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