



FortiSwitch 1024D

QuickStart Guide



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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:

FortiSwitch 1024D

QuickStart Guide

2 Power Cables

Ethernet Cable

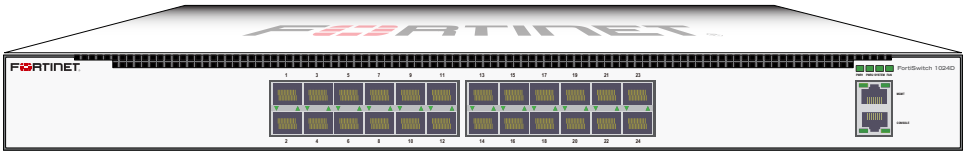
Console Cable

4 Rubber Feet

2 Rack-Mount Brackets

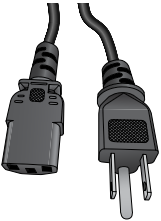
8 Bracket Screws (M4x0.7x6.8 Flat C S18C NI)

4 Rack Screws with Washers (M5x0.8x10 Pan C S+P SWRCH18A NI)

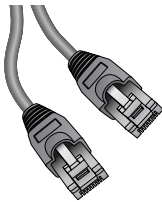


Note: Accessories may not be exactly as shown.

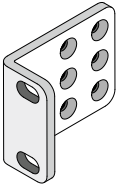
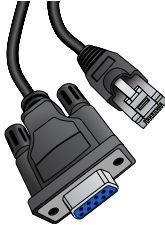
2 Power Cables



Ethernet Cable



Console Cable



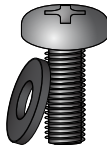
2 Rack-Mount Brackets

(M4x0.7x6.8 Flat C S18C NI)



8 Bracket Screws

(M5x0.8x10 Pan C S+P SWRCH18A NI)

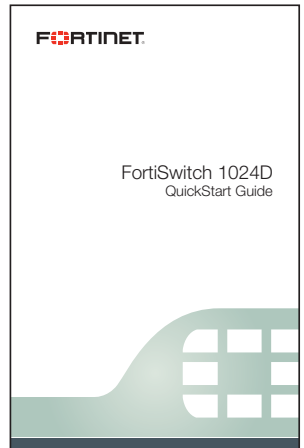


4 Rack Screws with Washers



4 Rubber Feet

QuickStart Guide



Installation

The FortiSwitch unit can be placed on any flat surface, or mounted in any standard 19 inch rack unit with the provided rack-mount brackets and screws.

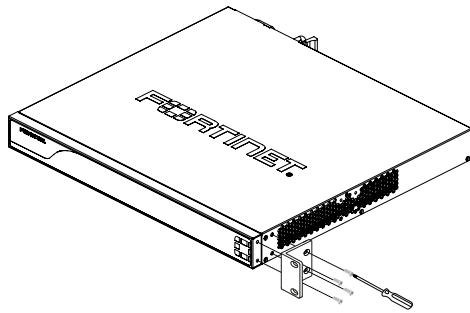
Caution: Electrostatic discharge (ESD) can damage your Fortinet equipment.

Caution: Do not place heavy objects on the unit.

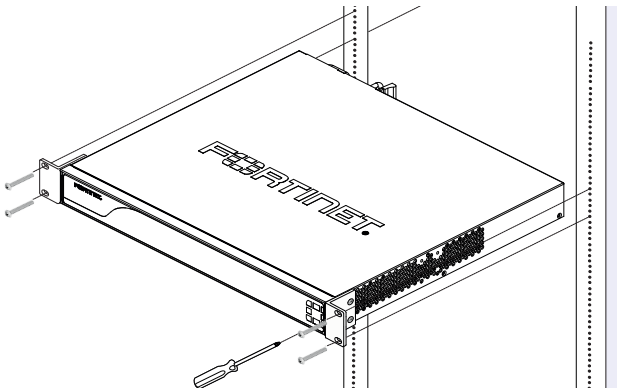
To install the FortiSwitch unit into a rack:

Caution: To avoid personal injury or damage to the unit, it is recommended that two or more people install the unit into the rack.

1. Ensure that the FortiSwitch unit is placed on a stable surface prior to rack-mount installation.
2. Attach the provided rack-mount brackets to the sides of the unit using the provided screws.



3. Position the FortiSwitch unit in the rack. Ensure there is enough room around the unit to allow for sufficient air flow.
4. Line up the rack-mount bracket holes to the holes on the rack and ensure that the FortiSwitch unit is level.

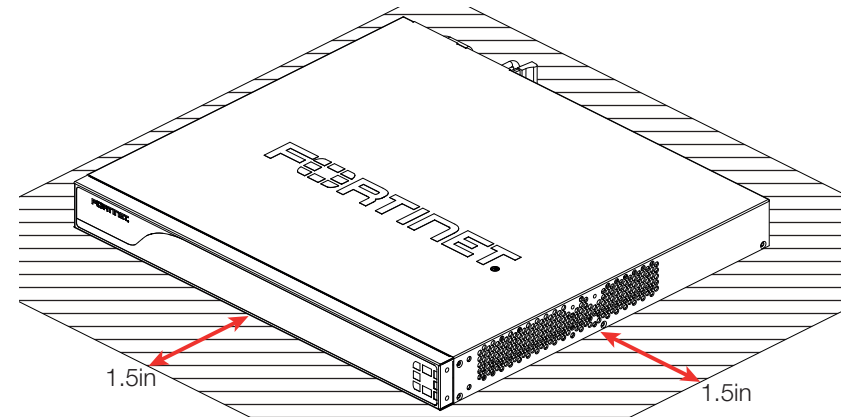


5. Finger tighten the four provided rack screws, with the washers between the screw and the rack, to attach the unit to the rack.
6. Verify that the spacing around the FortiSwitch unit conforms to requirements and that the unit is level, then tighten the rack-mount screws with an appropriate screwdriver.
7. Using the provided power cables, plug the cables into the rear of the unit and then into an electrical outlet.

Note: If the unit has a redundant power supply, each power cable should be connected to a different power source. In this way, if one power source fails, the other may still be operational and the unit will not lose power.

To install the unit on a flat surface:

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



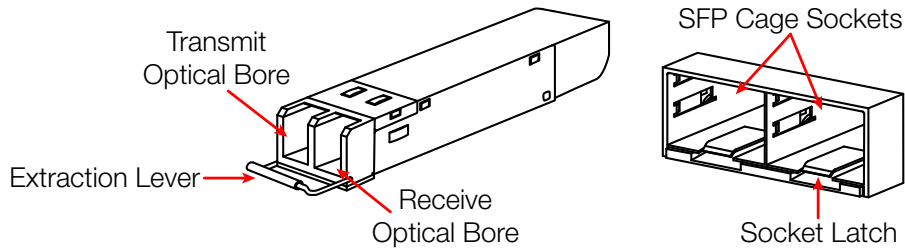
5. Using the provided power cables, plug the cables into the rear of the unit and then into an electrical outlet.

Note: If the unit has a redundant power supply, each power cable should be connected to a different power source. In this way, if one power source fails, the other may still be operational and the unit will not lose power.

Caution: Do not place heavy objects on the unit.

Caution: Plug the provided power cable into the rear of the unit, and then into a grounded electrical outlet or a separate power source such as an uninterruptible power supply (UPS) or a power distribution unit (PDU).

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.

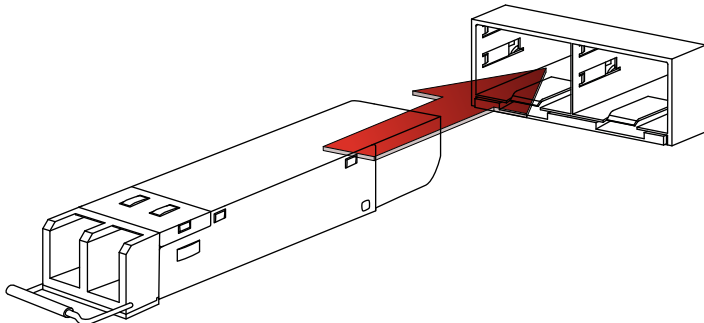
To install the SFP transceivers:

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.

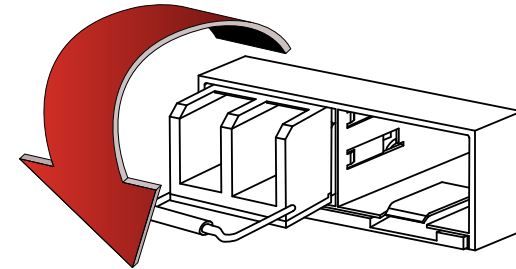


Caution: Do not force the SFP transceivers into the cage slots. If the transceiver does not easily slide in and click into place, it may not be aligned correctly or may be upside down. If this happens, remove the SFP transceiver, realign it or rotate it and slide it in again.

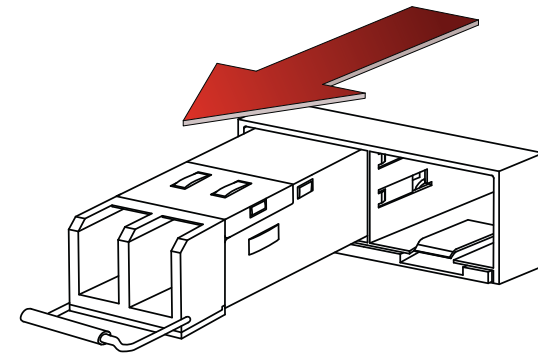
5. Press the transceiver firmly into the cage socket with your thumb.
6. Verify that the transceiver is latched correctly by grasping the sides of the transceiver and trying to pull it out without lowering the extraction lever.
If the transceiver cannot be removed, it is installed and latched correctly.
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.



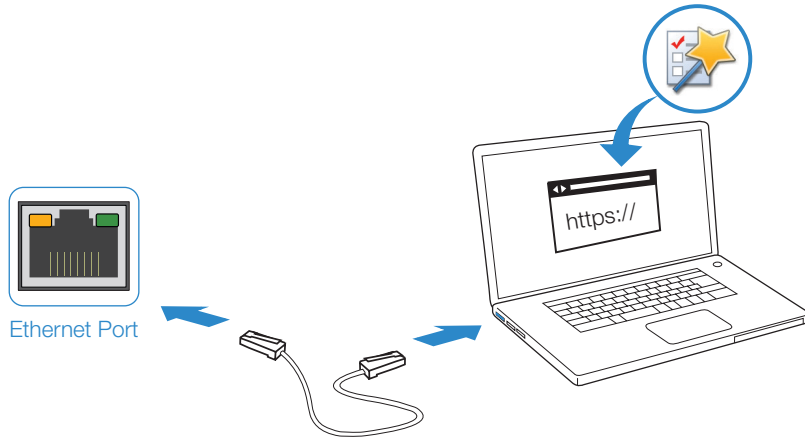
If you are unable to use your finger to open the lever, use a small flat-head screwdriver or other similar tool to open the lever.

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.

Connect to the FortiSwitch Unit

Web Browser



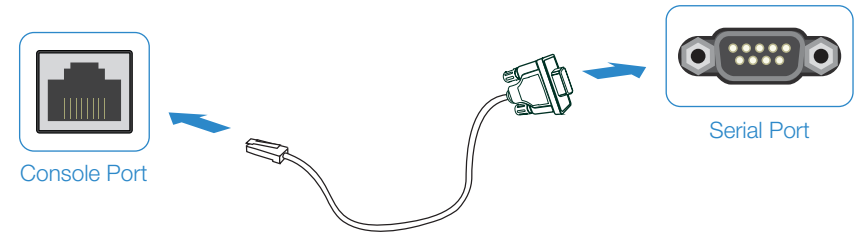
To Connect to the GUI

1. Connect the [Ethernet cable](#).
2. Configure the management computer to be on the same [subnet](#) as the internal interface as the FortiSwitch unit:

IP address: 192.168.1.2
Netmask: 255.255.255.0

3. Visit [192.168.1.99](#) in your web browser.
4. Login using username `admin` and `no password`.
5. [Configure your device](#) and save your settings.
6. [Register your device](#) from the dashboard page.

Terminal Emulation



To Connect to the CLI

1. Connect the device's [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:

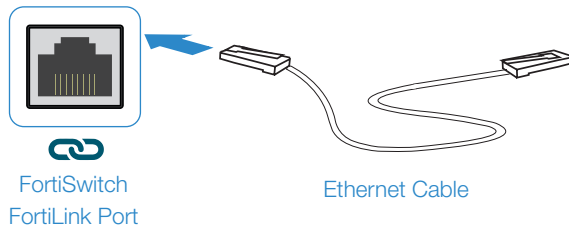
Baud Rate: 115200
Data bits: 8
Parity: None
Stop bits: 1
Flow Control: None

3. Press `Enter` on your keyboard to [connect to the CLI](#).
4. Login using username `admin` and no password. You can now proceed with configuring your device.

Get started by typing `?` for a list of available [commands](#).

Begin typing a command then type `?` for a list of available ways to complete. For example `config ?` will show the lowest level of configuration options.

FortiLink

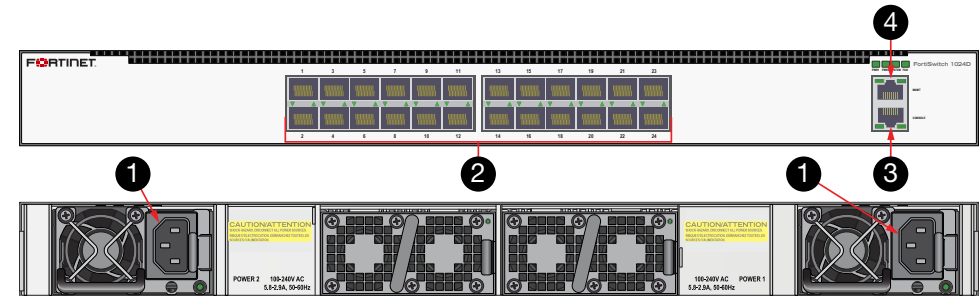


1. Connect a [FortiSwitch FortiLink Port](#) directly using an Ethernet Cable to a [FortiGate FortiLink Port](#) or any FortiGate Port that is not an HA port
2. Login to the FortiGate and go to the [WiFi & Switch Controller --> FortiLink Interface](#)
3. [Add a FortiGate Port](#) in the FortiLink interface and choose [Automatically authorize devices](#)
4. When the [FortiSwitch is online](#) in the [WiFi & Switch Controller --> Managed FortiSwitch](#) section, you can now manage your FortiSwitch

Cloud Management (Connect a port to the Internet)

1. Visit support.fortinet.com to register your device and cloud management license
2. Sign in at <https://fortilan.forticloud.com> to manage your Inventory List

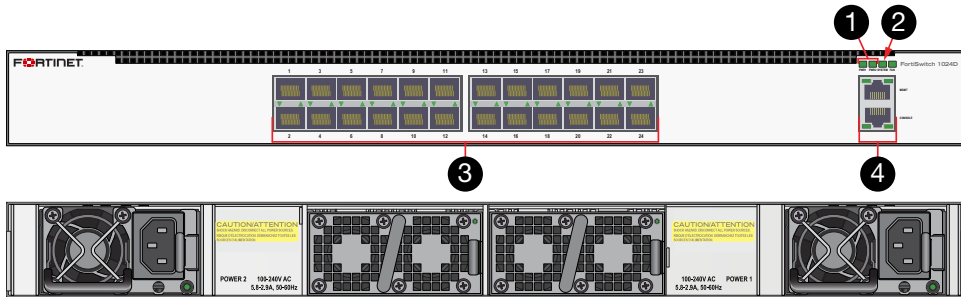
Technical Specifications



#	Interface	Type	Description
1	Power Supply		100-240V AC, 5.8-2.9A, 50-60Hz, redundant power supplies.
2	SFP Ports 1 to 24	SFP+	10Gbps, small form-factor pluggable transceiver ports.
3	Console Port	RJ-45	Optional connection to the management computer. Provides access to the CLI.
4	MGMT Port	RJ-45	Gigabit Ethernet client port for management. The default IP address is 192.168.1.99.

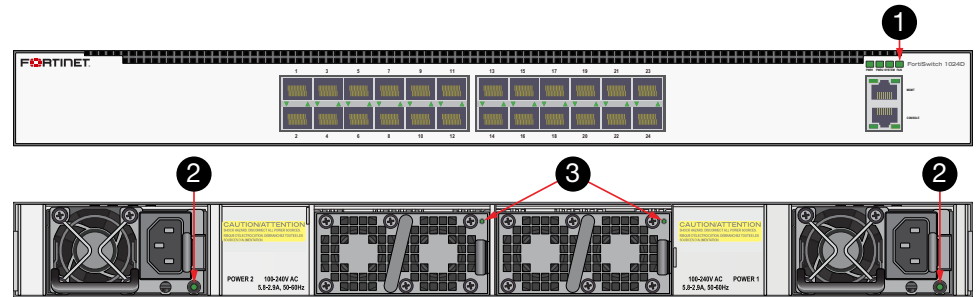
Caution: SFP ports should use UL listed Optical Transceiver products, rated Laser Class 1, 3.3V DC.

LED Specifications 1



#	LED	State	Description
1	PWR 1 & 2	Green	The power supply is powered.
		Flashing Yellow	The power supply has failed.
		Off	Power is not connected.
2	SYSTEM	Green	The unit is operating normally.
		Flashing Green	The unit is booting up or in diagnostic mode.
		Red	The unit has a major alarm.
		Off	The unit is off.
		Green	The unit has a minor alarm.
3	SFP Ports	Green	Port is active.
		Flashing Green	Port is transmitting and receiving data.
		Off	No link established.
4	Ethernet Ports Speed	Green	Port is connected at 1Gbps.
		Yellow	Port is connected at 10/100Mbps.
		Off	No link established.
4	Ethernet Ports Activity	Flashing Green	Port is transmitting and receiving data.
		Off	Port is not in use.

LED Specifications 2



#	LED	State	Description
1	FAN	Green	Fans are operating normally.
		Yellow	A fan has failed.
2	Power Supplies	Green	The power supply is receiving power.
		Yellow	Power has been lost; a parallel power supply still has power.
		Off	The power supply has no power.
3	FAN	Off	This LED is not in use.

Cautions and Warnings

Environmental specifications

Ambient operating temperature: 0°C to 40°C

Rack Mount Instructions - The following or similar rack-mount instructions are included with the installation instructions:

Instructions de montage en rack - Les instructions de montage en rack suivantes ou similaires sont incluses avec les instructions d'installation:

Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T_{ma}) specified by the manufacturer.

Température ambiante élevée – S'il est installé dans un rack fermé ou à unités multiples, la température ambiante de fonctionnement de l'environnement du rack peut être supérieure à la température ambiante de la pièce. Par conséquent, il est important d'installer le matériel dans un environnement respectant la température ambiante maximale (T_{ma}) stipulée par le fabricant.

Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

Ventilation réduite – Installation de l'équipement dans un rack doit être telle que la quantité de flux d'air nécessaire au bon fonctionnement de l'équipement n'est pas compromise.

Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

Chargement Mécanique – Montage de l'équipement dans le rack doit être telle qu'une situation dangereuse n'est pas liée à un chargement mécanique inégal.

Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Surtension – Il convient de prendre l'ensemble des précautions nécessaires lors du branchement de l'équipement au circuit d'alimentation et être particulièrement attentif aux effets de la suralimentation sur le dispositif assurant une protection contre les courts-circuits et le câblage. Ainsi, il est recommandé de tenir compte du numéro d'identification de l'équipement.

Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

Fiabilité de la mise à la terre – Fiabilité de la mise à la terre de l'équipement monté en rack doit être maintenue. Une attention particulière devrait être accordée aux connexions d'alimentation autres que les connexions directes au circuit de dérivation (par exemple de l'utilisation de bandes de puissance).

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

Moving parts – Hazardous moving parts. Keep away from moving fan blades.

Pièces mobiles – Pièces mobiles dangereuses. Se tenir éloigné des lames mobiles du ventilateur.

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.

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: Shock Hazard. Disconnect all power sources.

ATTENTION: Risque d'électrocution. Débranchez toutes les sources d'alimentation.

Skilled person must install the equipment.

L'équipement doit être installé par une personne qualifiée

Never open the equipment and/or switch the plug-in power supplies and fan tray modules. For safety reasons, the equipment should be opened and maintenance only by qualified service personnel.

N'ouvrez jamais l'équipement et / ou ne commutiez pas les modules d'alimentation et les modules de ventilation. Pour des raisons de sécurité, l'équipement ne doit être ouvert et entretenu que par du personnel qualifié.

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-003 (A) / NMB-003 (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.

Le présent 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情報技術装置です。この装置を家庭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。

Korea Certification (KC) – Korea

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Documentation and Links

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.

Register Your Product

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

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Toll free: 1 866 648 4638

Phone: 1 408 486 7899

Fax: 1 408 235 7737

Email: register@fortinet.com

Product License Agreement

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