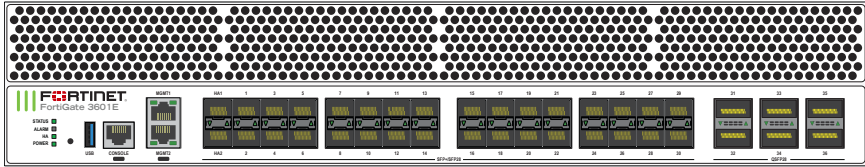


FortiGate 3600E Series

Information

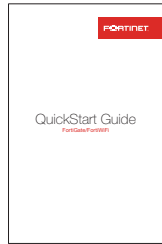
Box Includes



FortiGate 3600E Series



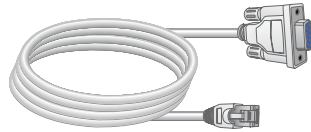
Information



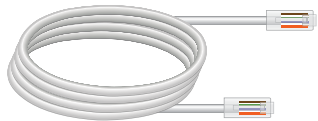
FortiGate/FortiWiFi QuickStart Guide



2 Power Cables (AC models only)

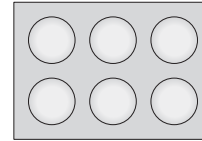


Console Cable (DB9 to RJ45)

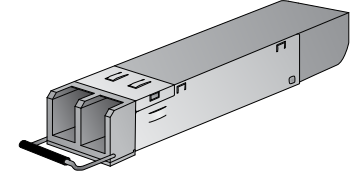


Ethernet Cable

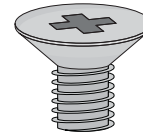
Box Includes



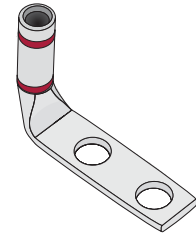
6 Rubber Feet



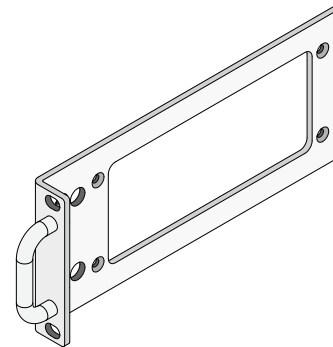
2 SFP+ SR Transceivers



12 Bracket Screws



2 Grounding Lugs (DC models only)

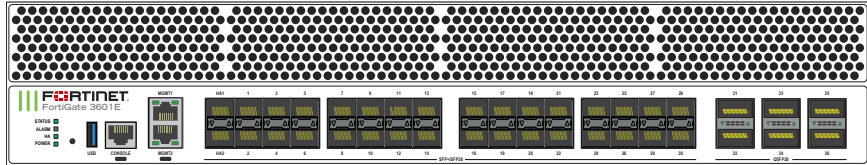


2 Rack-Mount Brackets



6 DC Terminal Rings (DC models only)

FortiGate 3600E/3601E



Ports 31 to 36 (QSFP28)
100Gbps quad small-form-factor pluggable transceiver ports

Ports 1 to 30 (SFP+/SFP28)
25Gbps small-form-factor pluggable transceiver ports

HA Ports 1 and 2 (SFP+/SFP28)
25Gbps small-form-factor pluggable transceiver ports
Optional connections to other FortiGate units for High Availability (HA)

MGMT Ports (RJ-45)
1Gbps client management ports
Default IP address of MGMT 1 is 192.168.1.99

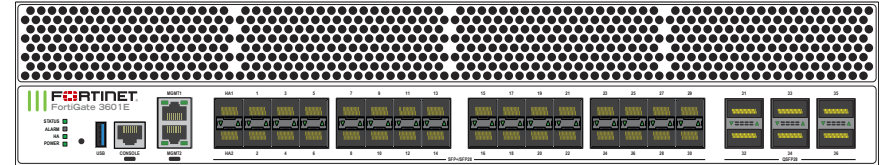
Console (RJ-45)
Optional connection to the management computer
Provides access to the CLI

USB (USB A) 
USB 3.0 port

FortiGate 3600E/3601E

Logo

- Green: The unit is on
- Off: The unit is off



SFP+/SFP28 and QSFP28 Ports

- Green: Connected
- ⚡ Flashing Green: Transmitting & receiving data
- Off: No link established

Ethernet Ports Link/Activity

- Green: Connected
- ⚡ Flashing Green: Transmitting & receiving data
- Off: No link established

Ethernet Ports Speed

- Green: Connected at 1Gbps
- Off: Not connected

Status

- Green: Normal
- ⚡ Flashing Green: Booting up

Alarm

- Red: Critical error has occurred
- Amber: Minor error has occurred
- Off: No errors detected

HA

- Green: HA enabled and working with peer connection
- Amber: HA enabled but working without peer connection
- Off: HA disabled

Power

- Green: The unit is on
- Off: The unit is off

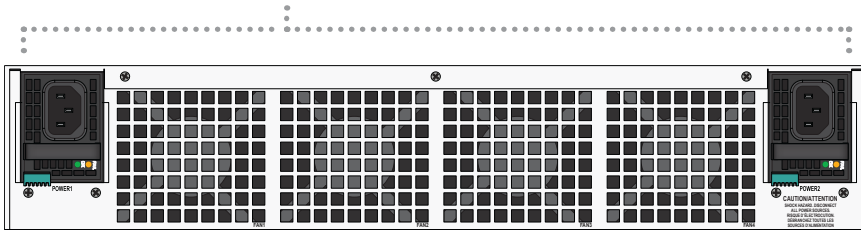
FortiGate 3600E/3601E

OK

- Green: Power supply providing power
- ⚡ Flashing Green: Power supply not providing power
- Off: No AC input

FAIL

- Amber: Power supply critical event
- ⚡ Flashing Amber: Power supply warning event

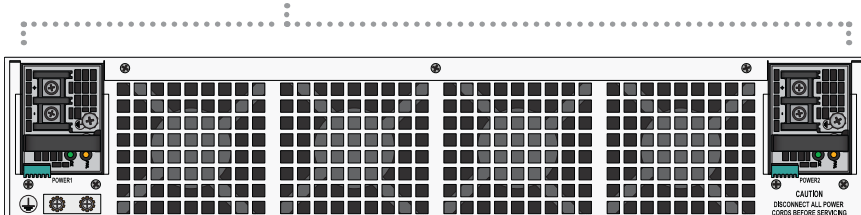


AC Power

100-120Vac, 12A, 50/60Hz or
200-240Vac, 9A, 50/60Hz,
hot swappable, redundant (1+1) power supplies

DC Power

-48V DC, 17.8A (x2), hot swappable, redundant (1+1) power supplies, + : 0V, - : -48V



OK

- Green: Power supply providing power
- ⚡ Flashing Green: Power supply not providing power
- Off: No AC input

FAIL

- Amber: Power supply critical event
- ⚡ Flashing Amber: Power supply warning event

Installation

The FortiGate unit can be mounted in any standard 19 inch rack unit with the provided rack-mount brackets and screws. AC models can also be surface mounted with the provided rubber feet.

A slide rail mounting kit is also available for purchase.

Please read the “Cautions and Warnings” on page 11 before installing your device.

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

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

Do not place heavy objects on the unit.

Note: 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.

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 **6 AWG** and the connection is to be installed by a qualified service personnel.

DC models only:

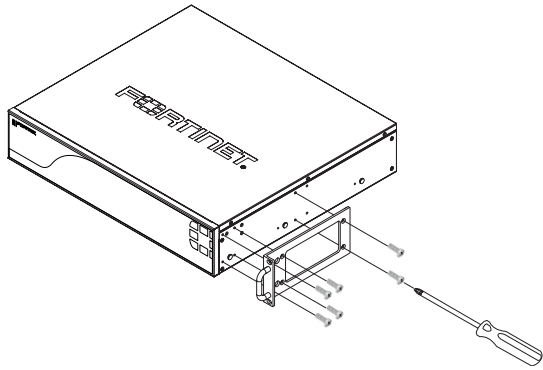
Note: This product is only intended for installation and use in a Restricted Access Location.

The DC power cables are intended to be used only for in-rack wiring, must be routed away from sharp edges, and must be adequately fixed to prevent excessive strain on the wires and terminals.

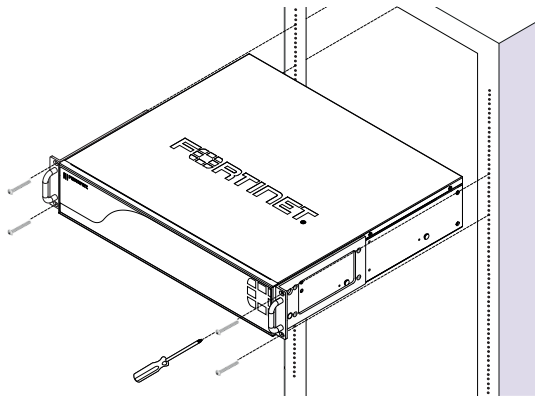
DC cables must be a minimum of **10 AWG**.

To install the FortiGate unit into a rack

1. Attach the provided rack-mount brackets to the sides of the unit using the provided screws.



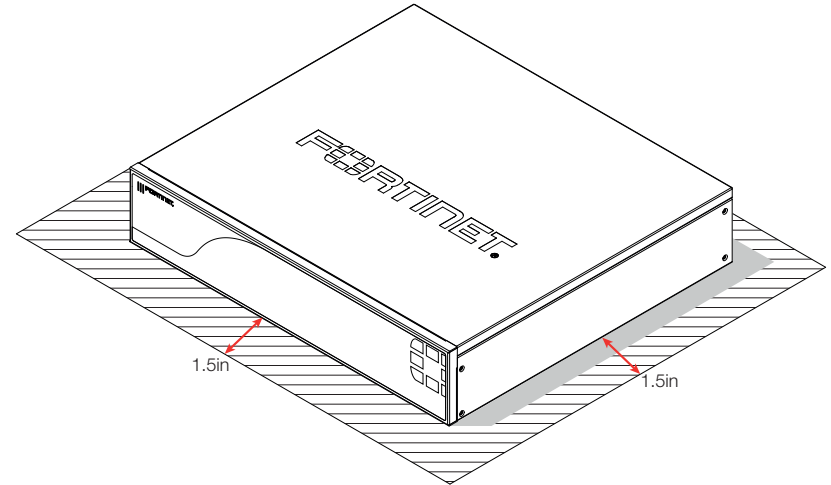
2. Position the FortiGate unit in the rack. Ensure there is enough room around the unit to allow for sufficient air flow.
3. Line up the rack-mount bracket holes to the holes on the rack and ensure that the FortiGate unit is level.



4. Finger tighten four rack-mount screws to attach the unit to the rack.
5. Verify that the spacing around the FortiGate unit conforms to requirements and that the unit is level, then tighten the rack-mount screws with an appropriate screwdriver.
6. Plug the provided power cables into the rear of the unit, and then into grounded electrical outlets or separate power sources such as uninterruptible power supplies (UPS) or power distribution units (PDU).

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 1.5in (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.



5. Plug the provided power cables into the rear of the unit, and then into grounded electrical outlets or separate power sources such as uninterruptible power supplies (UPS) or power distribution units (PDU).

Crimping guidelines

The end of the 6 AWG ground wire must be fitted with a suitable 5/8-inch double-hole lug. Use the following information to crimp and prepare the wire.

Caution: Do not crimp energized wires.

Follow these crimping guidelines:

- Strip the insulation from cable. Be careful not to nick cable strands which may later result in strands breaking.
- Cable end should be clean: wire brush or clean with emery cloth if necessary. Insert cable into connector until it stops. The insertion length must approximate the stripped length of cable.
- Insert connector in die and compress between the markings beginning near the tongue of the connector. Using the wrong installing die may result in a defective connection.
- After crimping, remove all sharp edges, flashes, or burrs.

Connecting the device to ground

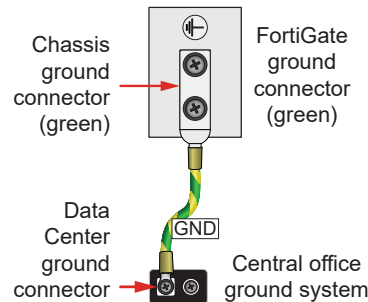
This product has a separate ground terminal provided on the back of the product in addition to the grounding terminal of the attachment plug. The ground terminal provides two connectors to be used with a double-holed lug. This connector must be connected to a local ground connection.

You need the following equipment to connect the device to ground:

- An electrostatic discharge (ESD) preventive wrist strap with connection cord.
- One green with yellow stripe 6 AWG stranded wire with listed closed loop double-hole lug suitable for minimum 6 AWG copper wire.

To connect the device to ground:

1. Attach the ESD wrist strap to your wrist and to an ESD socket or bare metal surface on the device or frame.
2. Make sure that the device and ground wire are not energized.
3. Connect the ground wire from the local ground to the ground connector on the device.
4. Secure the ground wire to the device.
5. Optionally label the wire GND.



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 a 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.

Surtenion - 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.

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 SR1814.013 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 SR1814.013 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

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

Caution: Shock Hazard. Disconnect all power sources.

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

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 #12AWG 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 #12AWG et la connexion doit être installée par un personnel qualifié.

Caution: Slide/rail mounted equipment is not to be used as a shelf or a work space.

Attention: Un équipement monté sur bâti ne doit pas être utilisé sur une étagère ou dans un espace de travail.

Fiber optic transceiver must be rated 3.3V, 22mA max, Laser Class 1, UL certified component. Le transceiver optique doit avoir les valeurs nominales de 3.3 V, maximum 22 mA, Laser Class 1, homologué UL.

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。VCCI-A

Product Safety Electrical Appliance & Material (PSE) – Japan

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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>

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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

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Korea Certification (KC) – Korea

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