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FORTINET 4800F Series High Performance With Flexibility



Before you begin

Register your device to access FortiGuard updates, cloud management, firmware upgrades, technical support and warranty coverage.

<https://support.fortinet.com>

The Essentials

Default Logins

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

MGMT1 IP 192.168.1.99 MGMT2 IP 192.168.2.99

Admin Guide

For a detailed Getting Started guide, setup and configuration information, refer to the Admin Guide on <https://docs.fortinet.com/>

Customer Service

For contracts, licensing, product registration and account management, contact FortiCare Support at <https://www.fortinet.com/support/contact>

Self-service Resources

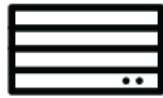
Access our knowledge base, forums, videos and technical experts at <https://www.fortinet.com/support/support-services/forticare-support>

Thank you for choosing Fortinet

Package Contents

FortiGate 4800F Series

- FG-4800F, FG-4801F, FG-4800F-DC, FG-4801F-DC,
- FG-4801F-NEBS, FG-4801F-DC-NEBS



FortiGate Device



QuickStart Guide



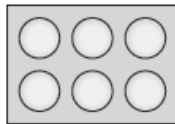
4x C15 Power Cables



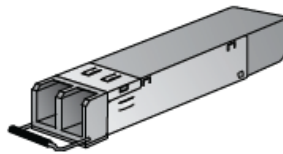
1x Ethernet Cable



1x Console Cable



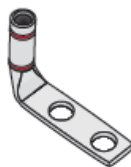
6x Rubber Feet



2x SFP+ Transceivers



1x Rail Kit



1x Grounding Lug
(DC models only)



4x DC Power Cables
(DC models only)

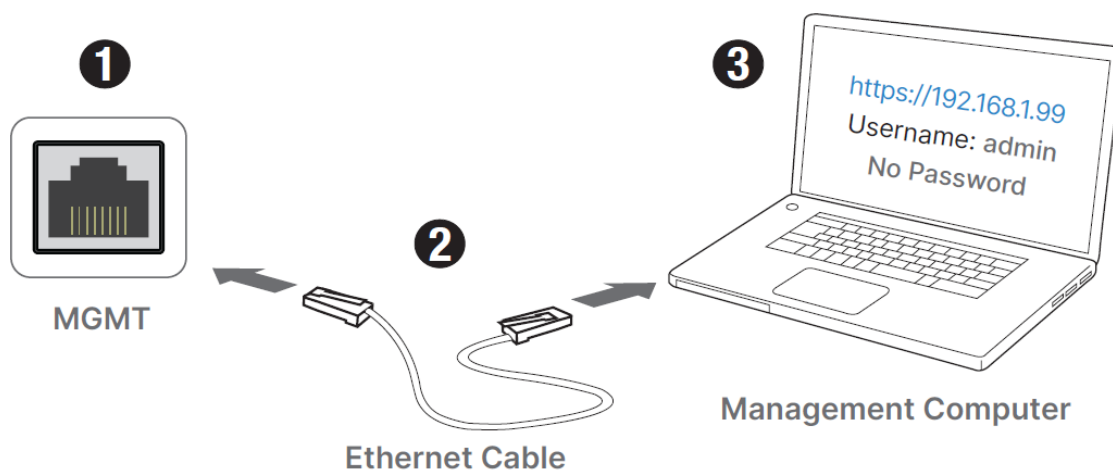


1x Pre-Installed NEBS Filter
(NEBS models only)

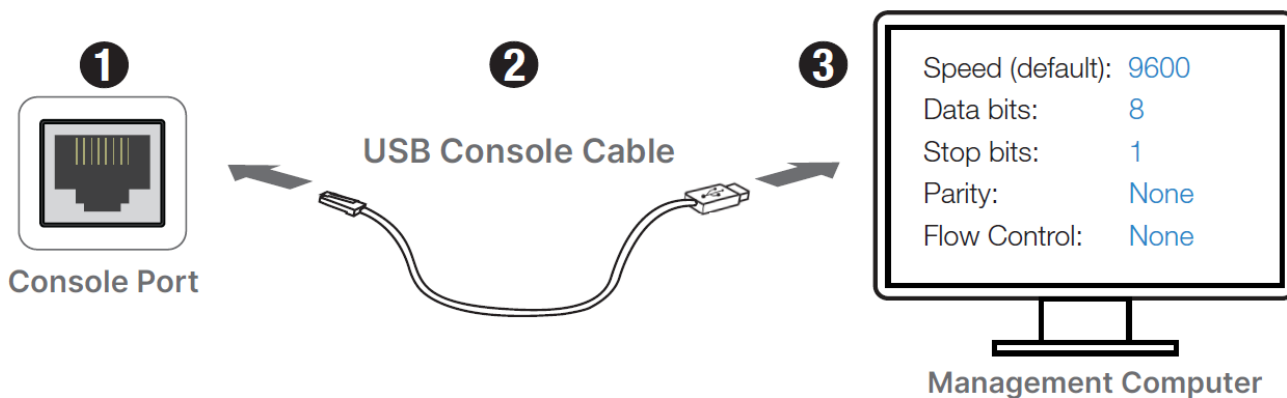
Setup

Unpack the box, power the device and choose one of the following options:

GUI



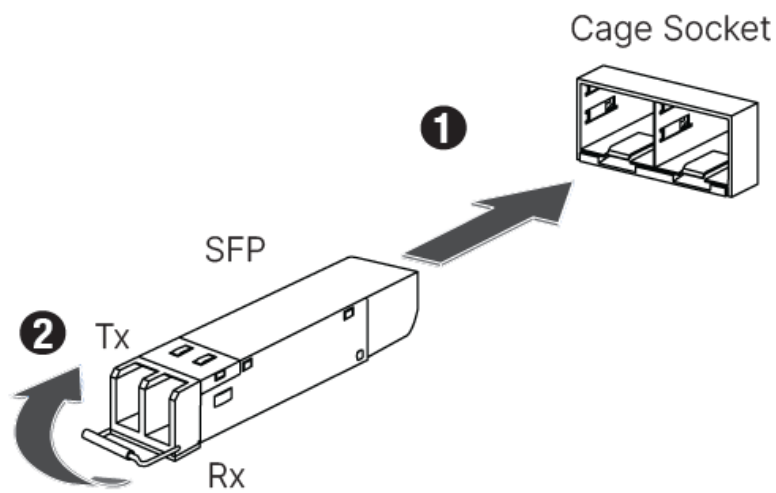
Note: Configure the management computer with IP 192.168.1.x and subnet 255.255.255.0



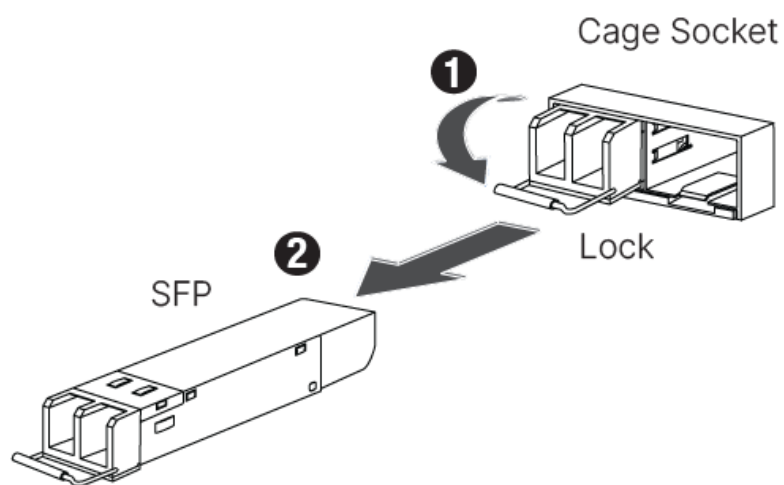
Note: For a detailed CLI guide, visit <https://docs.fortinet.com>

SFP Modules

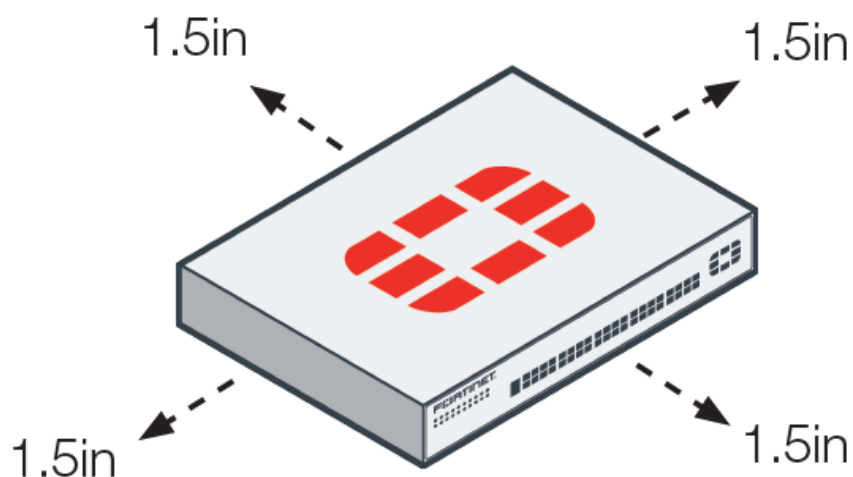
Installation



Removal



Desktop Installation



Note: Place the device on a flat, clean and stable surface.

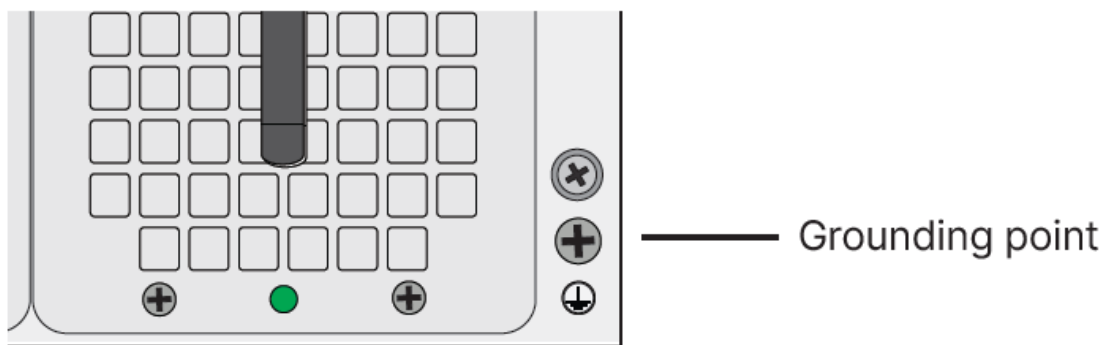
NEBS Installation

To meet Network Equipment Building System (NEBS) and safety compliance requirements, the grounding point on the back of the device must be permanently connected to the central office or interior equipment grounding system. Use the following parts to ensure a satisfactory ground connection to the FG-4801F/-DC/-NEBS device:

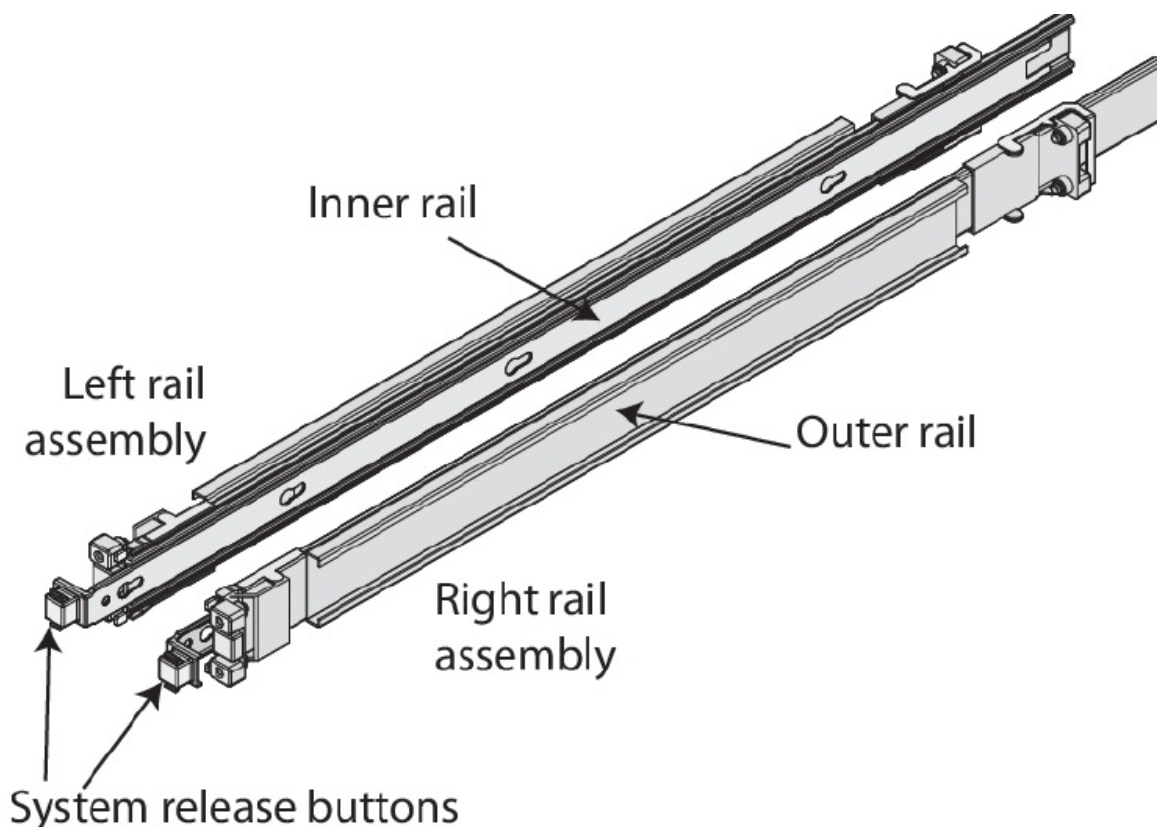
- One UL Listed grounding lug with two M5 bolt holes with 15.88mm (0.625in) spacing between them
- A wire receptacle that accepts 6 AWG or larger, multistrand copper wire
- One grounding wire that is at least 6 AWG multistrand copper wire.

The wire diameter and length depend on the device location and site environment

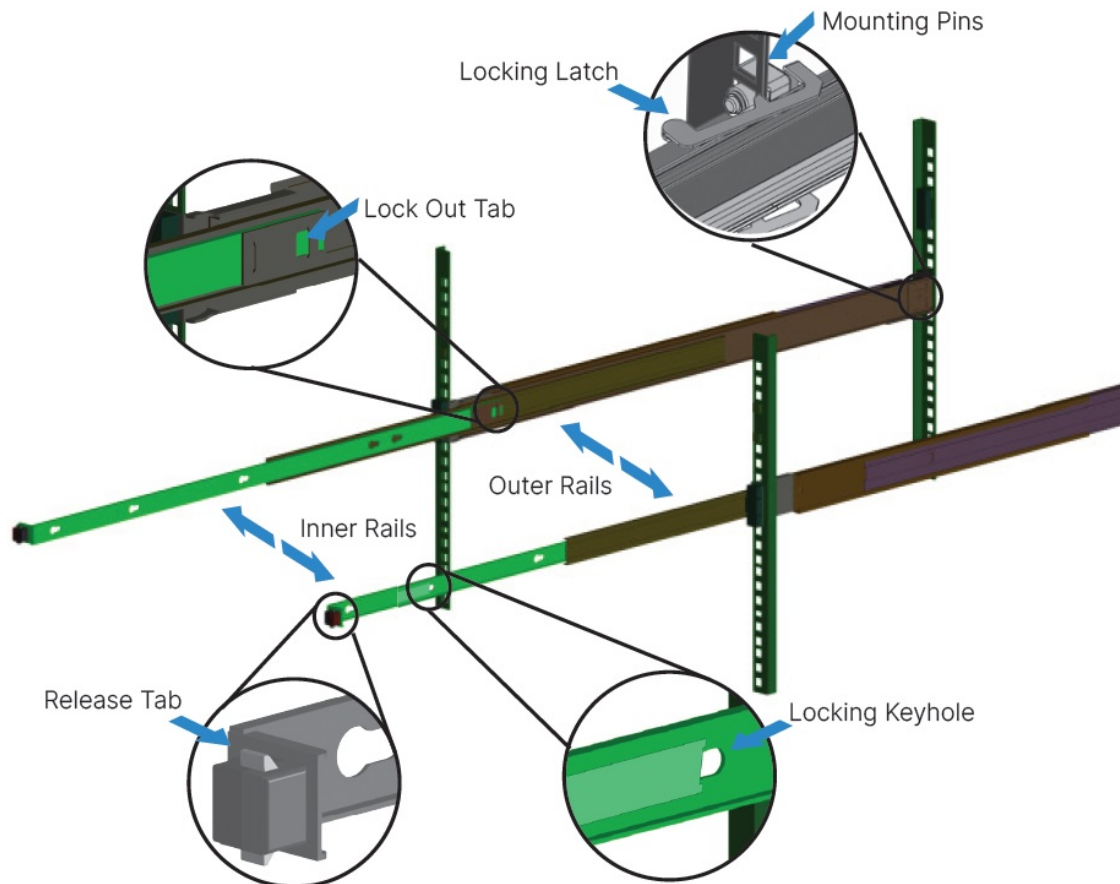
- Two screws with lock washers (provided).



Rail Installation

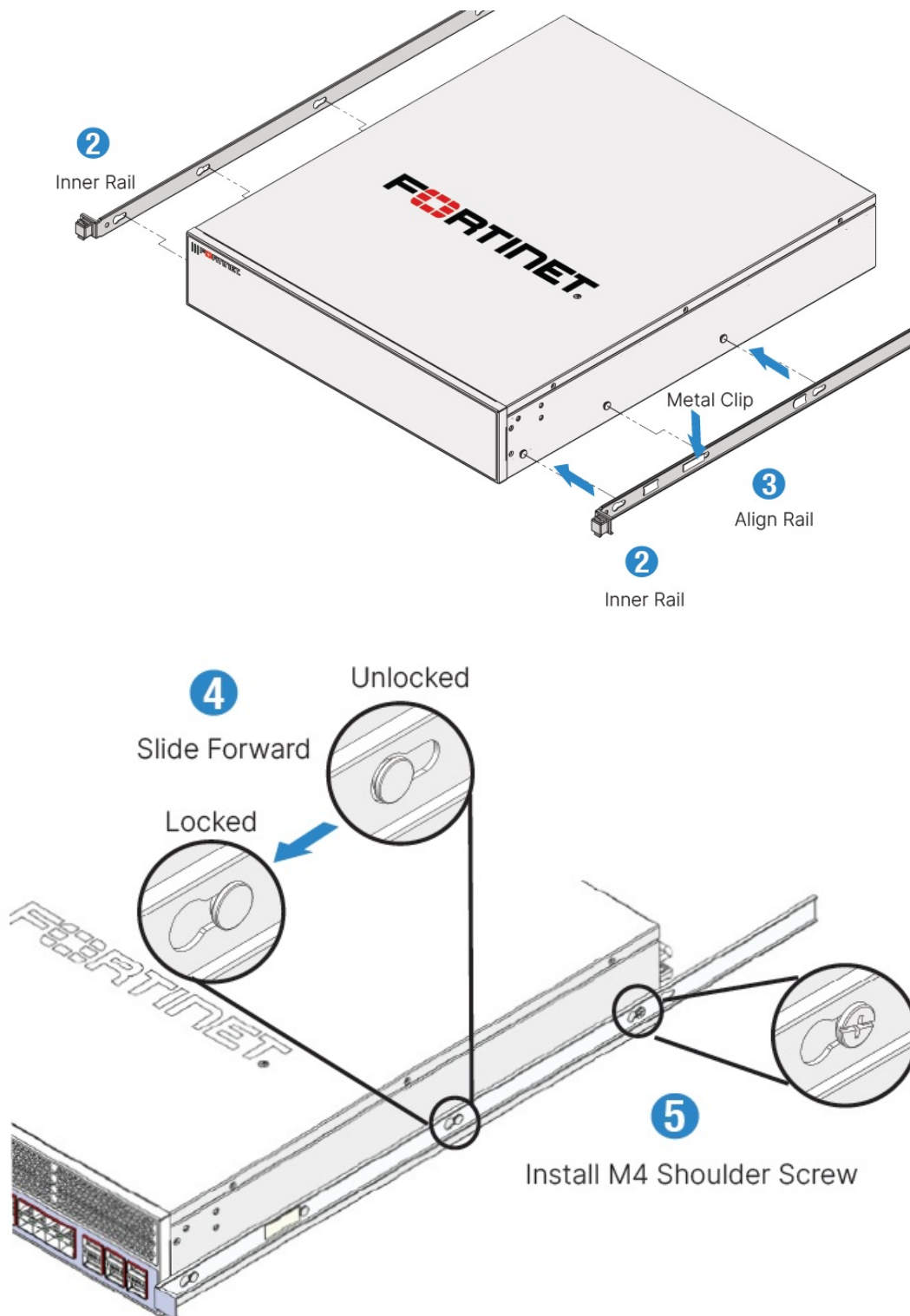


- The rail kit includes a left and a right rail assembly
- Each rail assembly includes an inner rail, a middle rail, and an outer rail
- The inner rail has locking keyholes used to secure the rail to the appliance
- The inner rail rear end has a lock out tab which slides into the middle rail
- The middle rail is in the outer rail and used to guide the inner rail into the outer rail
- The outer rail has front and rear mounting pins that push into to the rack holes
- The outer rail also has front and rear locking latches to secure the rail to the rack



Attach the Inner Rails to the Appliance

1. Detach the inner rail from the rail assembly by pressing the lock out tab
2. Place an inner rail against a side of the appliance
3. Align the inner rail keyholes with the appliance pins
4. Slide the rail towards the front of the appliance until the metal clip locks into place
5. For inner rails with five keyholes and a chassis with three pins and a thread hole, use the provided M4 shoulder screw to secure the rail to the appliance
6. Repeat steps 1 to 5 for the remaining inner rail



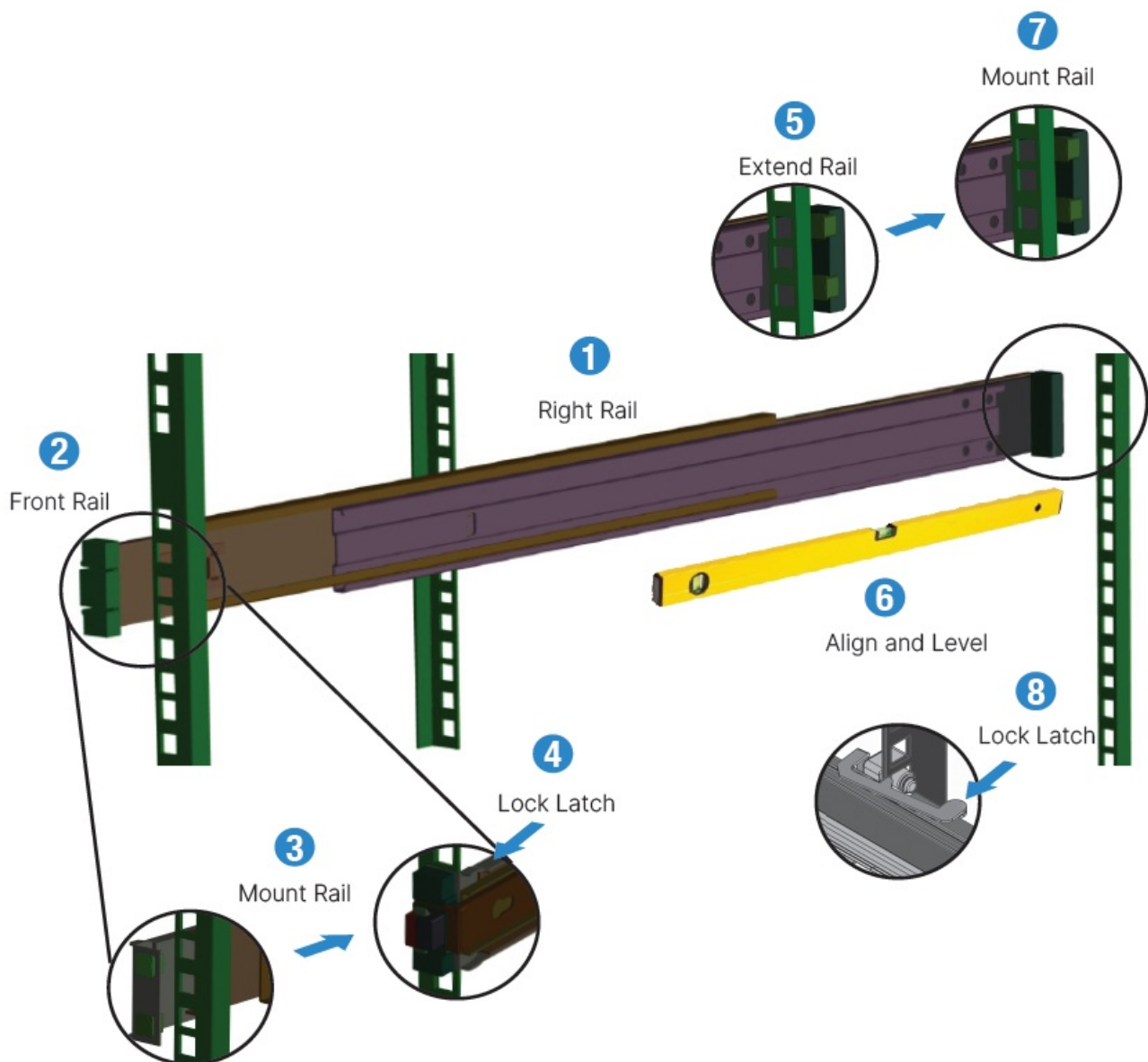
Attach the Outer Rails to the Rack

Front Outer Rail

1. Place an outer rail against a side of the rack
2. Align the front outer rail with the front of the rack
3. Push the front outer rail mounting pins into the rack post holes
4. Lock the locking latch to safely secure the front outer rail to the post

Rear Outer Rail

5. Extend the rear outer rail just past the rack post
6. Level the rail and align the mounting pins
7. Push the rear mounting pins into the rack post holes
8. Lock the locking latch to safely secure the rear outer rail to the post
9. Repeat steps 1 to 8 for the remaining outer rail



Install the Appliance

Safety Precautions

1. Check that the inner rails are secured to the appliance
2. Inspect that the rack posts and outer rails are secured and level

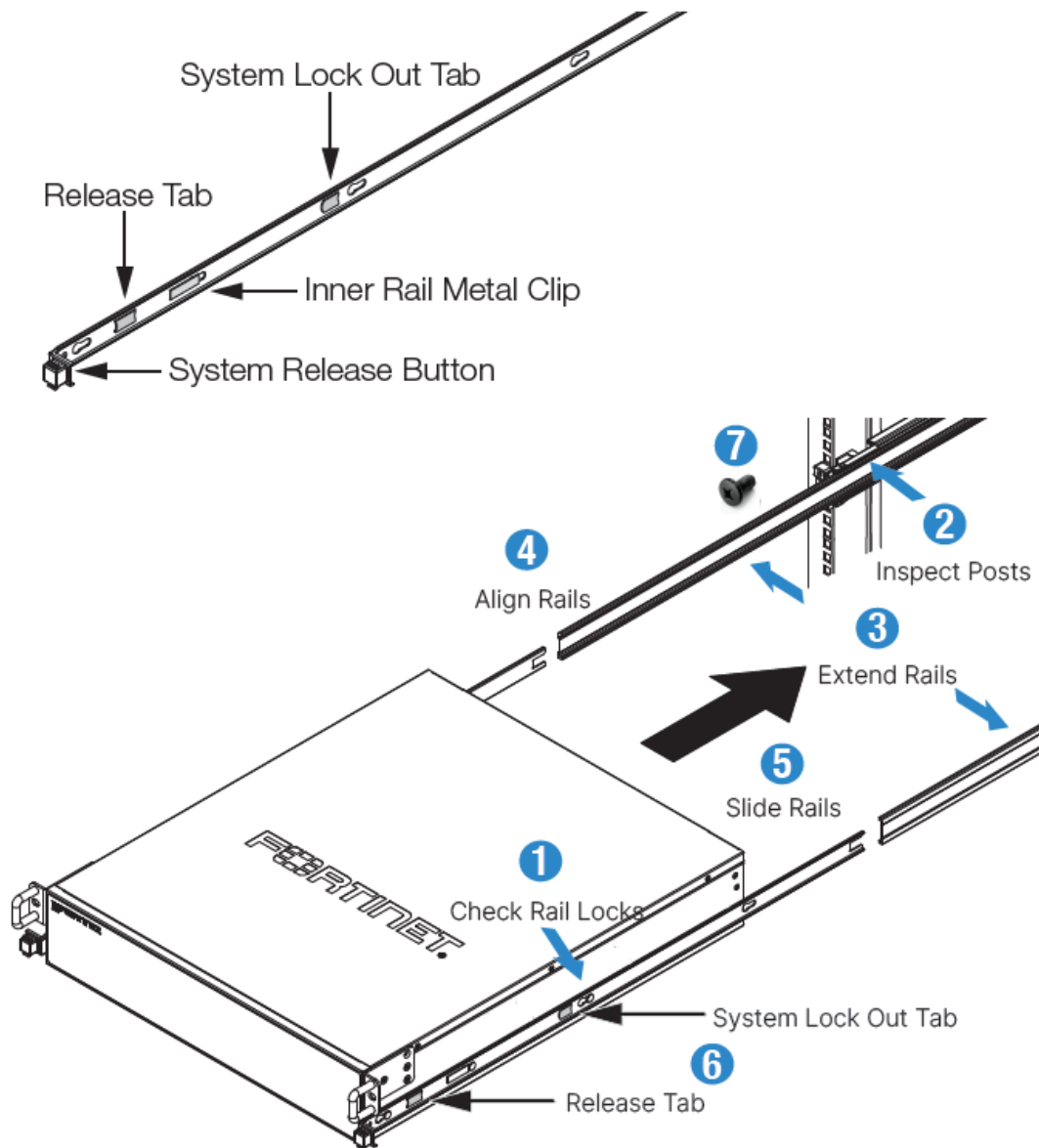
Rail Installation

3. Slide the middle outer rails forward until they fully extend and lock into place
4. Using a lifting device, lift the appliance and align the inner rails with the middle rails

5. Slide the appliance and inner rails into the middle rails until there is a stop

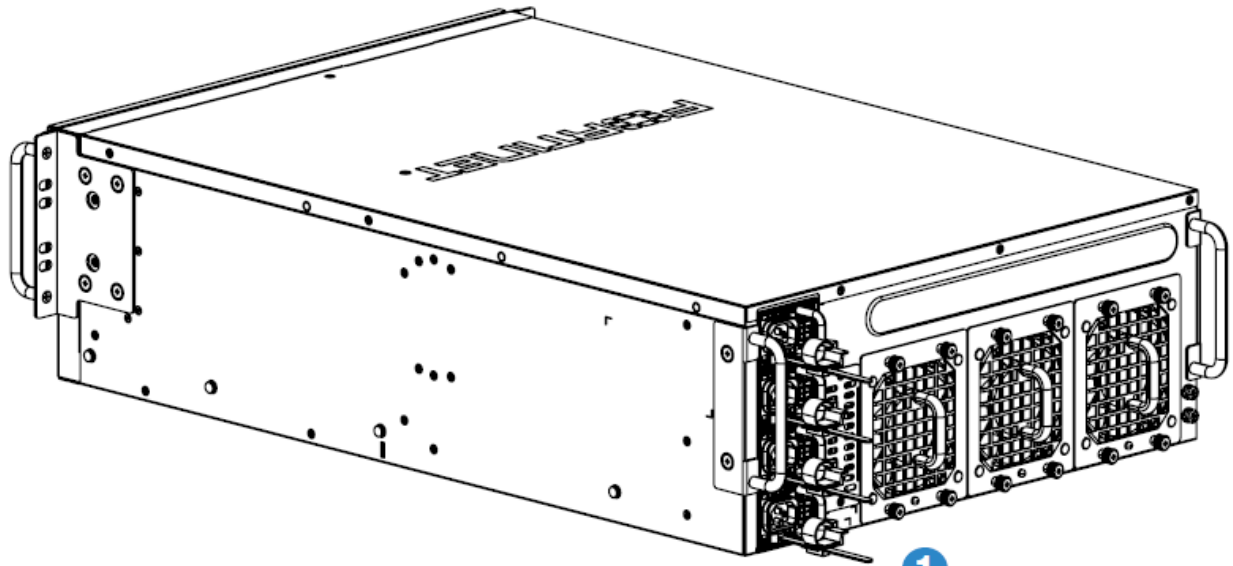
System Lock

6. Apply even pressure and slide the release tabs outward while sliding the appliance all the way into the rack until the system release tabs click and lock into position
7. Use four rack screws (not provided) to secure the appliance to the rack

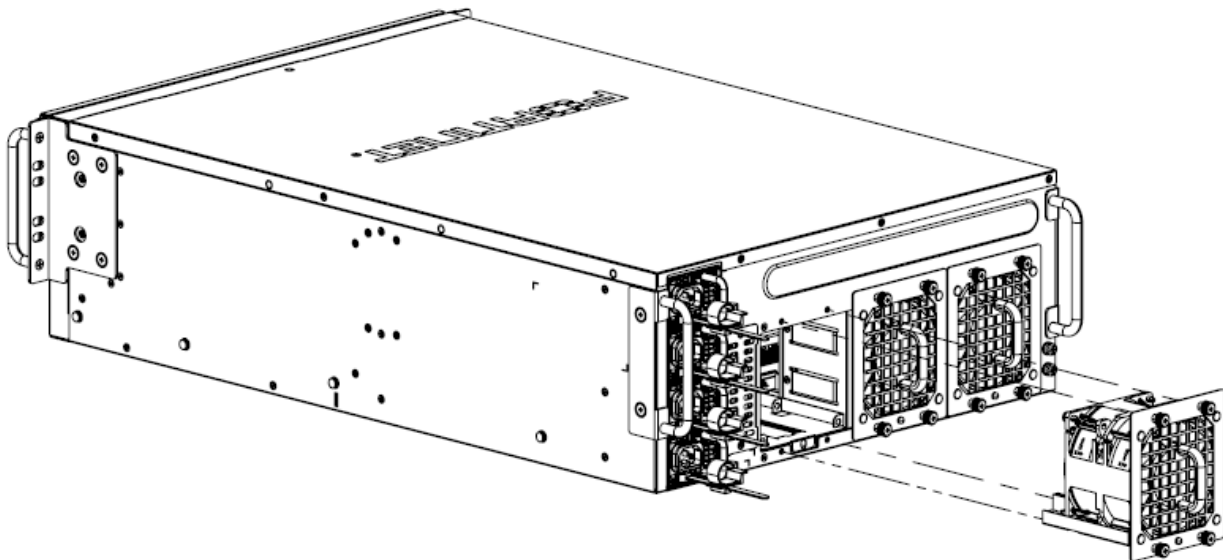


Fan Replacement

Fan modules can be hot-swapped and should be cleaned every 2 years or less. Replace fan modules after 6 years or less.



Unfasten 4x Fan Screws, then
remove Fan Module

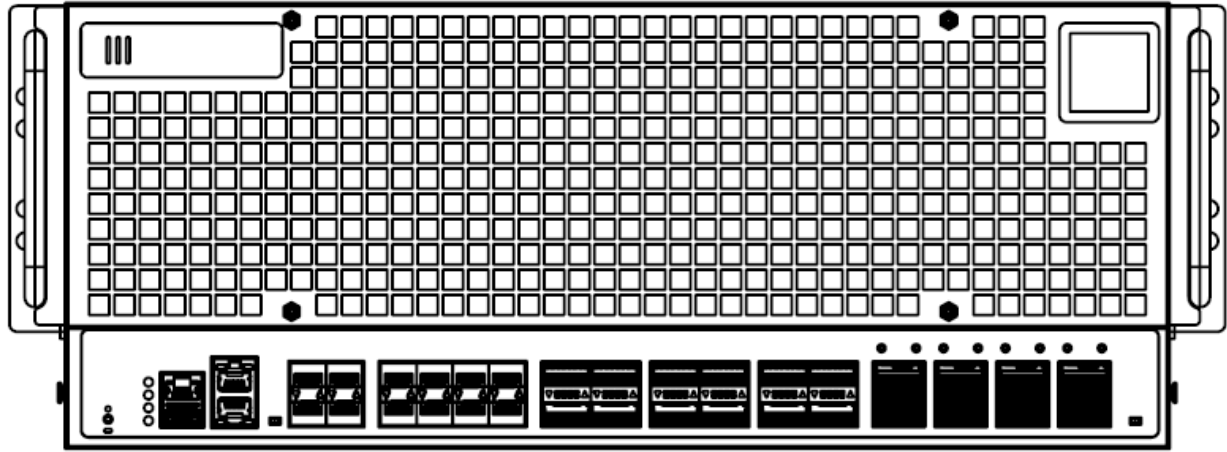


Replace Fan Module, then
fasten 4x Fan Screws

Filter Replacement (NEBS models only)

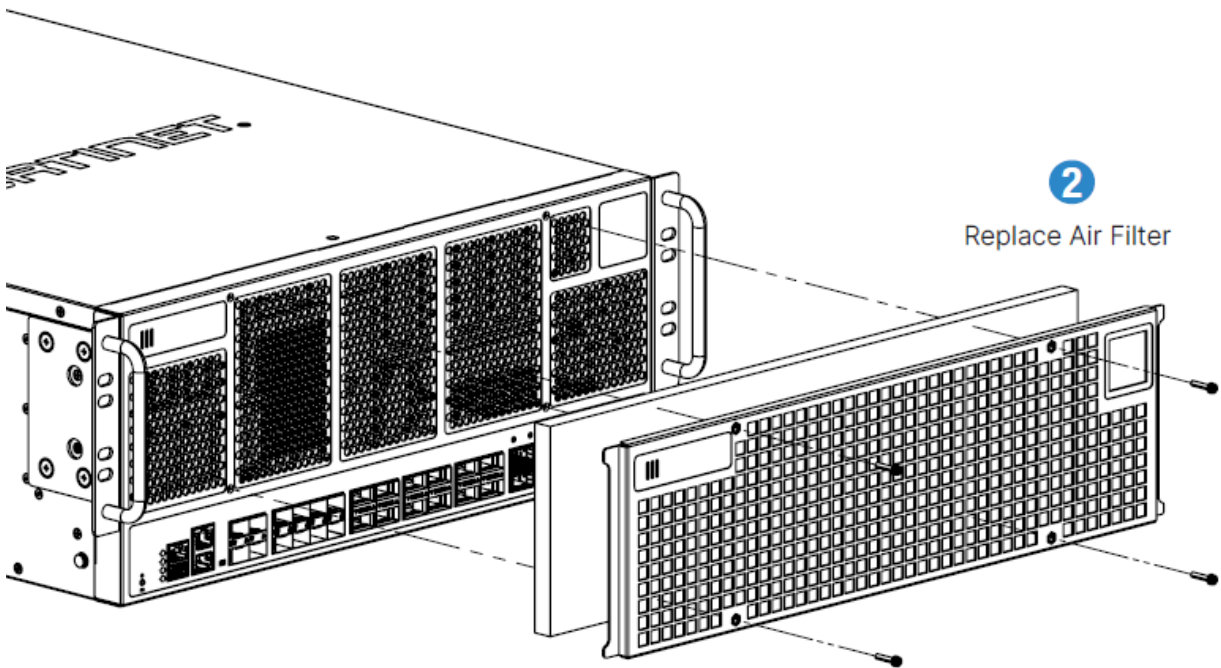
For NEBS models, the air filter is pre-installed. Replace the filter every 6 months or less.

1 Unfasten 4x Screws, then remove Cover



2

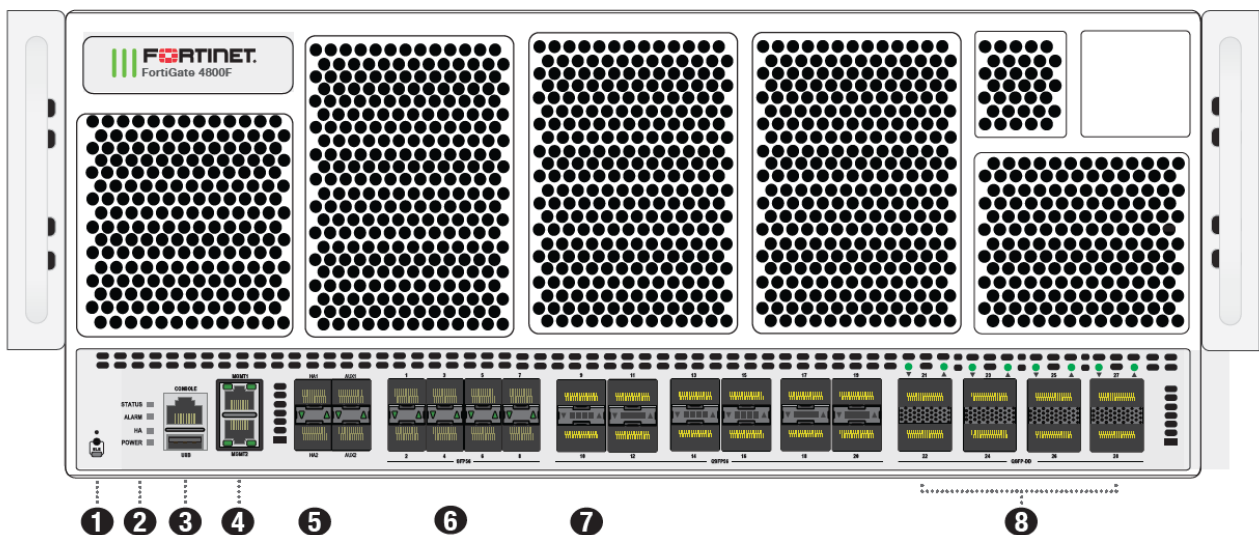
Replace Air Filter



3

Install Cover, then
fasten 4x Screws

FG-4800F Series Front



1. BLE Button Activates BLE management or restores to factory default



Blue: BLE connected



Flashing Blue: BLE in discovery



Off: BLE not connected

2. STATUS



Green: Normal operation



Flashing Green: Booting up

HA



Green: Operating in an HA cluster



Red: HA failure



Off: HA disabled

ALARM



Red: Major alarm detected



Amber: Minor alarm detected



Off: No errors detected

POWER



Green: Device is on



Flashing Green: Checking PFR



Off: Device is off

3. Console (RJ45) CLI interface

USB (USB A) USB 3.0 server port

4. MGMT 1 and MGMT 2 (RJ45) 10 GE management ports

LINK/ACT (Left LED)



Green: Link established



Flashing Green: Data activity



Off: No link established

SPEED (Right LED)



Green: 10 Gbps



Amber: 1 Gbps



Off: 100 Mbps or no link established

Note: For NEBS models, the filter is pre-installed

5. Ports HA1, HA2, AUX1, and AUX2

▼ Green: Connected at 50/25/10/1 Gbps

↗ Flashing Green: Data activity

▼ Off: No link established

6. Ports 1 to 8 (SFP56)

▼ Green: Connected at 50/25/10/1 Gbps

↗ Flashing Green: Data activity

▼ Off: No link established

7. Ports 9 to 20 (QSFP56)

▼ Green: Connected at 200/100/40 Gbps

↗ Flashing Green: Data activity

▼ Off: No link established

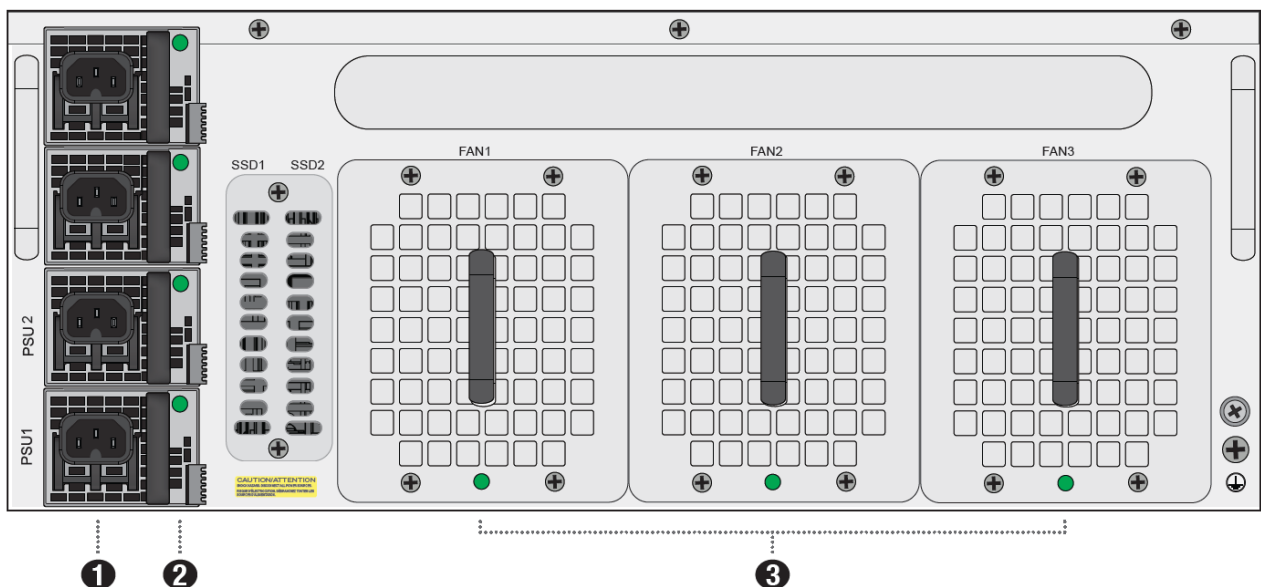
8. Ports 21 to 28 (QSFP-DD)

▲ Green: Connected at 400/200/100/40 Gbps

↗ Flashing Green: Data activity

▲ Off: No link established

FG-4800F Series Rear







1. AC Power Supplies

200-240VAC, 7-6A, 50/60Hz (x4)




2+2 Redundant, hot-swappable power supplies

2. Power Supply LED Indicators

● Green: Standby rail and main output on

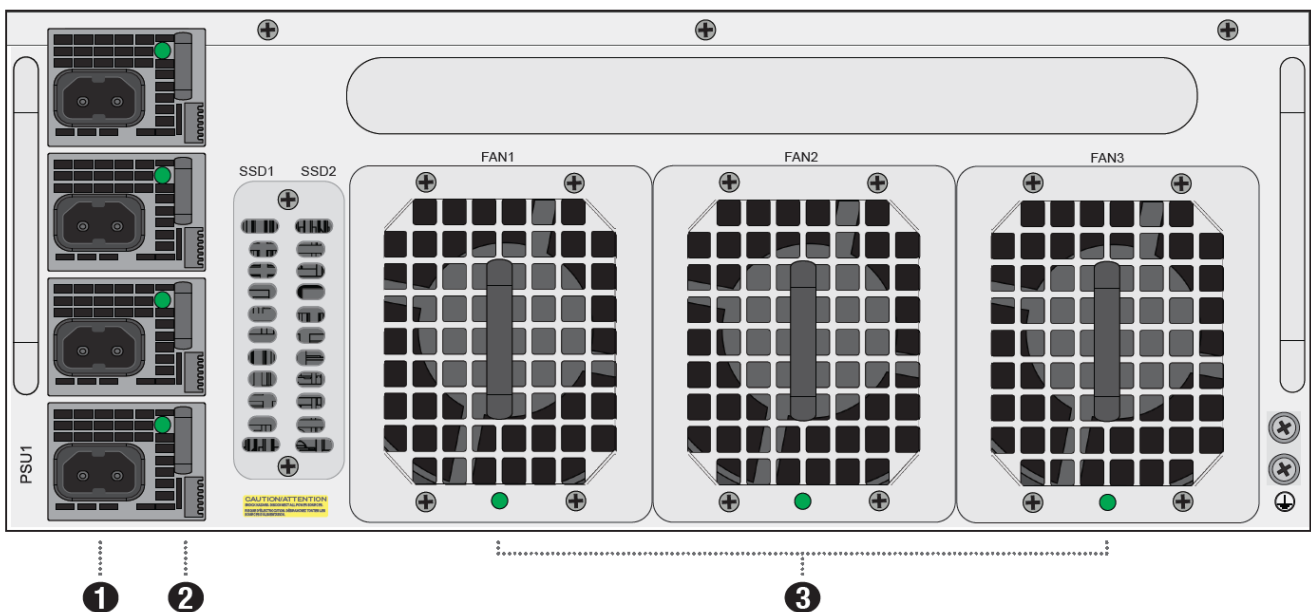
-  Flashing Green: Standby rail and main output off
-  Amber: Main output or fan error detected
-  Flashing Amber: Power supply warning event detected
-  Off: Error or no AC input






3. System Fan LED Status




-  Green: Fan operating normally
-  Red: Fan error, RPM too low or too high
-  Off: Fan error or fan is off

Note: The fan trays are hot-swappable

FG-4800F-DC Series Rear



1. DC Power Supplies (2+2)
 - 48V to -60V DC, 30A-24A (x4), hot-swappable
2. DC PSU LED Status
 -  Green: Power supply operating normally
 -  Flashing Green: DC power detected
 -  Amber: Power output is off
 -  Flashing Amber: Power supply error
 -  Off: DC power not detected
3. System Fan LED Status

-  Green: Fan operating normally
-  Red: Fan error, RPM too low or too high
-  Off: Fan error or fan is off

Note: The fan trays are hot-swappable

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:

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

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

Safety

- Moving parts — Hazardous moving parts. Keep away from moving fan blades.
- Warning: Equipment intended for installation in Restricted Access Location.

Skilled person must install the equipment.

- Warning: A readily accessible disconnect device shall be incorporated in the building installation wiring.
- Warning: A UL Listed external disconnect device, i.e. circuit breaker or other, with over current protection suitable for local code (rated 6A recommended) shall be installed with this equipment.
- 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.

CAUTION: Shock Hazard. Disconnect all power sources.

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.

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.

Warning: Stability hazard.

The rack may tip over causing serious personal injury.

Before extending the rack to the installation position, read the installation instructions.

Do not put any load on the slide-rail mounted equipment in the installation position.

Do not leave the slide-rail mounted equipment in the installation position.

Fiber optic transceiver must be rated 3.3V, 22mA max, Laser Class 1, UL certified component.

Warning: Class I Equipment. This equipment must be earthed. The power plug must be connected to a properly wired earth ground socket outlet. An improperly wired socket outlet could place hazardous voltage on accessible metal parts.

Warning: All Ethernet cables are designed for intra-building connection to other equipment. Do not connect these ports directly to communication wiring or other wiring that exits the building where the appliance is located.

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 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

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.

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.

Innovation, Science and Economic Development (ISED) – Canada

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

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 & your body.

This radio transmitter (Contains IC:7280B-111T15E) 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.

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.

Ant.	Brand Holder	Model Name	Antenna Type	Connector	Antenna Gain (dBi)
1	Wieson	ARY196-0047-011-00	PIFA	MMCX	-0.27

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.

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

- 2402-2480MHz less than 20dBm

This equipment should be installed and operated with minimum distance 20cm between the radiator & 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.

Note: The full Declaration of Conformity for this product is available in the link below:

<https://site.fortinet.com/ProductRegulatory/EU>

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 e.i.r.p. of the product for sale in the EU:

Frequency Range (MHz)	Maximum e.i.r.p. (dBm)
Bluetooth 2.4GHz	1.98

UK Conformity Assessed (UKCA) – United Kingdom

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

2402-2480MHz less than 20dBm

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>

Voluntary Control Council for Interference (VCCI) – Japan

Product Safety Electrical Appliance & Material (PSE) – Japan

Bureau of Standards Metrology and Inspection (BSMI) – Taiwan

The presence conditions of the restricted substance (BSMI RoHS table) are available at the link below: <https://www.fortinet.com/bsmi>

National Telecommunications Commission (NCC) – Taiwan

NEBS

WARNING: The intra-building ports of the FG-4801F/-DC/-NEBS equipment or subassembly are suitable for connection to intra-building or unexposed wiring or cabling only. The intra-building port(s) of the equipment or subassembly **MUST NOT** be metallically connected to interfaces that connect to the OSP or its wiring. These interfaces are designed for use as intra-building interfaces only (Type 2 or Type 4 ports as described in GR-1089-CORE, Issue 6) and require isolation from the exposed OSP cabling. The addition of Primary Protectors is not sufficient protection in order to connect these interfaces metallically to OSP wiring.

For AC powered EUT:

WARNING: The FG-4801F/-DC/-NEBS shall be connected to and external Special Protection Devices (SPD) when installed and connected to commercial AC power.

- The FG-4801F/-DC/-NEBS shall be located in a restricted access location where only crafts personnel are allowed access.
- FG-4801F/-DC/-NEBS utilizes a UL Listed two-hole with a size of 6-10AWG that utilizes 4N·m to secure the frame and EUT.
- The FG-4801F/-DC/-NEBS shall be installed and connected to the CBN.
- The FG-4801F/-DC/-NEBS is suitable for connection to the Central Office and locations where NEC applies.
- The battery returns of the FG-4801F/-DC/-NEBS shall be connected as DC-I.
- The FG-4801F/-DC/-NEBS shall be grounded via a copper ground conductor.
- All bare grounding connection points to the FG-4801F/-DC/-NEBS shall be cleaned and coated with an anti-oxidant solution before connections are made.
- All surfaces on the FG-4801F/-DC/-NEBS that are un-plated shall be brought to a bright finish and treated with an anti-oxidant solution before connections are made.
- All non-conductive surfaces on the FG-4801F/-DC/-NEBS shall be removed from all

threads and connection points to ensure electrical continuity. The FG-4801F/-DC/-NEBS is capable of operating at 200-240Vac or -48Vdc to -60Vdc at a maximum current level 7-6A for AC or 30-24A.

- Air filter must be replaced every 6 months.

[Fortinet.com](https://www.fortinet.com)

March 4, 2025

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For Product License Agreement / EULA and Warranty Terms, visit

<https://www.fortinet.com/content/dam/fortinet/assets/legal/EULA.pdf>

FAQ


- **Q: Where can I find detailed product documentation?**

A: The Admin Guide is available at <https://docs.fortinet.com/> for setup and configuration information.

• **Q: How do I contact customer service for product-related queries?**

A: For contracts, licensing, and support, contact FortiCare Support at <https://www.fortinet.com/support/contact>

Documents / Resources

	FORTINET 4800F Series High Performance With Flexibility [pdf] User Guide de FG-4800F, FG-4801F, FG-4800F-DC, FG-4801F-DC, FG-4801F-NEBS, FG-4801F-DC-NEBS, 4800F Series High Performance With Flexibility, 4800F Series, High Performance With Flexibility, With Flexibility, Flexibility
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References

- [User Manual](#)

FORTINET

4800F Series, 4800F Series High Performance With Flexibility, FG-4800F, FG-4800F-DC, FG-4801F, FG-4801F-DC, FG-4801F-DC-NEBS, FG-4801F-NEBS, Flexibility, FORTINET, High Performance With Flexibility, With Flexibility

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