



Hewlett Packard
Enterprise

HPE FlexFabric 5700 Switch Series

Installation Guide

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Preparing for installation

Table 1 describes the HPE FlexFabric 5700 Switch Series models, power supplies, and fan trays.

Table 1 HPE FlexFabric 5700 Switch Series models, power supplies, and fan trays

Product code	HPE description	Alias
HPE FlexFabric 5700 Switch Series models:		
JG894A	HPE FlexFabric 5700 48G 4XG 2QSFP+ Switch	HPE 5700 48G 4XG 2QSFP+
JG895A	HPE FlexFabric 5700 48G 4XG 2QSFP+ TAA-compliant Switch	HPE 5700 48G 4XG 2QSFP+ TAA
JG896A	HPE FlexFabric 5700 40XG 2QSFP+ Switch	HPE 5700 40XG 2QSFP+
JG897A	HPE FlexFabric 5700 40XG 2QSFP+ TAA-compliant Switch	HPE 5700 40XG 2QSFP+ TAA
JG898A	HPE FlexFabric 5700 32XGT 8XG 2QSFP+ Switch	HPE 5700 32XGT 8XG 2QSFP+
JG899A	HPE FlexFabric 5700 32XGT 8XG 2QSFP+ TAA-compliant Switch	HPE 5700 32XGT 8XG 2QSFP+ TAA
Power supplies		
JC680A	HPE 58x0AF 650W AC Power Supply	650W AC power supply
JH336A	HPE FlexFabric Switch 650W 48V Hot Plug NEBS-compliant DC Power Supply	650W DC power supply
JG900A	HPE A58x0AF Back (Power Side) to Front (Port Side) Airflow 300W AC Power Supply	300W AC power supply
JG901A	HPE A58x0AF Back (Power Side) to Front (Port Side) Airflow 300W DC Power Supply	300W DC power supply
Fan trays		
JC682A	HPE 58x0AF Back (Power Side) to Front (Port Side) Airflow Fan Tray	LSWM1FANSC
JC683A	HPE 58x0AF Front (Port Side) to Back (Power Side) Airflow Fan Tray	LSWM1FANSCB
JG552A	HPE X711 Front (Port Side) to Back (Power Side) Airflow High Volume Fan Tray	LSWM1HFANSCB
JG553A	HPE X712 Back (Power Side) to Front (Port Side) Airflow High Volume Fan Tray	LSWM1HFANSC

- For regulatory identification purposes, the HPE FlexFabric 5700 48G 4XG 2QSFP+ and HPE FlexFabric 5700 48G 4XG 2QSFP+ TAA-compliant products are assigned Regulatory Model Numbers (RMN). The Regulatory Model Numbers for these products are listed below. These regulatory numbers should not be confused with the marketing names HPE FlexFabric 5700, or product numbers JG894A and JG895A.

Product code	RMN	HPE description
JG894A	BJNGA-AD0024	HPE FlexFabric 5700 48G 4XG 2QSFP+ Switch

Product code	RMN	HPE description
JG895A	BJNGA-AD0024	HPE FlexFabric 5700 48G 4XG 2QSFP+ TAA-compliant Switch

- For regulatory identification purposes, the HPE FlexFabric 5700 40XG 2QSFP+ and HPE FlexFabric 5700 40XG 2QSFP+ TAA-compliant products are assigned Regulatory Model Numbers (RMN). The Regulatory Model Numbers for these products are listed below. These regulatory numbers should not be confused with the marketing products HPE FlexFabric 5700, or product numbers JG896A and JG897A.

Product code	RMN	HPE description
JG896A	BJNGA-AD0025	HPE FlexFabric 5700 40XG 2QSFP+ Switch
JG897A	BJNGA-AD0025	HPE FlexFabric 5700 40XG 2QSFP+ TAA-compliant Switch

- For regulatory identification purposes, the HPE FlexFabric 5700 32XGT 8XG 2QSFP+ and HPE FlexFabric 5700 32XGT 8XG 2QSFP+ TAA-compliant products are assigned Regulatory Model Numbers (RMN). The Regulatory Model Numbers for these products are listed below. These regulatory numbers should not be confused with the marketing names HPE FlexFabric 5700, or product numbers JG898A and JG899A.

Product code	RMN	HPE description
JG898A	BJNGA-AD0026	HPE FlexFabric 5700 32XGT 8XG 2QSFP+ Switch
JG899A	BJNGA-AD0026	HPE FlexFabric 5700 32XGT 8XG 2QSFP+ TAA-compliant Switch

Safety recommendations

To avoid any equipment damage or bodily injury, read the following safety recommendations before installation. Note that the recommendations do not cover every possible hazardous condition.

- Before cleaning the switch, remove all power cords from the switch. Do not clean the switch with wet cloth or liquid.
- Do not place the switch near water or in a damp environment. Prevent water or moisture from entering the switch chassis.
- Do not place the switch on an unstable case or desk. The switch might be severely damaged in case of a fall.
- Ensure good ventilation of the equipment room and keep the air inlet and outlet vents of the switch free of obstruction.
- Make sure the operating voltage is in the required range.
- To avoid electrical shocks, do not open the chassis while the switch is operating or when the switch is just powered off.
- When replacing FRUs, including power supplies and fan trays, wear an ESD wrist strap to avoid damaging the units.

Examining the installation site

The switch must be used indoors.

Mount your switch in a rack and make sure:

- Adequate clearance is reserved at the air inlet and outlet vents for ventilation.
- The rack has a good ventilation system.
- Identify the hot aisle and cold aisle at the installation site, and make sure ambient air flows into the switch from the cold aisle and exhausts to the hot aisle.
- Identify the airflow designs of neighboring devices, and prevent hot air flowing out of the bottom device from entering the top device.
- The rack is sturdy enough to support the switch and its accessories.
- The rack is reliably grounded.

To ensure normal operation and long service life of your switch, install it in an environment that meets the requirements described in the following subsections.

Temperature/humidity

Maintain appropriate temperature and humidity in the equipment room.

- Lasting high relative humidity can cause poor insulation, electricity leakage, mechanical property change of materials, and metal corrosion.
- Lasting low relative humidity can cause washer contraction and ESD and bring problems including loose captive screws and circuit failure.
- High temperature can accelerate the aging of insulation materials and significantly lower the reliability and lifespan of the switch.

For the temperature and humidity requirements of different switch models, see "[Appendix A Chassis views and technical specifications.](#)"

Cleanliness

Dust buildup on the chassis might result in electrostatic adsorption, which causes poor contact of metal components and contact points, especially when indoor relative humidity is low. In the worst case, electrostatic adsorption can cause communication failure.

Table 2 Dust concentration limit in the equipment room

Substance	Concentration limit (particles/m ³)
Dust	$\leq 3 \times 10^4$ (no visible dust on the tabletop over three days)
NOTE: Dust diameter $\geq 5 \mu\text{m}$	

The equipment room must also meet limits on salts, acids, and sulfides to eliminate corrosion and premature aging of components, as shown in [Table 3](#).

Table 3 Harmful gas limits in the equipment room

Gas	Maximum concentration (mg/m ³)
SO ₂	0.2
H ₂ S	0.006
NH ₃	0.05
Cl ₂	0.01

EMI

All electromagnetic interference (EMI) sources, from outside or inside of the switch and application system, adversely affect the switch in the following ways:

- A conduction pattern of capacitance coupling.
- Inductance coupling.
- Electromagnetic wave radiation.
- Common impedance (including the grounding system) coupling.

To prevent EMI, use the following guidelines:

- If AC power is used, use a single-phase three-wire power receptacle with protective earth (PE) to filter interference from the power grid.
- Keep the switch far away from radio transmitting stations, radar stations, and high-frequency devices to make sure the EMI levels do not exceed the compliant range.
- Use electromagnetic shielding when necessary. For example, use shielded interface cables.
- To prevent signal ports from getting damaged by over-voltage or over-current caused by lightning strikes, only route interface cables indoors.

Laser safety

⚠ WARNING!

Do not stare into any fiber port when the switch has power. The laser light emitted from the optical fiber might hurt your eyes.

The switch is a Class 1 laser device.

Installation tools

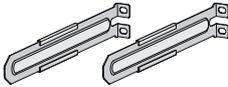
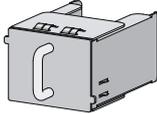
The installation tools are not provided with the switch. Prepare them yourself.

- Phillips screwdriver.
- ESD wrist strap.
- Marker.

Installation accessories

Table 4 Installation accessories

Product code	Description	Quantity	Applicable models
5066-0850	1 U mounting bracket kit (including one pair of mounting brackets and eight M4 countersunk screws) 	1 kit	All HPE 5700 switches

Product code	Description	Quantity	Applicable models
5185-8681	1 U short slide rail kit (including one pair of slide rails and four M4 countersunk screws) 	1 kit	<ul style="list-style-type: none"> HPE 5700 32XGT 8XG 2QSFP+ HPE 5700 32XGT 8XG 2QSFP+ TAA
5185-8713	1 U long slide rail kit (including one pair of slide rails, one pair of guide rails, and four M4 countersunk screws) 	1 kit	<ul style="list-style-type: none"> HPE 5700 48G 4XG 2QSFP+ HPE 5700 48G 4XG 2QSFP+ TAA HPE 5700 40XG 2QSFP+ HPE 5700 40XG 2QSFP+ TAA
N/A	M6 screw and floating nut 	User supplied	All HPE 5700 switches
5184-6723	Grounding cable 	1	All HPE 5700 switches
5185-9579	Grounding screw 	2	All HPE 5700 switches
5185-8676	Power supply filler module 	1	All HPE 5700 switches
N/A	AC power cord	User supplied	<ul style="list-style-type: none"> 300W AC power supply 650W AC power supply
5185-8688 5400-0249	DC power cord  The power cord color code scheme is for illustration only. The cable delivered for your country or region might use a different color scheme.	1	<ul style="list-style-type: none"> 300W DC power supply 650W DC power supply
5185-8748	Removable cable tie 	1	All power supplies
5185-8627	Console cable 	1	All HPE 5700 switches

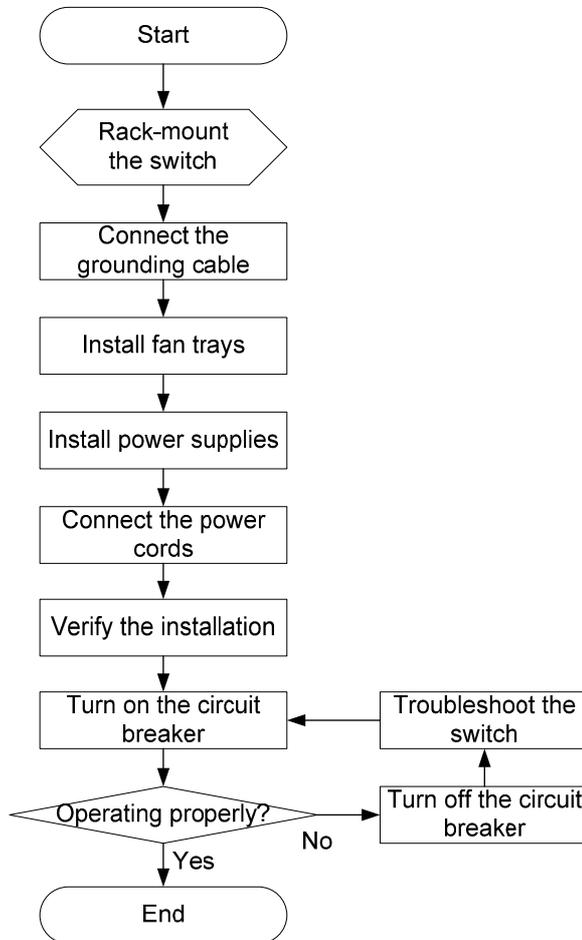
Product code	Description	Quantity	Applicable models
5185-8722	SFP/SFP+ dust plug 	Optional	All HPE 5700 switches
5187-9022	QSFP+ dust plug 	Optional	All HPE 5700 switches

Installing the switch

△ CAUTION:

Keep the tamper-proof seal on a mounting screw on the chassis cover intact, and if you want to open the chassis, contact Hewlett Packard Enterprise Support for permission. Otherwise, Hewlett Packard Enterprise shall not be liable for any consequence caused thereby.

Figure 1 Hardware installation flow



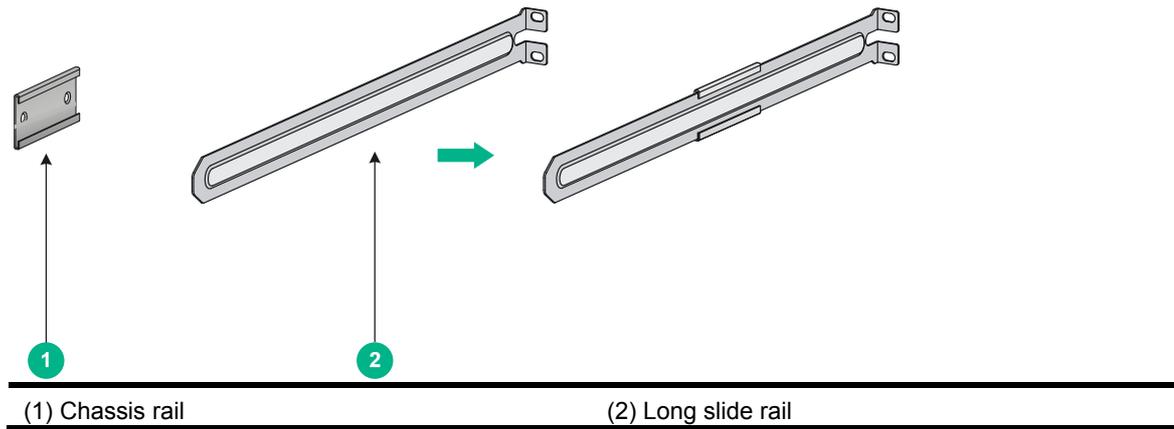
Installing the switch in a 19-inch rack

Installation prerequisites

To close the rack door easily, make sure the rack depth for the HPE 5700 32XGT 8XG 2QSFP+ and HPE 5700 32XGT 8XG 2QSFP+ TAA switches is a minimum of 1000 mm (39.37 in).

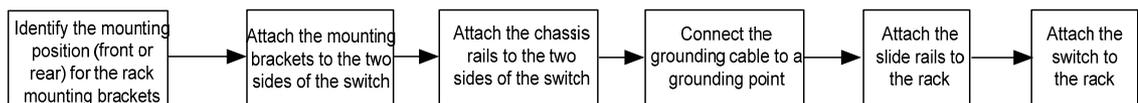
The distance from the front to the rear posts of the rack must meet the requirements described in [Table 5](#).

You must use both the mounting bracket and the rack mounting rail kit to rack-mount the switch.



Rack-mounting procedures at a glance

Figure 4 Rack-mounting procedure



NOTE:

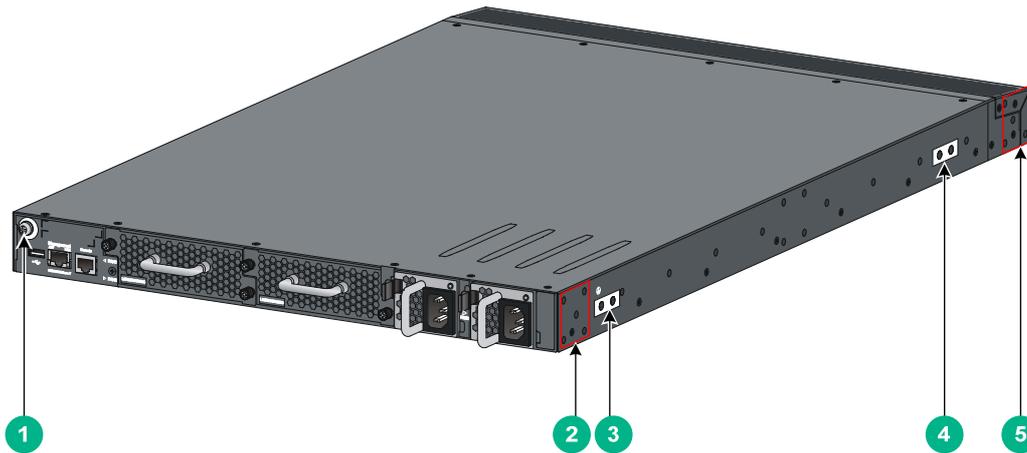
If a rack shelf is available, you can put the switch on the rack shelf, slide the switch to an appropriate location, and attach the switch to the rack with the mounting brackets.

Attaching the mounting brackets, chassis rails, and grounding cable to the chassis

The switch has one front mounting position (near the network ports) and one rear mounting position (near the power supplies).

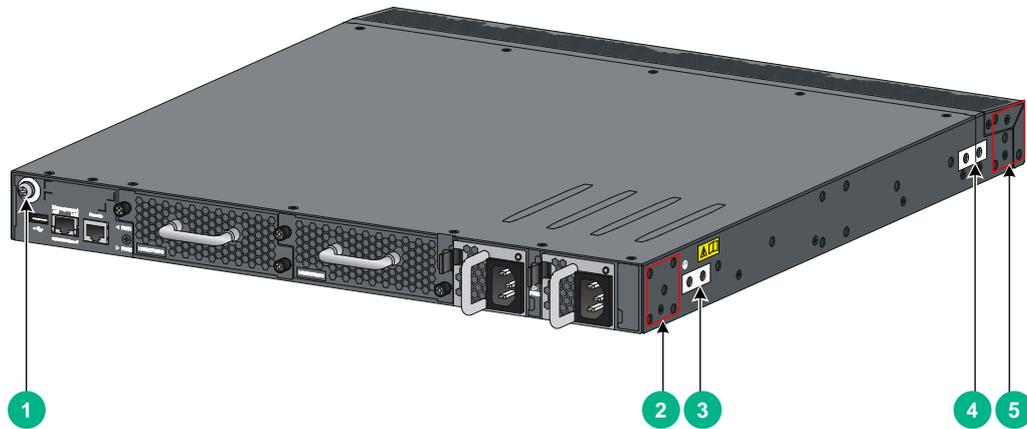
The switch has one primary grounding point (with a grounding sign) and two auxiliary grounding points. Use the primary grounding point whenever possible. If the primary grounding point fails or is not suitable for the installation site, use one of the auxiliary grounding points.

Figure 5 Mounting and grounding positions of the HPE 5700 32XGT 8XG 2QSFP+/HPE 5700 32XGT 8XG 2QSFP+ TAA switch



- | | |
|---------------------------------|---------------------------------|
| (1) Auxiliary grounding point 2 | (2) Rear mounting position |
| (3) Primary grounding point | (4) Auxiliary grounding point 1 |
| (5) Front mounting position | |

Figure 6 Mounting and grounding positions of the HPE 5700 48G 4XG 2QSFP+/HPE 5700 48G 4XG 2QSFP+ TAA/HPE 5700 40XG 2QSFP+/HPE 5700 40XG 2QSFP+ TAA switch



- | | |
|---------------------------------|---------------------------------|
| (1) Auxiliary grounding point 2 | (2) Rear mounting position |
| (3) Primary grounding point | (4) Auxiliary grounding point 1 |
| (5) Front mounting position | |

Attaching the mounting brackets and chassis rails to the chassis

1. Align the mounting brackets with the screw holes in the rear mounting position (see [Figure 7](#)) or front mounting position (see [Figure 8](#)).
2. Use M4 screws (supplied with the switch) to attach the mounting brackets to the chassis.
3. Align the chassis rails with the rail mounting holes in the chassis:
 - o If the mounting brackets are in the rear mounting position, align the chassis rails with the screw holes at the front of the side panels (see [Figure 7](#)).
 - o If the mounting brackets are in the front mounting position, align the chassis rails with the screw holes at the rear of the side panels (see [Figure 8](#)).
4. Use M4 screws (supplied with the switch) to attach the chassis rails to the chassis.

NOTE:

Secure the mounting brackets and chassis rails to both sides of the chassis in the same way.

Connecting the grounding cable to the chassis

⚠ CAUTION:

The primary grounding point and auxiliary grounding point 1 are located on the left side panel. If you use one of these grounding points, you must connect the grounding cable to the grounding point before you mount the switch in the rack.

To connect the grounding cable to a chassis grounding point, for example, the primary grounding point:

1. Choose a grounding point.
2. Unpack the grounding cable and grounding screws.
3. Align the two-hole grounding lug at one end of the cable with the grounding holes of the grounding point, insert the grounding screws into the holes, and tighten the screws with a screwdriver to attach the grounding lug to the chassis, as shown in [Figure 7](#).

Figure 7 Attaching the rear mounting brackets/chassis rails/grounding cable to the chassis

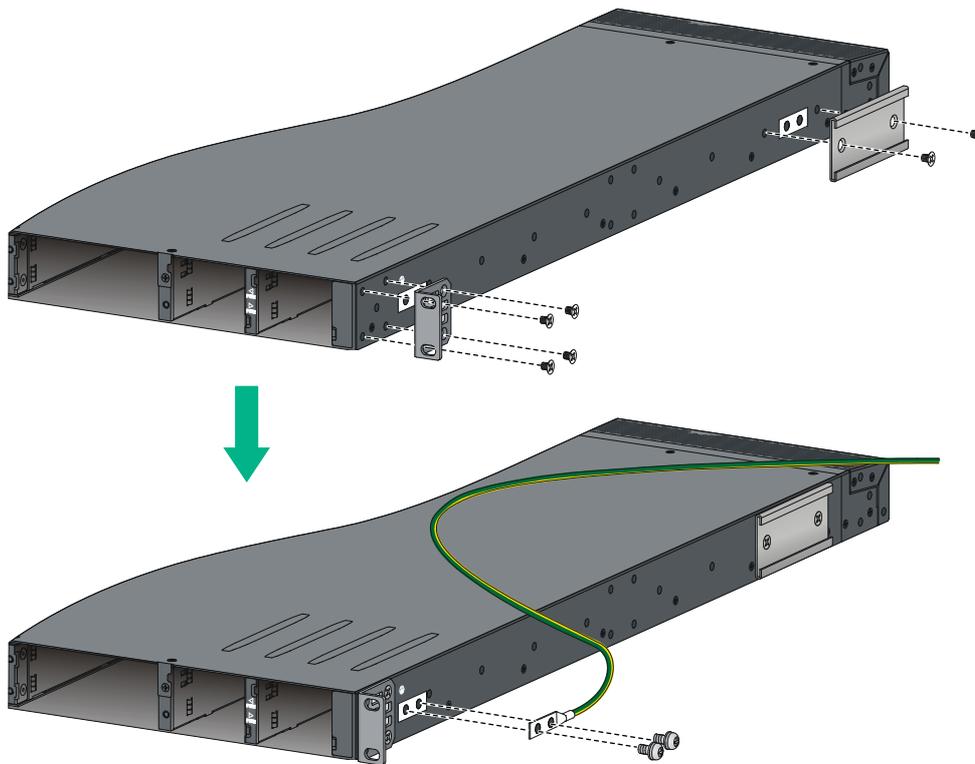
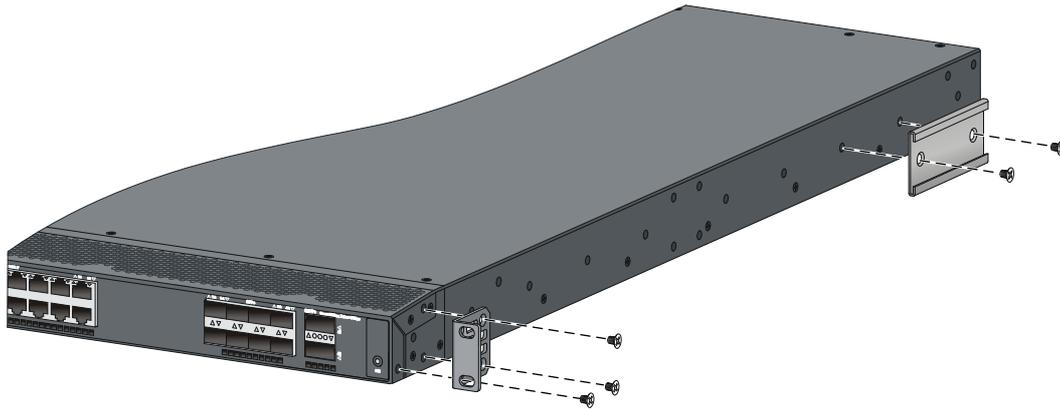


Figure 8 Attaching the front mounting brackets/chassis rails to the chassis



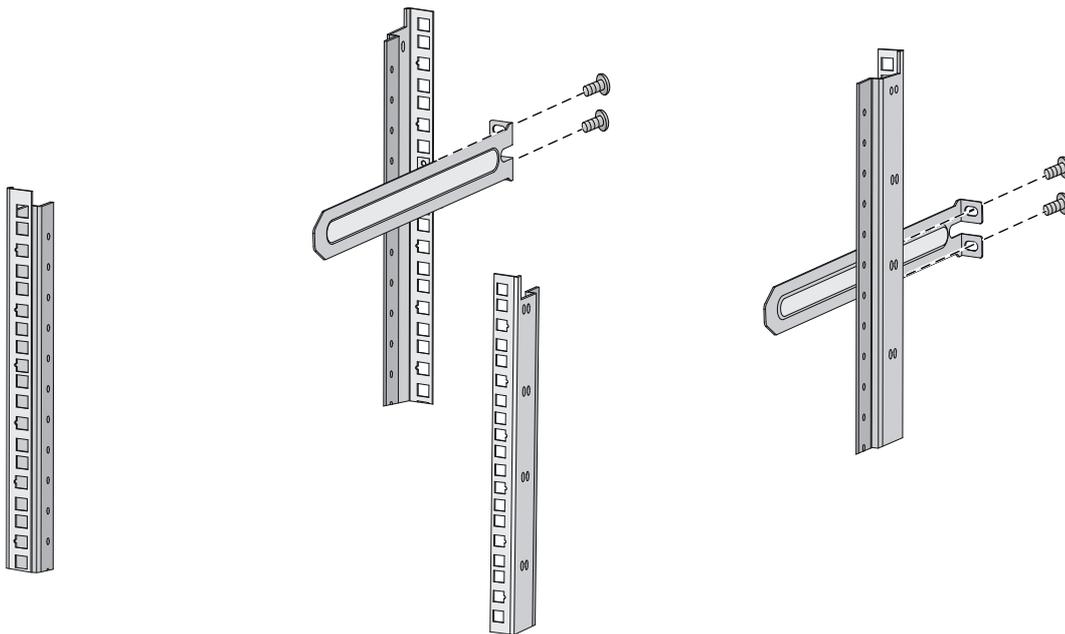
NOTE:

As a best practice, use the primary grounding point or auxiliary grounding point 1 because the grounding cable and grounding screw that come with the switch are suitable only for these two grounding points.

Attaching the slide rails to the rack

1. Identify the rack attachment position for the slide rails, and mark cage nut installation positions on the rack posts.
2. Install cage nuts (user-supplied) in the mounting holes in the rack posts.
3. Align the screw holes in one slide rail with the cage nuts in the rack post on one side, and use screws (user-supplied) to attach the slide rail to the rack, as shown in [Figure 9](#).
4. Repeat the preceding step to attach the other slide rail to the rack post on the other side.
Keep the two slide rails at the same height so the slide rails can attach into the chassis rails.

Figure 9 Installing the slide rails



Mounting the switch in the rack

This task requires two people.

To mount the switch in the rack:

1. Wear an ESD wrist strap and make sure it makes good skin contact and is reliably grounded.
2. Verify that the mounting brackets and chassis rails have been securely attached to the switch chassis.
3. Verify that the slide rails have been correctly attached to the rear rack posts.
4. Install cage nuts (user-supplied) to the front rack posts and make sure they are at the same level as the slide rails.
5. Supporting the bottom of the switch, align the chassis rails with the slide rails on the rack posts, as shown in [Figure 10](#). Work with another person to slide the chassis rails along the slide rails until the mounting brackets are flush with the rack posts.
6. Use screws (user-supplied) to attach the mounting brackets to the rack, as shown in [Figure 11](#).
To secure the switch in the rack, make sure the front ends of the slide rails reach out of the chassis rails.

Figure 10 Mounting the switch in the rack (1)

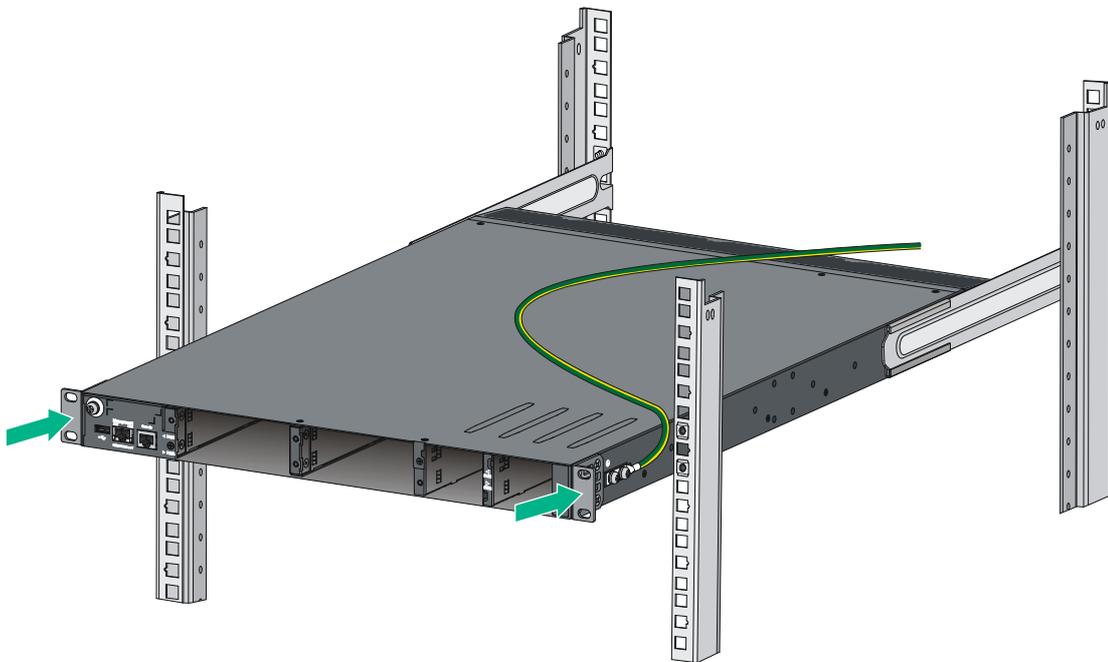
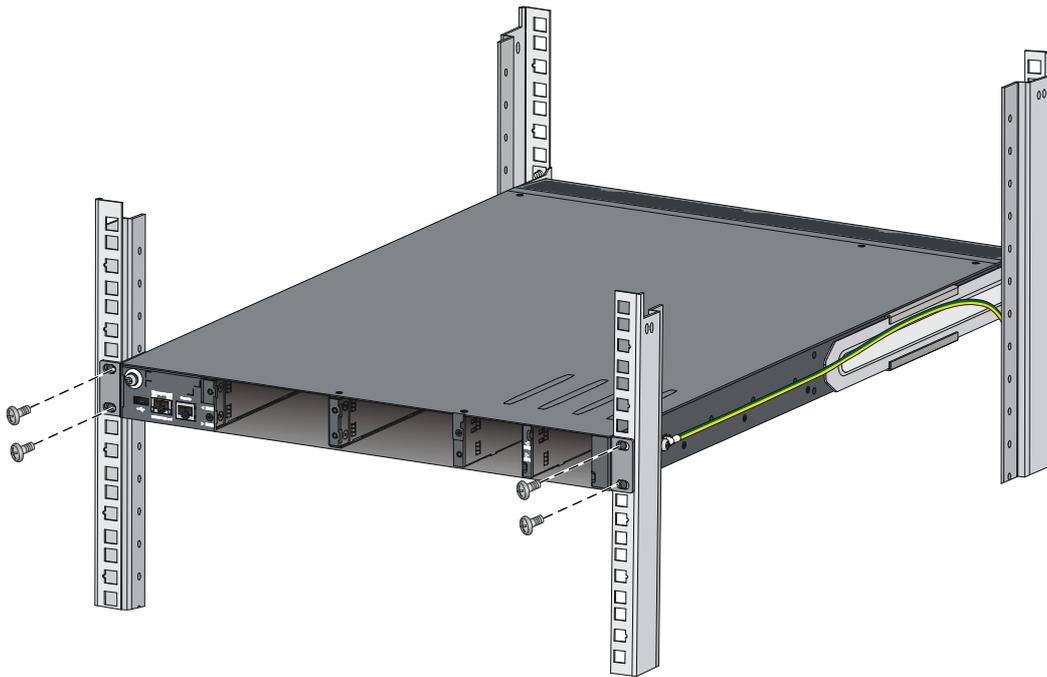


Figure 11 Mounting the switch in the rack (2)



Grounding the switch

⚠ WARNING!

Correctly connecting the switch grounding cable is crucial to lightning protection and EMI protection.

The power input end of the switch has a noise filter, whose central ground is directly connected to the chassis to form the chassis ground (commonly known as PGND). You must securely connect this chassis ground to the earth to minimize the potential for system damage, maximize the safety at the site, and minimize EMI susceptibility of the system.

You can ground a switch by using a grounding strip at the installation site or the AC power cord connected to the switch.

NOTE:

The power and grounding terminals in this section are for illustration only.

Grounding the switch with a grounding strip

⚠ WARNING!

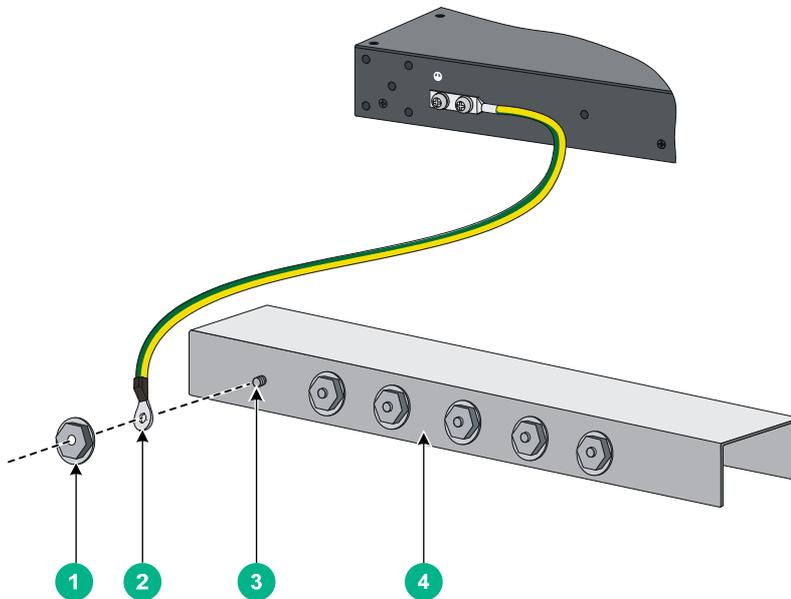
Connect the grounding cable to the grounding system in the equipment room. Do not connect it to a fire main or lightning rod.

If a grounding strip is available at the installation site, connect the grounding cable to the grounding strip.

To connect the grounding cable:

1. Attach the two-hole grounding lug at one end of the grounding cable to a grounding point on the switch chassis (see "Connecting the grounding cable to the chassis").
2. Remove the hex nut of a grounding post on the grounding strip.
3. Attach the ring terminal at the other end of the grounding cable to the grounding strip through the grounding post, and fasten the ring terminal with the removed hex nut.

Figure 12 Connecting the grounding cable to a grounding strip



(1) Hex nut

(2) Ring terminal

(3) Grounding post

(4) Grounding strip

NOTE:

- As a best practice, use the primary grounding point or auxiliary grounding point 1, because the grounding cable and grounding screw provided with the switch are applicable only to these two grounding points.
- To use auxiliary grounding point 2 on the switch, prepare a grounding cable yourself. The connection method is the same as connecting to the other two grounding points.

Grounding the switch by using the AC power cord

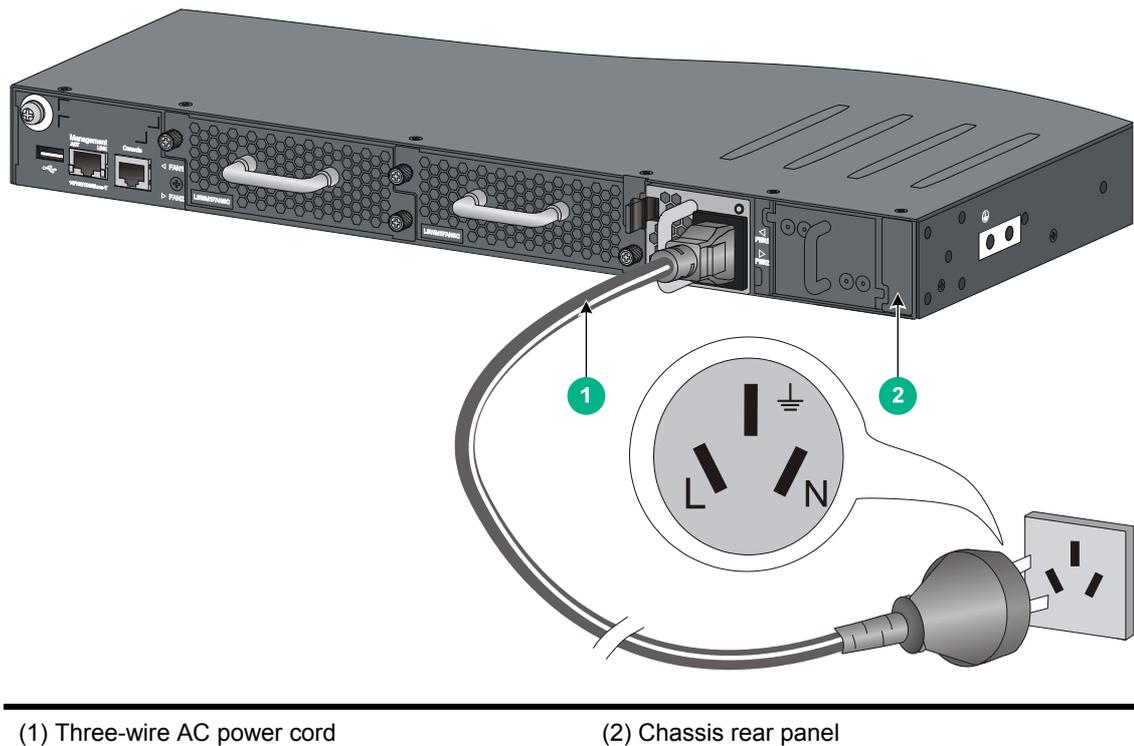
If the installation site has no grounding strips, you can ground an AC-powered switch through the protective earth (PE) wire of the power cord, but must make sure:

- The power cord has a PE wire.
- The ground contact in the power outlet is securely connected to the ground in the power distribution room or on the AC transformer side.
- The power cord is securely connected to the power outlet.

NOTE:

If the ground contact in the power outlet is not connected to the ground, report the problem and reconstruct the grounding system.

Figure 13 Grounding through the PE wire of the AC power cord



NOTE:

To guarantee the grounding effect, use the grounding cable provided with the switch to connect to the grounding strip in the equipment room as long as possible.

Installing/removing a fan tray

⚠ CAUTION:

To ensure good ventilation for the switch:

- Install two fan trays of the same model on the switch.
- Do not operate the system with one failed fan tray for more than 24 hours.
- Do not remove the failed fan tray until you are ready for replacing it.
- Do not operate the system without any fan tray for more than 2 minutes.
- Do not operate the system outside of the temperature range 0°C to 45°C (32°F to 113°F) degrees.

NOTE:

- The fan trays in the HPE 5700 48G 4XG 2QSFP+, HPE 5700 48G 4XG 2QSFP+ TAA, HPE 5700 40XG 2QSFP+, and HPE 5700 40XG 2QSFP+ TAA switches must be the same type: LSWM1FANSC(JC682A) or LSWM1FANSCB(JC683A).
- The fan trays in the HPE 5700 32XGT 8XG 2QSFP+ and HPE 5700 32XGT 8XG 2QSFP+ TAA switches must be the same type: LSWM1HFANSC(JG553A) or LSWM1HFANSCB(JG552A).

Installing a fan tray

⚠ CAUTION:

To prevent damage to the fan tray or the connectors on the backplane, insert the fan tray gently. If you encounter a hard resistance while inserting the fan tray, pull out the fan tray and insert it again.

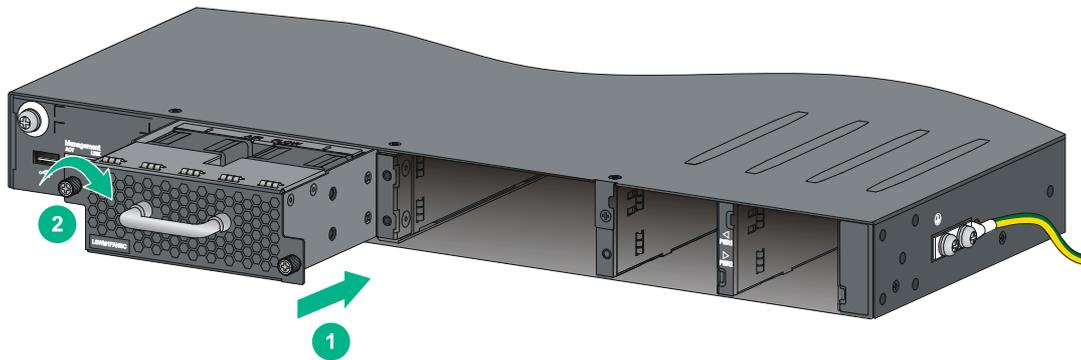
Select appropriate fan trays as needed. For the optional fan trays and their specifications, see "Fan trays."

To install a fan tray:

1. Wear an ESD wrist strap and make sure it makes good skin contact and is reliably grounded.
2. Unpack the fan tray and verify that the fan tray model is correct.
3. Grasp the handle of the fan tray with one hand and support the fan tray bottom with the other, and slide the fan tray along the guide rails into the slot until the fan tray seats in the slot and has a firm contact with the backplane (see callout 1 in Figure 14).
4. Fasten the captive screw on the fan tray with a Philips screwdriver until the fan tray is securely attached in the chassis (see callout 2 in Figure 14).

If the captive screw cannot be tightly fastened, verify the installation of the fan tray.

Figure 14 Installing a fan tray



Removing a fan tray

⚠ WARNING!

- Take out the fan tray after the fans completely stop rotating.
- To avoid an unbalanced fan causing loud noise, do not touch the fans, even if they are not rotating.

To remove a fan tray:

1. Wear an ESD wrist strap and make sure it makes good skin contact and is reliably grounded.
2. Loosen the captive screw of the fan tray with a Philips screwdriver until it is fully disengaged from the switch chassis.
3. Grasp the handle of the fan tray with one hand and pull the fan tray part way out the slot. Support the fan tray bottom with the other hand, and pull the fan tray slowly along the guide rails out of the slot.
4. Put away the removed fan tray in an antistatic bag for future use.

Installing/removing a power supply

⚠ WARNING!

- The switch does not support intermixing of AC and DC power supplies.
 - HPE 5700 48G 4XG 2QSFP+ and HPE 5700 48G 4XG 2QSFP+ TAA switches do not support intermixing of 300W and 650W power supplies.
 - Provide a circuit breaker for each power supply and make sure the circuit breaker is off before installation.
 - In power redundancy mode, you can replace a power supply without powering off the switch but must strictly follow the installation and procedures in [Figure 15](#) and [Figure 16](#) to avoid any bodily injury or damage to the switch.
-

The switch comes with both power supply slots empty and the power filler modules as accessories. You can install one or two power supplies for these switches as needed. For more information about the power supplies available for the switches, see "[Power supplies](#)."

Figure 15 Installation procedure

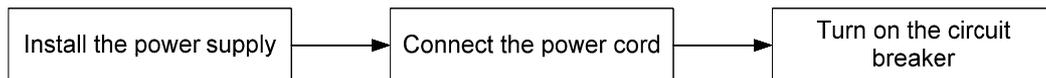
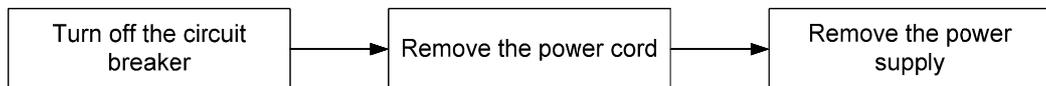


Figure 16 Removal procedure



Installing a power supply

⚠ CAUTION:

- Follow the forward inertia of the power supply when inserting it into the chassis, and make sure the power supply has firm contact with the connectors on the backplane.
 - To prevent damage to the connectors inside the switch chassis, insert the power supply gently. If you encounter a hard resistance while inserting the power supply, pull out the power supply and insert it again.
 - If only one power supply is installed, install a power filler module in the empty power supply slot for good ventilation of the switch.
-

To install a 300W AC power supply, 300W DC power supply, 650W AC power supply, or 650W DC power supply into the switch:

1. Wear an ESD wrist strap and make sure it makes good skin contact and is reliably grounded.
2. Unpack the power supply and verify that the power supply model is correct.
3. Correctly orient the power supply with the power supply slot (see [Figure 17](#)), grasp the handle of the power supply with one hand and support its bottom with the other, and slide the power supply slowly along the guide rails into the slot.

The slot is foolproof. If you cannot insert the power supply into the slot, re-orient the power supply rather than use excessive force to push it in.

Figure 17 Installing a power supply

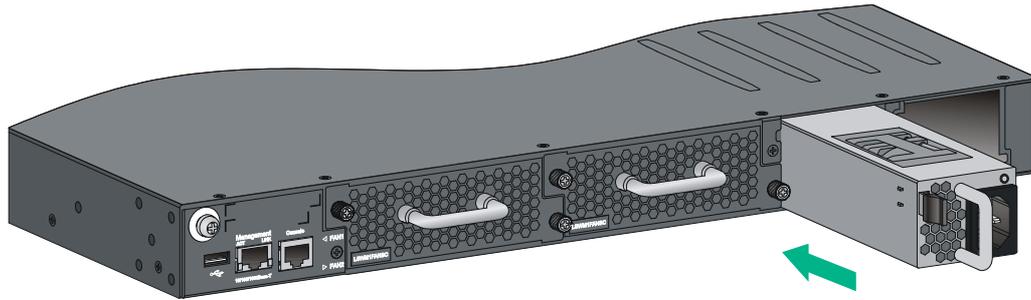
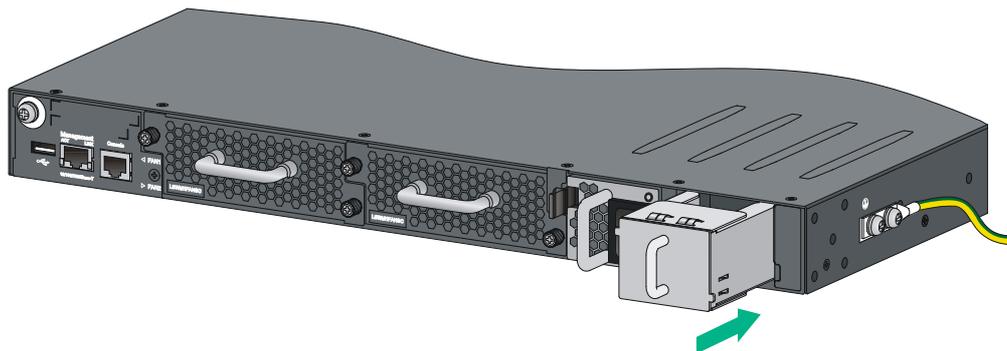


Figure 18 Installing a power supply filler module



Removing a power supply

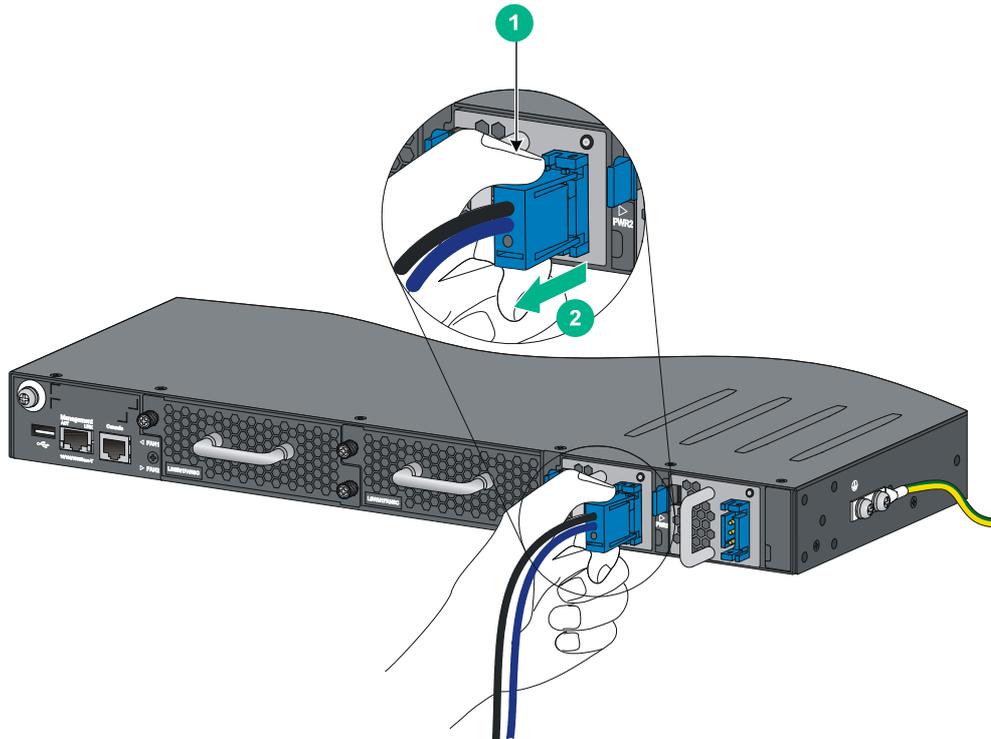
⚠ CAUTION:

- If the switch has two power supplies, removing one power supply does not affect the operation of the switch. If the switch has only one power supply, removing the power supply powers off the switch.
 - The power cord color code scheme in [Figure 19](#) is for illustration only. The cable delivered for your country or region might use a different color scheme. When you connect the power cord, always identify the polarity symbol on its wires.
-

To remove a 300W AC power supply, 300W DC power supply, 650W AC power supply, or 650W DC power supply from the switch:

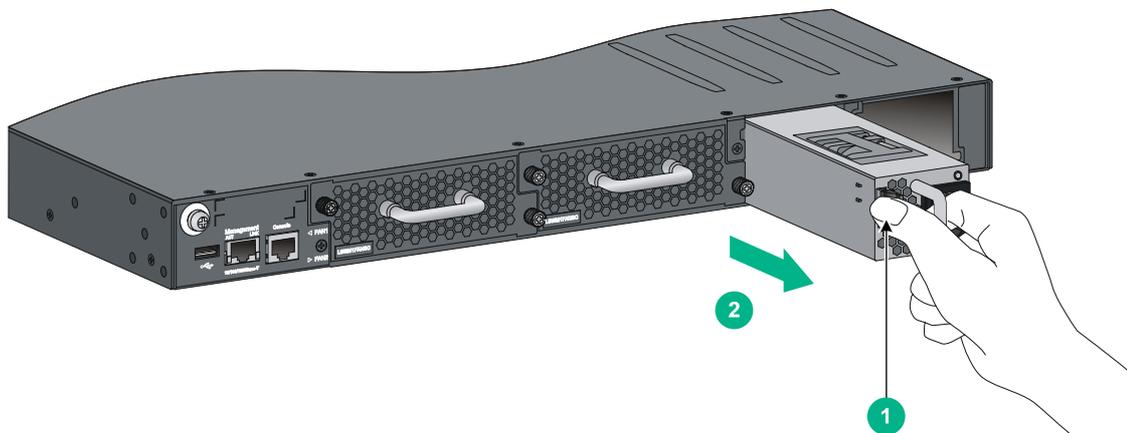
1. Wear an ESD wrist strap and make sure it makes good skin contact and is reliably grounded.
2. Squeeze the tabs on the power cord connector with your thumb and forefinger, and pull the connector out to remove the power cord, as shown in [Figure 19](#).
3. Hold the handle on the power supply with one hand, pivot the latch on the power supply to the right with your thumb, and pull the power supply part way out of the slot, as shown in [Figure 20](#).
4. Supporting the power supply bottom with one hand, slowly pull the power supply out with the other hand.
5. Put away the removed power supply in an antistatic bag for future use.

Figure 19 Removing the DC power cord



(1) Press the tabs on the power cord connector (2) Pull the power cord connector out
with your thumb and forefinger

Figure 20 Removing the power supply



(1) Pivot the latch to the right with your thumb (2) Pull the power supply out

Connecting the power cord

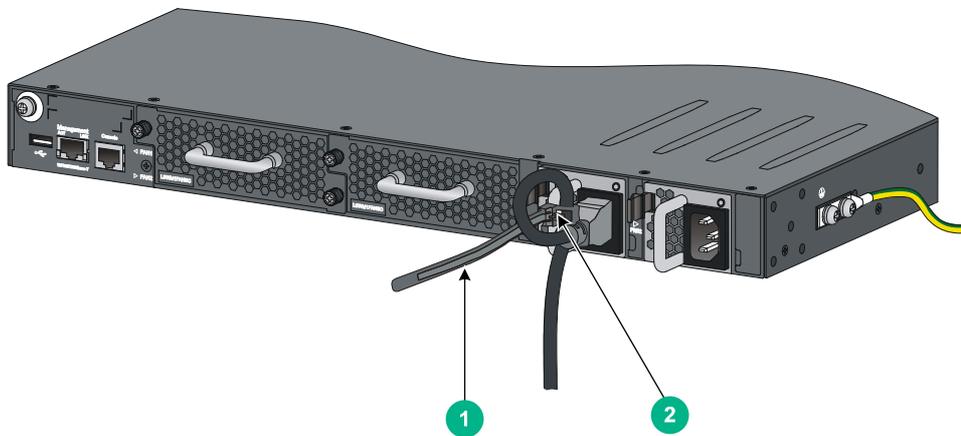
△ CAUTION:

- Provide a circuit breaker for each power cord.
- Before connecting the power cord, make sure the circuit breaker on the power cord is turned off.

Connecting the AC power supply

1. Insert the female connector of the AC power cord supplied with the power supply into the power receptacle on the power supply.
2. Use a cable tie to secure the power cord to the handle of the power supply, as shown in [Figure 21](#).
3. Connect the other end of the power cord to an AC power outlet.

Figure 21 Connecting the AC power supply on the HPE 5700 40XG 2QSFP+ switch



(1) Cable tie

(2) Tighten the cable tie to secure the power cord to the handle of the power supply

Connecting the DC power supply

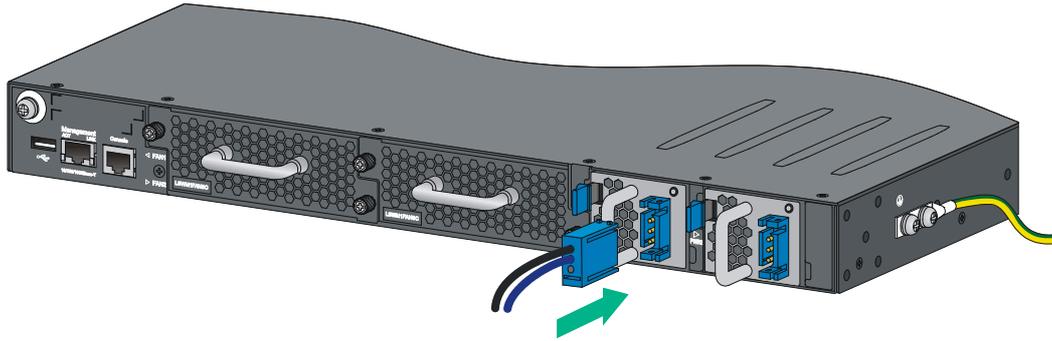
⚠ CAUTION:

The power cord color code scheme in [Figure 22](#) is for illustration only. The cable delivered for your country or region might use a different color scheme. When you connect the power cord, always identify the polarity symbol on its wires.

To connect the DC power supply:

1. Unpack the DC power cord, identify the plug for connecting to the power supply, orient the plug with the power receptacle on the power supply, and insert the plug into the receptacle (see [Figure 22](#)).
The receptacle is foolproof. If you cannot insert the plug into the receptacle, re-orient the plug rather than use excessive force to push it in.
2. Use a cable tie to secure the power cord to the handle of the power supply, as shown in [Figure 21](#).
3. Connect the other ends of the wires to the DC power source wiring terminals, with the negative wire (– or L–) to the negative terminal (–) and the positive wire (+ or M/N) to the positive terminal (+).

Figure 22 Connecting the DC power supply on the HPE 5700 40XG 2QSFP+ switch



Verifying the installation

After you complete the installation, verify that:

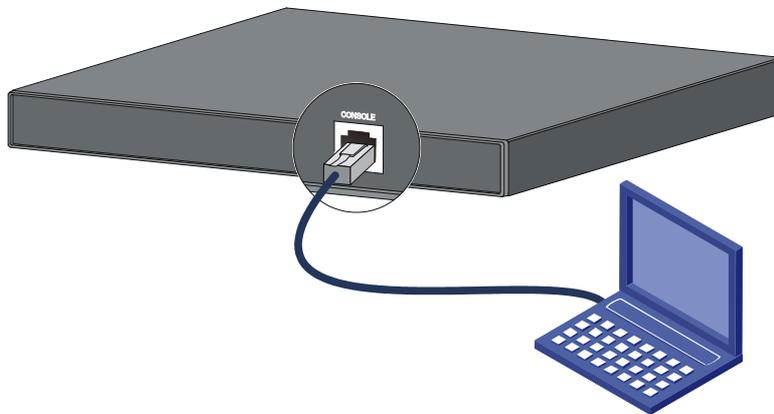
- There is enough space for heat dissipation around the switch, and the rack is stable.
- The grounding cable is securely connected.
- The correct power source is used.
- The power cords are correctly connected.
- All the interface cables are cabled indoors. If any cable is routed outdoors, verify that the socket strip with lightning protection and lightning arresters for network ports have been correctly connected.

Accessing the switch for the first time

Setting up the configuration environment

The first time you access the switch you must use a console cable to connect a configuration terminal, for example, a PC, to the console port on the switch.

Figure 23 Connecting the console port to a terminal



Connecting the console cable

A console cable is an 8-core shielded cable, with a crimped RJ-45 connector at one end for connecting to the console port of the switch, and a DB-9 female connector at the other end for connecting to the serial port on the configuration terminal.

Figure 24 Console cable

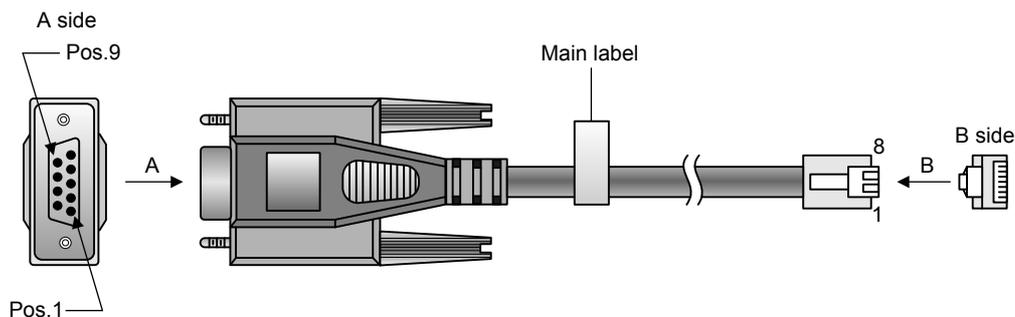


Table 6 Console cable pinouts

RJ-45	Signal	DB-9	Signal
1	RTS	8	CTS
2	DTR	6	DSR
3	TXD	2	RXD
4	SG	5	SG

RJ-45	Signal	DB-9	Signal
5	SG	5	SG
6	RXD	3	TXD
7	DSR	4	DTR
8	CTS	7	RTS

To connect a terminal (for example, a PC) to the switch:

1. Connect the DB-9 female connector of the console cable to the serial port of the PC.
2. Connect the RJ-45 connector to the console port of the switch.

NOTE:

- Identify the mark on the console port and make sure you are connecting to the correct port.
 - The serial ports on PCs do not support hot swapping. To connect a PC to an operating switch, first connect the PC end. To disconnect a PC from an operating switch, first disconnect the switch end.
-

Setting terminal parameters

To configure and manage the switch through the console port, you must run a terminal emulator program, HyperTerminal or PuTTY, on your configuration terminal. You can use the emulator program to connect a network device, a Telnet site, or an SSH site. For more information about the terminal emulator programs, see the user guides for these programs.

The following are the required terminal settings:

- **Bits per second**—9600.
- **Data bits**—8.
- **Stop bits**—1.
- **Parity**—None.
- **Flow control**—None.

Powering on the switch

Before powering on the switch, verify that the following conditions are met:

- The power cord is correctly connected.
- The input power voltage meets the requirement of the switch.
- The console cable is correctly connected.
- The configuration terminal (a PC, for example) has started, and its serial port settings are consistent with the console port settings on the switch.

Power on the switch. During the startup process, you can access Boot ROM menus to perform tasks such as software upgrade and file management. The Boot ROM interface and menu options differ with software versions. For more information about Boot ROM menu options, see the software-matching release notes for the device.

After the startup completes, you can access the CLI to configure the switch.

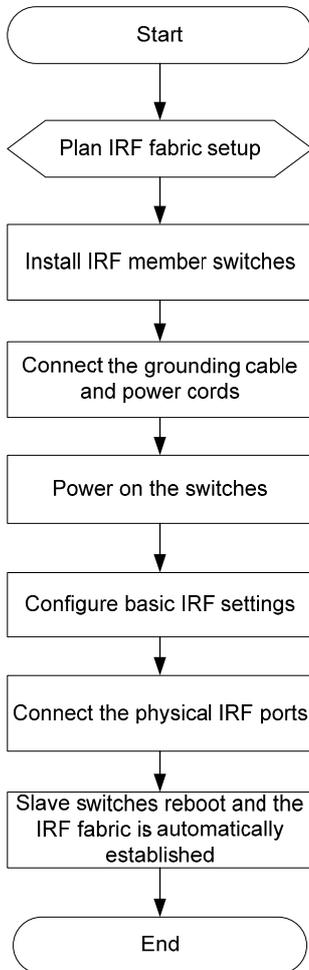
For more information about the configuration commands and CLI, see *HPE FlexFabric 5700 Switch Series Configuration Guide* and *HPE FlexFabric 5700 Switch Series Command References*.

Setting up an IRF fabric

You can use HPE IRF technology to connect and virtualize HPE FlexFabric 5700 switches into a large virtual switch called an "IRF fabric" for flattened network topology, and high availability, scalability, and manageability.

IRF fabric setup flowchart

Figure 25 IRF fabric setup flowchart



To set up an IRF fabric:

Step	Description
1. Plan IRF fabric setup.	<p>Plan the installation site and IRF fabric setup parameters:</p> <ul style="list-style-type: none">• Planning IRF fabric size and the installation site• Identifying the master switch and planning IRF member IDs• Planning IRF topology and connections• Identifying physical IRF ports on the member switches• Planning the cabling scheme

Step	Description
2. Install IRF member switches.	See " Installing the switch in a 19-inch rack. "
3. Connect ground wires and power cords.	See " Grounding the switch " and " Connecting the power cord. "
4. Power on the switches.	N/A
5. Configure basic IRF settings.	See <i>HPE FlexFabric 5700 Switch Series IRF Configuration Guide</i> .
6. Connect the physical IRF ports.	See " Planning IRF topology and connections. " All switches except the master switch automatically reboot, and the IRF fabric is established.

Planning IRF fabric setup

This section describes issues that an IRF fabric setup plan must cover.

Planning IRF fabric size and the installation site

Choose switch models and identify the number of required IRF member switches, depending on the user density and upstream bandwidth requirements. The switching capacity of an IRF fabric equals the total switching capacities of all member switches.

Plan the installation site depending on your network solution as follows:

- Place all IRF member switches in one rack for centralized high-density access.
- Distribute the IRF member switches in different racks to implement the top-of-rack (ToR) access solution for a data center.

As your business grows, you can plug HPE FlexFabric 5700 switches into the IRF fabric to increase the switching capacity without any topology change or replacement.

Identifying the master switch and planning IRF member IDs

Determine which switch you want to use as the master for managing all member switches in the IRF fabric. An IRF fabric has only one master switch. You configure and manage all member switches in the IRF fabric at the command line interface of the master switch.

NOTE:

IRF member switches will automatically elect a master. You can affect the election result by assigning a high member priority to the intended master switch. For more information about master election, see *HPE FlexFabric 5700 Switch Series IRF Configuration Guide*.

Prepare an IRF member ID assignment scheme. An IRF fabric uses member IDs to uniquely identify and manage its members, and you must assign each IRF member switch a unique member ID.

Planning IRF topology and connections

You can create an IRF fabric in daisy chain topology, or more reliably, ring topology. In ring topology, the failure of one IRF link does not cause the IRF fabric to split as in daisy chain topology. Rather, the IRF fabric changes to a daisy chain topology without interrupting network services.

You connect the IRF member switches through IRF ports, the logical interfaces for the connections between IRF member switches. Each IRF member switch has two IRF ports: IRF-port 1 and IRF-port 2. To use an IRF port, you must bind at least one physical port to it.

When connecting two neighboring IRF member switches, you must connect the physical ports of IRF-port 1 on one switch to the physical ports of IRF-port 2 on the other switch.

The HPE 5700 48G 4XG 2QSFP+, HPE 5700 48G 4XG 2QSFP+ TAA, HPE 5700 40XG 2QSFP+, and HPE 5700 40XG 2QSFP+ TAA switches can provide 10-GE and 40-GE IRF connections through SFP+ ports and QSFP+ ports, respectively.

The HPE 5700 32XGT 8XG 2QSFP+ and HPE 5700 32XGT 8XG 2QSFP+ TAA switches can provide 10-GE and 40-GE IRF connections through 1/10-GE Ethernet ports, SFP+ ports, or QSFP+ ports.

You can bind several ports of the same type to an IRF port for increased bandwidth and availability.

Figure 26 and Figure 27 show the topologies of an IRF fabric made up of three HPE FlexFabric 5700 switches. The IRF port connections in the two figures are for illustration only, and more connection methods are available.

Figure 26 IRF fabric in daisy chain topology

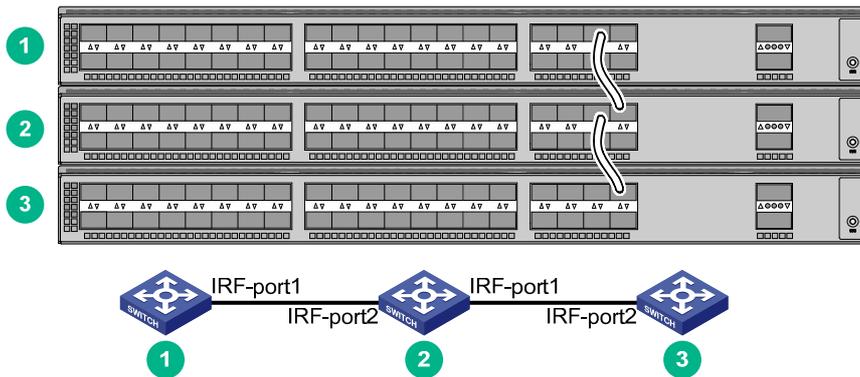
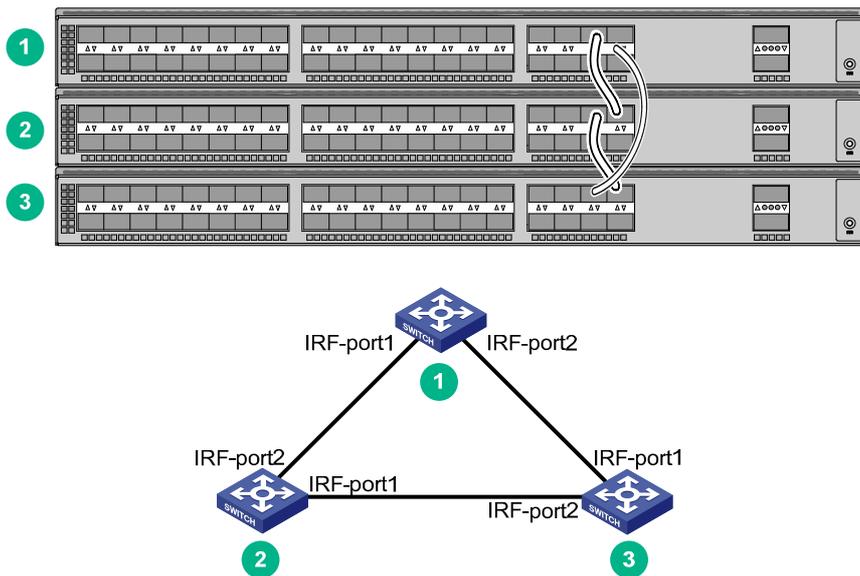


Figure 27 IRF fabric in ring topology



Identifying physical IRF ports on the member switches

Identify the ports to be used for IRF connections on the member switches according to your topology and connection scheme.

All ports on the front panel of the HPE FlexFabric 5700 switch can be used for IRF connections.

Follow these guidelines when you identify 1/10-GE Ethernet ports and SFP+ ports to be used for IRF connections:

- On the HPE 5700 40XG 2QSFP+ and HPE 5700 40XG 2QSFP+ TAA switches, the SFP+ ports are grouped by port number in ascending order, starting from one. Every four SFP+ ports form one group.
- On the HPE 5700 32XGT 8XG 2QSFP+ and HPE 5700 32XGT 8XG 2QSFP+ TAA switches, the 1/10-GE Ethernet ports and SFP+ ports are grouped by port number in ascending order, starting from 1 for 1/10-GE Ethernet ports and 33 for SFP+ ports, respectively. Every four ports form one group.
- On the HPE 5700 48G 4XG 2QSFP+ and HPE 5700 48G 4XG 2QSFP+ TAA switches, SFP+ ports numbered 49, 50, 51, and 52 form one group.
- A port can be bound to an IRF port or operate as a service port. When a port is bound to an IRF port, other ports in the same port group cannot be used as service ports, and vice versa.

A common practice is to use one 1/10-GE Ethernet port/SFP+ port group for IRF connections, and bind every two ports in the group to an IRF port for increased bandwidth and availability.

Planning the cabling scheme

Follow these guidelines when you use cables to connect switches:

- **HPE 5700 48G 4XG 2QSFP+, HPE 5700 48G 4XG 2QSFP+ TAA, HPE 5700 40XG 2QSFP+, and HPE 5700 40XG 2QSFP+ TAA switches**—Use SFP+/QSFP+ DAC cables or SFP+/QSFP+ transceiver modules and fibers.
- **HPE 5700 32XGT 8XG 2QSFP+ and HPE 5700 32XGT 8XG 2QSFP+ TAA switches**—Use Category 6 or higher twisted pair cables, SFP+/QSFP+ DAC cables, or SFP+/QSFP+ transceiver modules and fibers.

If the IRF member switches are far away from one another, choose the SFP+/QSFP+ transceiver modules with optical fibers. If the IRF member switches are all in one equipment room, choose Category 6 or higher twisted pair/SFP+/QSFP+ DAC cables. For more information about available SFP+/QSFP+ DAC cables and transceiver modules, see "[SFP+ port](#)" and "[QSFP+ port](#)."

The following subsections describe several recommended IRF connection schemes, and all these schemes use a ring topology.

Connecting the IRF member switches in one rack

Use SFP+ DAC cables to connect the IRF member switches (four switches in this example) in a rack as shown in [Figure 28](#). The switches in the ring topology (see [Figure 29](#)) are in the same order as connected in the rack.

Figure 28 Connecting the switches in one rack

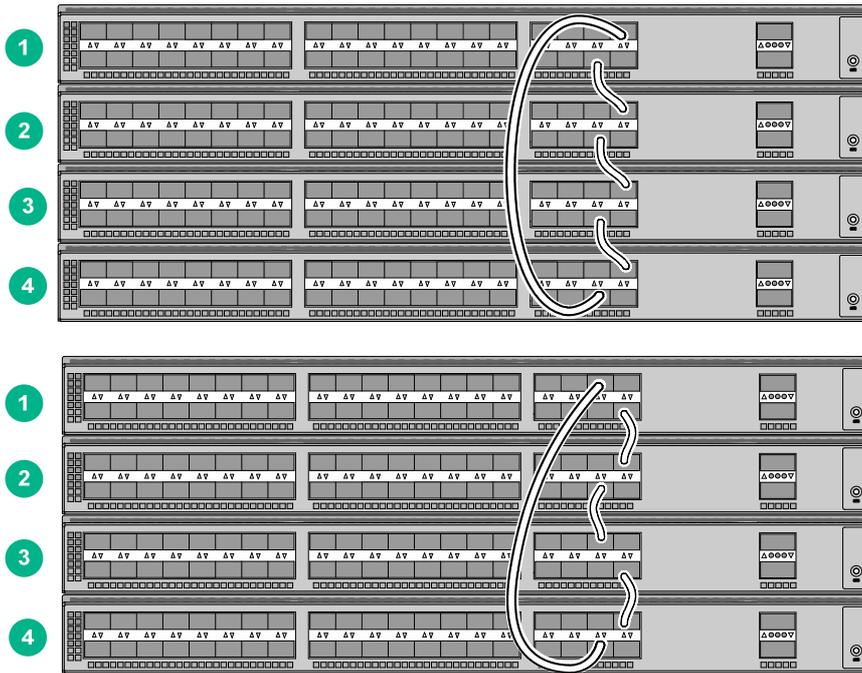
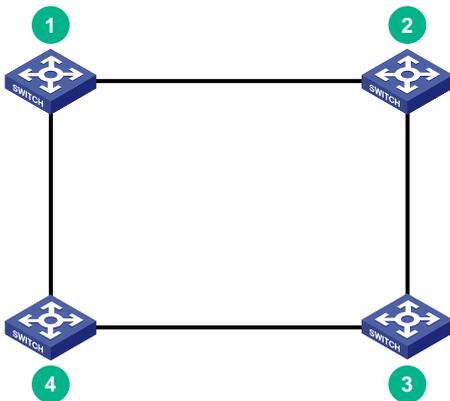


Figure 29 IRF fabric topology

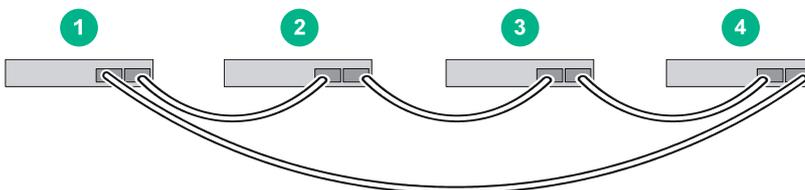


Connecting the IRF member switches in a ToR solution

You can install IRF member switches in different racks side by side to deploy a top of rack (ToR) solution.

Figure 30 shows an example for connecting four top of rack IRF member switches by using SFP+/QSFP+ DAC cables, and SFP+/QSFP+ transceiver modules, and optical fibers. The topology is the same as Figure 29.

Figure 30 ToR cabling



Configuring basic IRF settings

After you install the IRF member switches, power on the switches, and log in to each IRF member switch (see *HPE FlexFabric 5700 Switch Series Fundamentals Configuration Guide*) to configure their member IDs, member priorities, and IRF port bindings.

Follow these guidelines when you configure the switches:

- Assign the master switch higher member priority than any other switch.
- Bind physical ports to IRF port 1 on one switch and to IRF port 2 on the other switch. You perform IRF port binding before or after connecting IRF physical ports depending on the software release.
- To bind the ports on an interface card to an IRF port, you must install the interface card first. For how to install an interface card, see *HPE FlexFabric 5700 Switch Series Interface Cards User Guide*.
- Execute the **display irf configuration** command to verify the basic IRF settings.

For more information about configuring basic IRF settings, see *HPE FlexFabric 5700 Switch Series IRF Configuration Guide*.

Connecting the physical IRF ports

Use Category 6 or higher twisted-pair/SFP+/QSFP+ DAC cables or SFP+/QSFP+ transceiver modules and fibers to connect the IRF member switches as planned.

NOTE:

Wear an ESD wrist strap when you connect SFP+ DAC cables or SFP+ transceiver modules and fibers. For more information, see *SFP/SFP+/XFP Transceiver Modules Installation Guide* and *QSFP+ Transceiver Modules/Cables Installation Guide*.

Accessing the IRF fabric to verify the configuration

To verify the basic functionality of the IRF fabric after you finish configuring basic IRF settings and connecting IRF ports:

1. Log in to the IRF fabric through the console port of any member switch.
2. Create a Layer 3 interface, assign it an IP address, and make sure the IRF fabric and the remote network management station can reach each other.
3. Use Telnet, web, or SNMP to access the IRF fabric from the network management station. (See *HPE FlexFabric 5700 Switch Series Fundamentals Configuration Guide*.)
4. Verify that you can manage all member switches as if they were one node.
5. Display the running status of the IRF fabric by using the commands in [Table 7](#).

Table 7 Displaying and maintaining IRF configuration and running status

Task	Command
Display information about the IRF fabric.	display irf
Display all members' IRF configurations that take effect at a reboot.	display irf configuration
Display IRF fabric topology information.	display irf topology

NOTE:

To avoid IP address collision and network problems, configure at least one multi-active detection (MAD) mechanism to detect the presence of multiple identical IRF fabrics and handle collisions. For more information about MAD detection, see *HPE FlexFabric 5700 Switch Series IRF Configuration Guide*.

Maintenance and troubleshooting

Power supply failure

You can use the LEDs on the power supply to identify a power supply failure. For more information about the LEDs on a power supply, see the following user guides:

- *HPE A58x0AF 300W AC (JG900A) & 300W DC (JG901A) Power Supplies User Guide.*
- *HPE A58x0AF 650W AC (JC680A) & 650W DC (JC681A) Power Supplies User Guide.*
- *HPE FlexFabric Switch 650W 48V Hot Plug NEBS Compliant DC Power Supply (JH336A) User Guide.*

Symptom

The LEDs on the power supply are not steady green (active) or flashing green (standby).

Solution

To resolve the problem:

- Verify that the switch power cord is correctly connected.
- Verify that the power source meets the requirement.
- Verify that the operating temperature of the switch is in the normal range and the power supply has good ventilation.
- If the problem persists, contact Hewlett Packard Enterprise Support.

To replace a power supply, see "[Installing/removing a power supply.](#)"

Fan tray failure

CAUTION:

- Install two fan trays of the same model on the switch.
 - Do not operate the system with one failed fan tray for more than 24 hours.
 - Do not remove the failed fan tray until you are ready for replacing it.
 - Do not operate the system without any fan tray for more than 2 minutes.
 - Do not operate the system outside of the temperature range 0°C to 45°C (32°F to 113°F) degrees.
-

Symptom

The system status LED is steady red and the system outputs alarm messages.

Solution

To replace a failed fan tray, see "[Installing/removing a fan tray.](#)"

Configuration terminal problems

If the configuration environment setup is correct, the configuration terminal displays booting information when the switch is powered on. If the setup is incorrect, the configuration terminal displays nothing or garbled text.

No terminal display

Symptom

The configuration terminal has no display when the switch is powered on.

Solution

To resolve the problem:

1. Verify that the power system is operating correctly.
2. Verify that the switch is operating correctly.
3. Verify that the console cable has been connected correctly.
4. Verify that the following settings are configured for the terminal:
 - **Baud rate**—9600.
 - **Data bits**—8.
 - **Parity**—None.
 - **Stop bits**—1.
 - **Flow control**—None.
5. Verify that the console cable is not faulty.
6. If the problem persists, contact Hewlett Packard Enterprise Support.

Garbled terminal display

Symptom

The configuration terminal displays garbled text.

Solution

To resolve the problem:

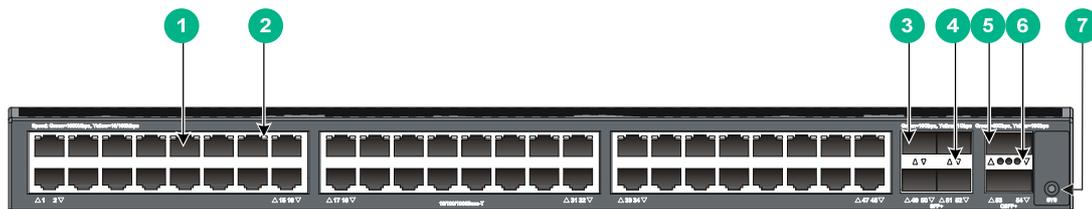
1. Verify that the following settings are configured for the terminal:
 - **Baud rate**—9600.
 - **Data bits**—8.
 - **Parity**—None.
 - **Stop bits**—1.
 - **Flow control**—None.
2. If the problem persists, contact Hewlett Packard Enterprise Support.

Appendix A Chassis views and technical specifications

Chassis views

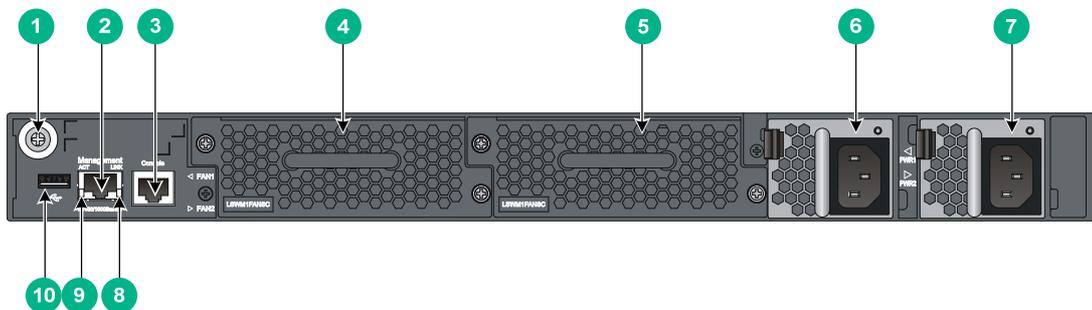
HPE 5700 48G 4XG 2QSFP+/HPE 5700 48G 4XG 2QSFP+ TAA

Figure 31 Front panel



- | | |
|-------------------------------------------------|-----------------------------------------------------|
| (1) 10/100/1000Base-T autosensing Ethernet port | (2) 10/100/1000Base-T autosensing Ethernet port LED |
| (3) SFP+ port | (4) SFP+ port LED |
| (5) QSFP+ port | (6) QSFP+ port LED |
| (7) System status LED (SYS) | |

Figure 32 Rear panel



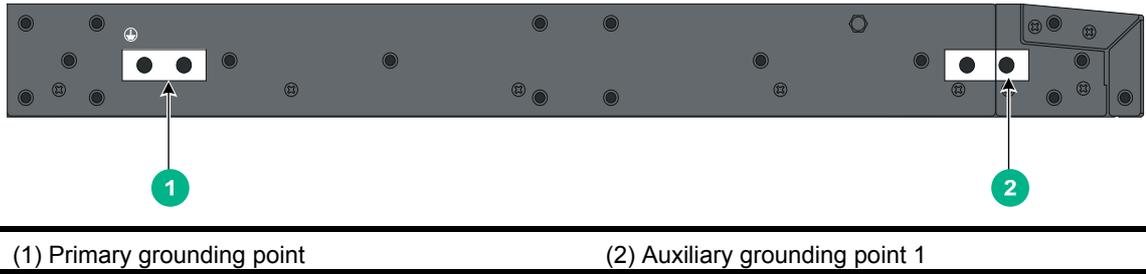
- | | |
|---------------------------------------------------|-----------------------------------------------|
| (1) Grounding screw (auxiliary grounding point 2) | (2) Management Ethernet port |
| (3) Console port | (4) Fan tray slot 1 |
| (5) Fan tray slot 2 | (6) Power supply slot 1 |
| (7) Power supply slot 2 | (8) LINK LED for the management Ethernet port |
| (9) ACT LED for the management Ethernet port | (10) USB port |

The HPE 5700 48G 4XG 2QSFP+ and HPE 5700 48G 4XG 2QSFP+ TAA switches come with the power supply slots empty and the filler modules for the slots as accessories. You can install one or two power supplies for the switch as needed. In [Figure 32](#), two 650 W AC power supplies are installed. For more information about installing and removing a power supply, see ["Installing/removing a power supply."](#)

The HPE 5700 48G 4XG 2QSFP+ and HPE 5700 48G 4XG 2QSFP+ TAA switches also come with the fan tray slots empty. You must install two fan trays of the same model for the switch. In [Figure 32](#),

two LSWM1FANSC fan trays are installed. For more information about installing and removing a fan tray, see ["Installing/removing a fan tray."](#)

Figure 33 Left side panel



HPE 5700 40XG 2QSFP+/HPE 5700 40XG 2QSFP+ TAA

Figure 34 Front panel

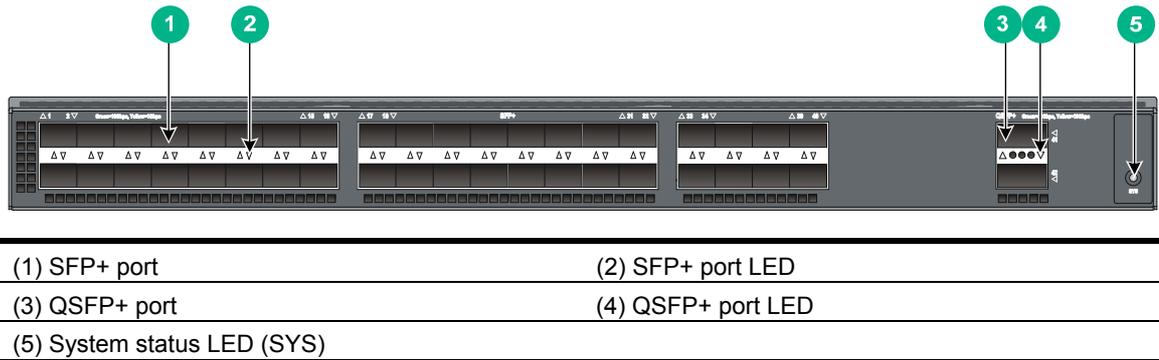
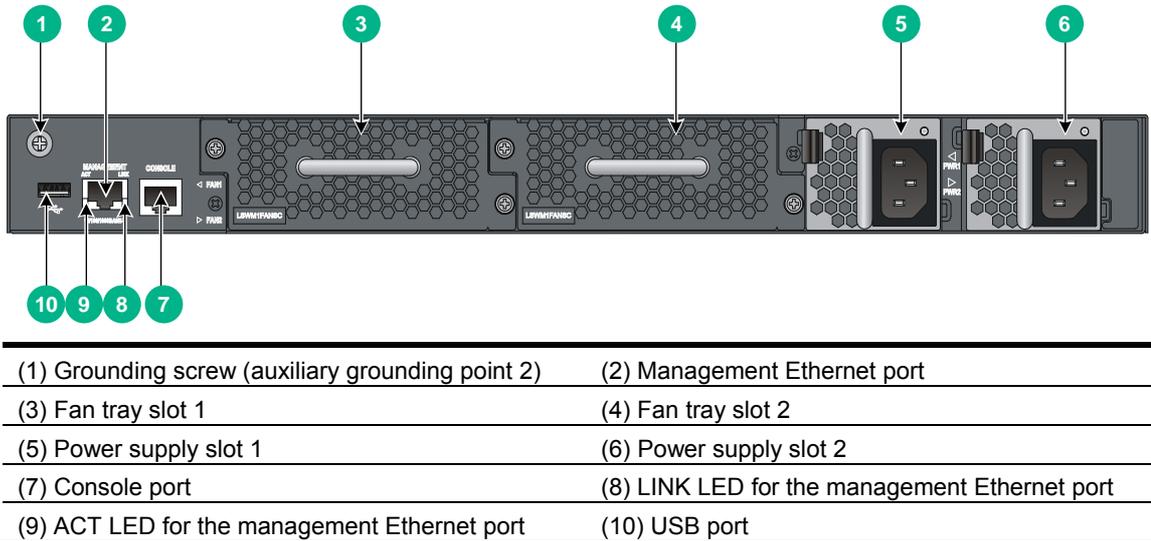


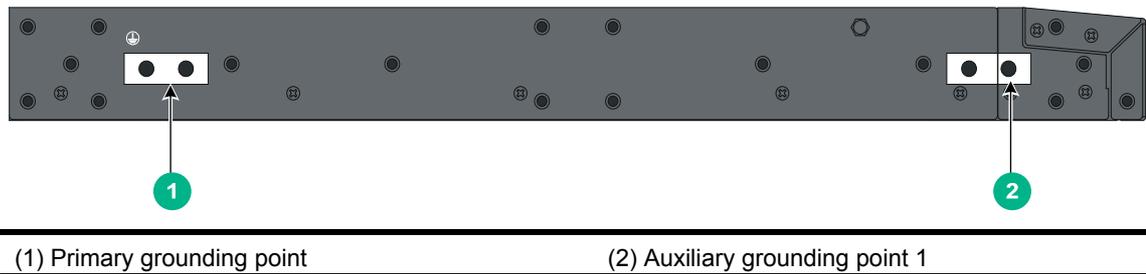
Figure 35 Rear panel



The HPE 5700 40XG 2QSFP+ and HPE 5700 40XG 2QSFP+ TAA switches come with the power supply slots empty and the filler modules for the slots as accessories. You can install one or two power supplies for the switch as needed. In [Figure 35](#), two 300W AC power supplies are installed. For more information about installing and removing a power supply, see ["Installing/removing a power supply."](#)

The HPE 5700 40XG 2QSFP+ and HPE 5700 40XG 2QSFP+ TAA switches also come with the fan tray slots empty. You must install two fan trays of the same model for the switch. In [Figure 35](#), two LSM1FANSC fan trays are installed. For more information about installing and removing a fan tray, see ["Installing/removing a fan tray."](#)

Figure 36 Left side panel

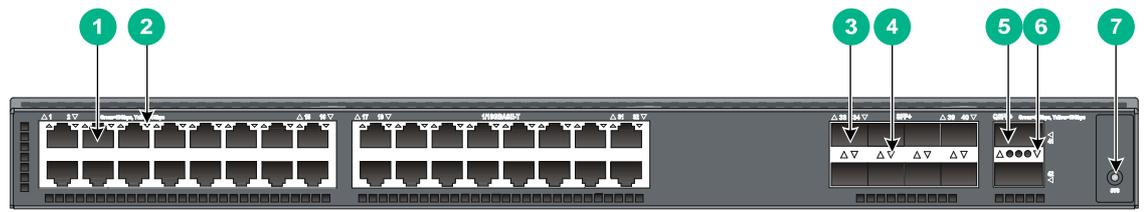


(1) Primary grounding point

(2) Auxiliary grounding point 1

HPE 5700 32XGT 8XG 2QSFP+ / HPE 5700 32XGT 8XG 2QSFP+ TAA

Figure 37 Front panel



(1) 1/10GBase-T autosensing Ethernet port

(2) 1/10GBase-T autosensing Ethernet port LED

(3) SFP+ port

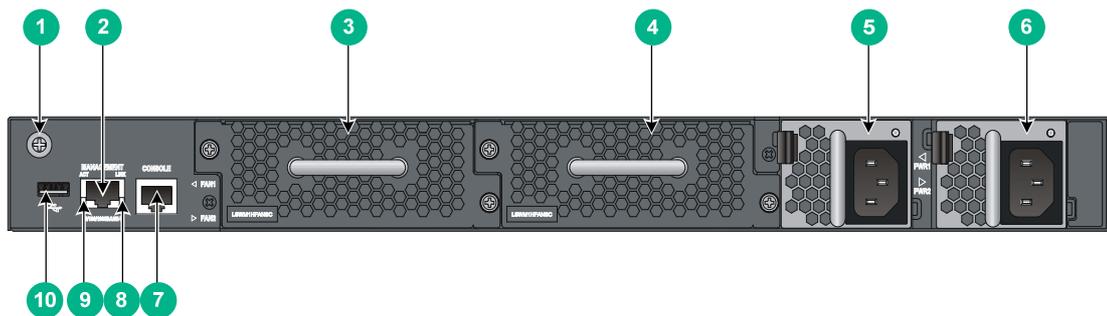
(4) SFP+ port LED

(5) QSFP+ port

(6) QSFP+ port LED

(7) System status LED (SYS)

Figure 38 Rear panel



(1) Grounding screw (auxiliary grounding point 2)

(2) Management Ethernet port

(3) Fan tray slot 1

(4) Fan tray slot 2

(5) Power supply slot 1

(6) Power supply slot 2

(7) Console port

(8) LINK LED for the management Ethernet port

(9) ACT LED for the management Ethernet port

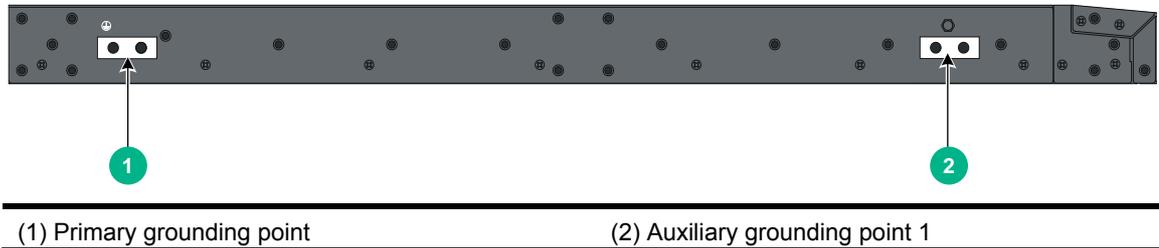
(10) USB port

The HPE 5700 32XGT 8XG 2QSFP+ and HPE 5700 32XGT 8XG 2QSFP+ TAA switches come with the power supply slots empty and the filler modules for the slots as accessories. You can install one

or two power supplies for the switch as needed. In [Figure 38](#), two 650W AC power supplies are installed. For more information about installing and removing a power supply, see ["Installing/removing a power supply."](#)

The HPE 5700 32XGT 8XG 2QSFP+ and HPE 5700 32XGT 8XG 2QSFP+ TAA switches also come with the fan tray slots empty. You must install two fan trays of the same model for the switch. In [Figure 38](#), two LSWM1HFANSC fan trays are installed. For more information about installing and removing a fan tray, see ["Installing/removing a fan tray."](#)

Figure 39 Left side panel



(1) Primary grounding point

(2) Auxiliary grounding point 1

Technical specifications

Table 8 Technical specifications

Item	HPE 5700 40XG 2QSFP+/HPE 5700 40XG 2QSFP+ TAA	HPE 5700 32XGT 8XG 2QSFP+/HPE 5700 32XGT 8XG 2QSFP+ TAA	HPE 5700 48G 4XG 2QSFP+/HPE 5700 48G 4XG 2QSFP+ TAA
Dimensions (H × W × D)	43.6 × 440 × 460 mm (1.72 × 17.32 × 18.11 in)	43.6 × 440 × 660 mm (1.72 × 17.32 × 25.98 in)	43.6 × 440 × 460 mm (1.72 × 17.32 × 18.11 in)
Weight	≤ 10 kg (22.05 lb)	≤ 13 kg (28.66 lb)	≤ 10 kg (22.05 lb)
Console ports	1		
Management Ethernet ports	1		
USB ports	1		
SFP+ ports	40	8	4
QSFP+ ports	2		
10/100/1000Base-T autosensing Ethernet ports	N/A	N/A	48
1/10GBase-T autosensing Ethernet ports	N/A	32	N/A
Fan tray slots	2, hot swappable, on the rear panel		
Power supply slots	2, hot swappable, on the rear panel		
AC-input voltage	<ul style="list-style-type: none"> Rated voltage: 100 VAC to 240 VAC @ 50 or 60 Hz Max voltage: 90 VAC to 264 VAC @ 47 to 63 Hz 		
DC-input voltage	The voltage range varies by the power supply model. For more information, see Figure 40 .		

Item	HPE 5700 40XG 2QSFP+/HPE 5700 40XG 2QSFP+ TAA	HPE 5700 32XGT 8XG 2QSFP+/HPE 5700 32XGT 8XG 2QSFP+ TAA	HPE 5700 48G 4XG 2QSFP+/HPE 5700 48G 4XG 2QSFP+ TAA
Minimum power consumption	<ul style="list-style-type: none"> • Single AC input: 83 W • Dual AC inputs: 90 W • Single DC input: 80 W • Dual DC inputs: 88 W 	<ul style="list-style-type: none"> • Single AC input: 135 W • Dual AC inputs: 150 W • Single DC input: 135 W • Dual DC inputs: 150 W 	<ul style="list-style-type: none"> • Single AC input: 98 W • Dual AC inputs: 115 W • Single DC input: 95 W • Dual DC inputs: 110 W
Maximum power consumption	<ul style="list-style-type: none"> • Single AC input: 153 W • Dual AC inputs: 162 W • Single DC input: 149 W • Dual DC inputs: 157 W 	<ul style="list-style-type: none"> • Single AC input: 343 W • Dual AC inputs: 350 W • Single DC input: 340 W • Dual DC inputs: 344 W 	<ul style="list-style-type: none"> • Single AC input: 157 W • Dual AC inputs: 175 W • Single DC input: 151 W • Dual DC inputs: 169 W
Chassis leakage current compliance	UL60950-1, EN60950-1, IEC60950-1, and GB4943		
Melting current of power supply fuse	<ul style="list-style-type: none"> • 300W AC power supply—6.3 A @ 250 VAC • 650W AC power supply—10 A @ 250 VAC • 300W DC power supply—25 A @ 250 VAC • 650W DC power supply—30 A @ 250 VAC 		
Operating temperature	0°C to 45°C (32°F to 113°F)		
Operating humidity	10% to 90%, noncondensing		
Fire resistance compliance	UL60950-1, EN60950-1, IEC60950-1, and GB4943		

Appendix B FRUs and compatibility matrixes

This appendix describes the field replaceable units (FRUs) available for the HPE FlexFabric 5700 switches and their compatibility.

All the FRUs in this appendix are hot swappable.

Power supplies

Figure 40 Power supply specifications

Power supply	Specifications	Switch model	Remarks
300 W AC power supply	<ul style="list-style-type: none"> Rated input voltage: 100 VAC to 240 VAC @ 50 Hz or 60 Hz Max input voltage: 90 VAC to 264 VAC @ 47 Hz to 63 Hz Max output power: 315 W 	<ul style="list-style-type: none"> HPE 5700 48G 4XG 2QSFP+ HPE 5700 48G 4XG 2QSFP+ TAA HPE 5700 40XG 2QSFP+ HPE 5700 40XG 2QSFP+ TAA 	For more information about the power supplies, see <i>HPE A58x0AF 300W AC (JG900A) & 300W DC (JG901A) Power Supplies User Guide</i> .
300 W DC power supply	<ul style="list-style-type: none"> Rated input voltage: -48 VDC to -60 VDC Max input voltage: -36 VDC to -72 VDC Max output power: 315 W 		
650 W AC power supply	<ul style="list-style-type: none"> Rated input voltage: 100 VAC to 240 VAC @ 50 Hz or 60 Hz Max input voltage: 90 VAC to 264 VAC @ 47 Hz to 63 Hz Max output power: 650 W 	<ul style="list-style-type: none"> HPE 5700 48G 4XG 2QSFP+ HPE 5700 48G 4XG 2QSFP+ TAA HPE 5700 32XGT 8XG 2QSFP+ HPE 5700 32XGT 8XG 2QSFP+ TAA 	For more information about the power supplies, see <i>HPE A58x0AF 650W AC (JC680A) & 650W DC (JC681A) Power Supplies User Guide</i> or <i>HPE FlexFabric Switch 650W 48V Hot Plug NEBS Compliant DC Power Supply (JH336A) User Guide</i> .
650 W DC power supply	<ul style="list-style-type: none"> Rated input voltage: -40 VDC to -60 VDC Max input voltage: -40 VDC to -72 VDC Max output power: 650 W 		

NOTE:

- The switches do not support intermixing of AC and DC power supplies.
- HPE 5700 48G 4XG 2QSFP+ and HPE 5700 48G 4XG 2QSFP+ TAA switches do not support intermixing of 300W and 650W power supplies.
- When a switch has two power supplies for redundancy, you can replace a power supply without powering off the switch. Make sure the power supply to be replaced is powered off before you replace it.

Fan trays

Item	Specifications
LSWM1FANSC (for the HPE 5700 48G 4XG 2QSFP+, HPE 5700 48G 4XG 2QSFP+ TAA, HPE 5700 40XG 2QSFP+, and HPE 5700 40XG 2QSFP+ TAA switches)	
Fans	Two 40 × 40 × 28 mm (1.57 × 1.57 × 1.1 in) fans
Fan speed	18500 R.P.M
Max airflow	45 CFM
Airflow direction	Back to front (Fans blow air from the power supply side to the network port side.)
Input voltage	12 V
Maximum power consumption	19.5 W
Documentation reference	<i>HPE LSWM1FANSC & LSWM1FANSCB Installation Manual</i>
LSWM1FANSCB (for the HPE 5700 48G 4XG 2QSFP+, HPE 5700 48G 4XG 2QSFP+ TAA, HPE 5700 40XG 2QSFP+, and HPE 5700 40XG 2QSFP+ TAA switches)	
Fans	Two 40 × 40 × 28 mm (1.57 × 1.57 × 1.1 in) fans
Fan speed	18500 R.P.M
Max airflow	45 CFM
Airflow direction	Front to back (Fans draw air from the network port side to the power supply side.)
Input voltage	12 V
Maximum power consumption	19.5 W
Documentation reference	<i>HPE LSWM1FANSC & LSWM1FANSCB Installation Manual</i>
LSWM1HFANSC (for the HPE 5700 32XGT 8XG 2QSFP+ and HPE 5700 32XGT 8XG 2QSFP+ TAA switches)	
Fans	Two 40 × 40 × 56 mm (1.57 × 1.57 × 2.2 in) fans
Fan speed	21000 R.P.M
Max airflow	70 CFM
Airflow direction	Back to front (Fans draw air from the power supply side to the network port side.)
Input voltage	12 V
Maximum power consumption	60 W
Documentation reference	<i>HPE LSWM1HFANSC & LSWM1HFANSCB Installation Manual</i>
LSWM1HFANSCB (for the HPE 5700 32XGT 8XG 2QSFP+ and HPE 5700 32XGT 8XG 2QSFP+ TAA switches)	
Fans	Two 40 × 40 × 56 mm (1.57 × 1.57 × 2.2 in) fans
Fan speed	21000 R.P.M
Max airflow	70 CFM
Airflow direction	Front to back (Fans draw air from the network port side to the power supply side.)

Item	Specifications
Input voltage	12 V
Maximum power consumption	60 W
Documentation reference	<i>HPE LSWM1HFANSC & LSWM1HFANSCB Installation Manual</i>

NOTE:

- The fan trays in the HPE 5700 48G 4XG 2QSFP+, HPE 5700 48G 4XG 2QSFP+ TAA, HPE 5700 40XG 2QSFP+, and HPE 5700 40XG 2QSFP+ TAA switches must be the same type: LSWM1FANSC or LSWM1FANSCB.
- The fan trays in the HPE 5700 32XGT 8XG 2QSFP+ and HPE 5700 32XGT 8XG 2QSFP+ TAA switches must be the same type: LSWM1HFANSC or LSWM1HFANSCB.

Appendix C Ports and LEDs

Ports

Console port

The switch has one console port.

Table 9 Console port specifications

Item	Specification
Connector type	RJ-45
Compliant standard	EIA/TIA-232
Transmission baud rate	9600 bps (default) to 115200 bps
Services	<ul style="list-style-type: none">• Provides connection to an ASCII terminal.• Provides connection to the serial port of a local or remote (through a pair of modems) PC running terminal emulation program.

Management Ethernet port

The switch has one management Ethernet port. You can connect this port to a PC or management station for loading and debugging software or remote management.

Table 10 Management Ethernet port specifications

Item	Specification
Connector type	RJ-45
Connector quantity	1
Port transmission rate	10/100/1000 Mbps, half/full duplex
Transmission medium and max transmission distance	100 m (328.08 ft) over category-5 twisted pair cable
Functions and services	Switch software and Boot ROM upgrade, network management

USB port

The switch has one OHC-compliant USB2.0 port that can upload and download data at a rate up to 12 Mbps. You can use this USB port to access the file system on the Flash of the switch, for example, to upload or download application and configuration files.

NOTE:

USB devices from different vendors vary in compatibility and driver. Hewlett Packard Enterprise does not guarantee correct operation of USB devices from other vendors on the switch. If a USB device does not operate correctly on the switch, replace it with one from another vendor.

SFP+ port

The switch provides SFP+ ports. You can plug the SFP transceiver modules in [Table 11](#), the SFP+ transceiver modules in [Table 12](#), and the SFP+ DAC cables in [Table 13](#) into the SFP+ ports as needed. You can use the SFP+ ports as IRF physical ports to connect the switches in an IRF deployment.

Table 11 1000 Mbps SFP transceiver modules available for the SFP+ ports

Product Code	Module description	Central wavelength (nm)	Connector	Cable/fiber diameter (μm)	Multimode fiber modal bandwidth (MHz × km)	Max transmission distance
JD089B	HPE X120 1G SFP RJ45 T transceiver	N/A	RJ-45	Category-5 twisted pair	N/A	100 m (328.08 ft)
JD118B	HPE X120 1G SFP LC SX transceiver	850	LC	Multi-mode, 50/125	500	550 m (1804.46 ft)
					400	500 m (1640.42 ft)
				Multi-mode, 62.5/125	200	275 m (902.23 ft)
					160	220 m (721.78 ft)
JD119B	HPE X120 1G SFP LC LX transceiver	1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
				Multi-mode, 50/125	500 or 400	550 m (1804.46 ft)
				Multi-mode, 62.5/125	500	550 m (1804.46 ft)
JD061A	HPE X125 1G SFP LC LH40 1310nm transceiver	1310	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
JD062A	HPE X120 1G SFP LC LH40 1550nm transceiver	1550	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
JD063B	HPE X125 1G SFP LC LH70 transceiver	1550	LC	Single-mode, 9/125	N/A	70 km (43.50 miles)

Table 12 10 Gbps SFP+ transceiver modules available for the SFP+ ports

Product Code	Module description	Central wavelength (nm)	Connector	Fiber diameter (μm)	Multimode fiber modal bandwidth (MHz × km)	Max transmission distance
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Product Code	Module description	Central wavelength (nm)	Connector	Fiber diameter (μm)	Multimode fiber modal bandwidth (MHz × km)	Max transmission distance
JD092B	HPE X130 10G SFP+ LC SR transceiver	850	LC	Multi-mode , 50/125	2000	300 m (984.25 ft)
					500	82 m (269.03 ft)
					400	66 m (216.54 ft)
				Multi-mode , 62.5/125	200	33 m (108.27 ft)
					160	26 m (85.3 ft.)
JD094B	HPE X130 10G SFP+ LC LR transceiver	1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)

Table 13 SFP+ DAC cables available for the SFP+ ports

Product code	Cable description	Cable length
JD095C	HPE X240 10G SFP+ SFP+ 0.65m DA Cable	0.65 m (2.13 ft)
JD096C	HPE X240 10G SFP+ SFP+ 1.2m DA Cable	1.2 m (3.94 ft)
JD097C	HPE X240 10G SFP+ SFP+ 3m DA Cable	3 m (9.84 ft)
JG081C	HPE X240 10G SFP+ SFP+ 5m DA Cable	5 m (16.40 ft)

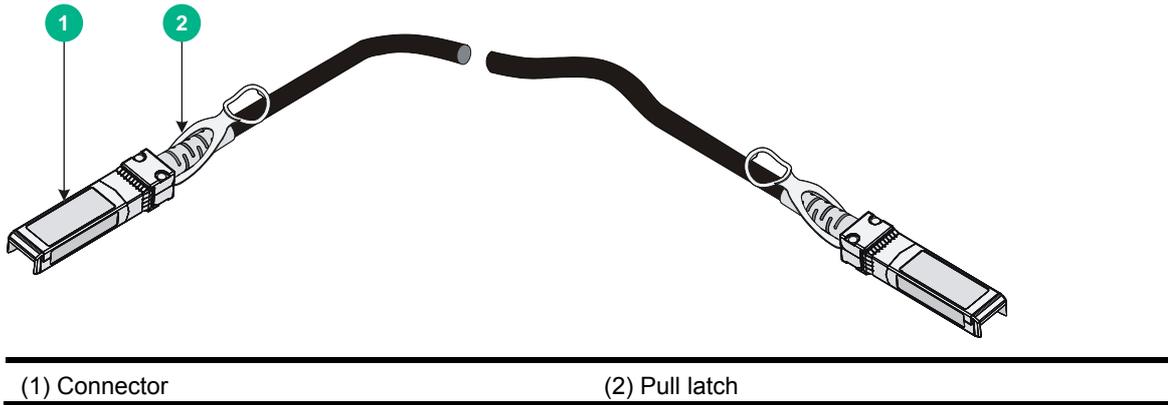
NOTE:

- To guarantee the functionality of the SFP+ ports, use only SFP or SFP+ transceiver modules approved by Hewlett Packard Enterprise.
- The SFP and SFP+ transceiver modules available for this switch series are subject to change over time. For the most up-to-date list of SFP transceiver modules, contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Support.

For the SFP transceiver module specifications, see *HPE Comware-Based Devices Transceiver Modules User Guide*.

The SFP+ DAC cables available for the HPE FlexFabric 5700 switches are 10 Gbps SFP+ DAC Cables, as shown in [Figure 41](#).

Figure 41 SFP+ DAC cable



QSFP+ port

The switch provides QSFP+ ports. You can plug the QSFP+ transceiver modules in [Table 14](#) and the QSFP+ DAC cables in [Table 15](#) into the SFP+ ports as needed.

Table 14 QSFP+ transceiver modules available for the switch

Product code	Transceiver module model	Central wavelength (nm)	Fiber diameter (μm)	Connector	Multimode fiber modal bandwidth (MHz x km)	Max transmission distance
JG661A	HPE X140 40G QSFP+ LC LR4 SM 10km 1310nm Transceiver Module	Four lanes: <ul style="list-style-type: none"> • 1271 • 1291 • 1311 • 1331 	Single-mode, 9/125	LC	N/A	10 km (6.21 miles)
JG709A	HPE X140 40G QSFP+ MPO MM 850nm CSR4 300m Transceiver Module	850	Multi-mode, 50/125	MPO	2000	300 m (984.25 ft)
					4700	400 m (1312.33 ft)
JG325B	HPE X140 40G QSFP+ MPO SR4 Transceiver	850	Multi-mode, 50/125	MPO	2000	100 m (328.08 ft)
					4700	150 m (492.12 ft)

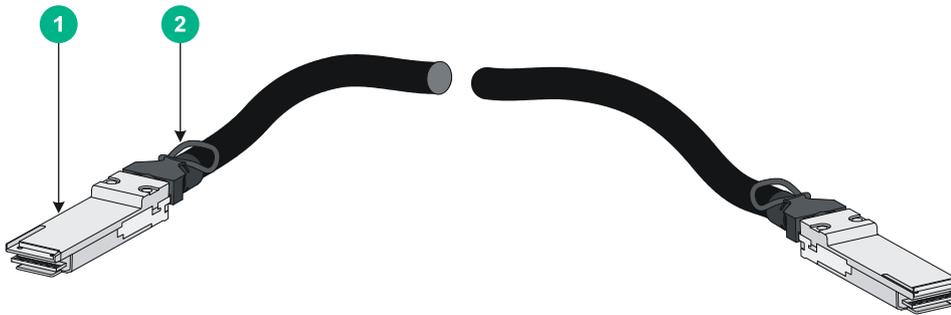
Table 15 40G QSFP+ DAC cables available for the switch

Product code	Cable description	Cable length
JG326A	HPE X240 40G QSFP+ QSFP+ 1m Direct Attach Copper Cable	1 m (3.28 ft)
JG327A	HPE X240 40G QSFP+ QSFP+ 3m Direct Attach Copper Cable	3 m (9.84 ft)
JG328A	HPE X240 40G QSFP+ QSFP+ 5m Direct Attach Copper Cable	5 m (16.40 ft)

Table 16 40G QSFP+ to 4x10G SFP+ DAC cables available for the switch

Product code	Cable description	Cable length
JG329A	HPE X240 40G QSFP+ to 4x10G SFP+ 1m Direct Attach Copper Splitter Cable	1 m (3.28 ft)
JG330A	HPE X240 40G QSFP+ to 4x10G SFP+ 3m Direct Attach Copper Splitter Cable	3 m (9.84 ft)
JG331A	HPE X240 40G QSFP+ to 4x10G SFP+ 5m Direct Attach Copper Splitter Cable	5 m (16.40 ft)

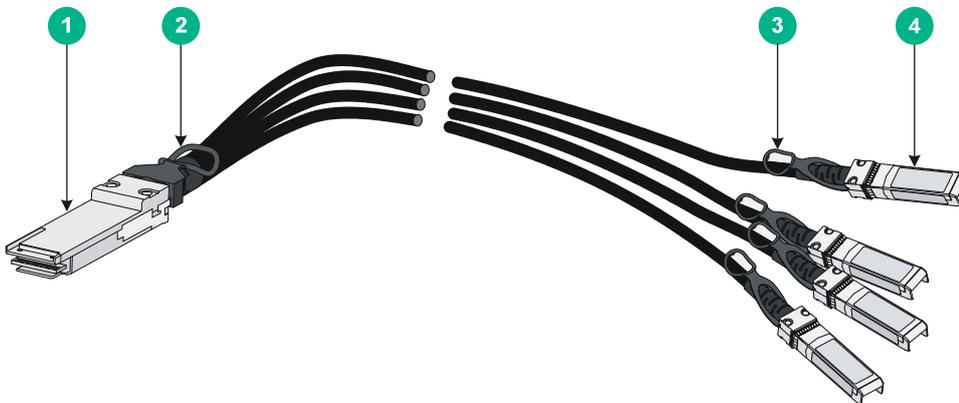
Figure 42 40G QSFP+ DAC cable



(1) Connector

(2) Pull latch

Figure 43 40G QSFP+ to 4x10G SFP+ DAC cable



(1) QSFP+ module

(2) QSFP+ side pull latch

(3) SFP+ side pull latch

(4) SFP+ module

NOTE:

- To guarantee the functionality of the QSFP+ ports, use only QSFP+ transceiver modules and cables approved by Hewlett Packard Enterprise on the HPE 5700 switches.
- The 40G QSFP+ port of the QSFP-40G-SR4-MM850 transceiver module can be split into four channels. You can connect the 40G QSFP+ port to four 10G SFP+ ports. The QSFP-40G-SR4-MM850 transceiver module and SFP+ transceiver modules to be connected must be the same in specifications, including central wavelength and fiber diameter.
- The QSFP+ transceiver modules and cables available for this switch series are subject to change over time. For the most up-to-date list of SFP transceiver modules, contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Support.

For QSFP+ transceiver module and cable specifications, see *HPE Comware-Based Devices Transceiver Modules User Guide*.

10/100/1000Base-T autosensing Ethernet port

The HPE 5700 48G 4XG 2QSFP+ and HPE 5700 48G 4XG 2QSFP+ TAA switches have 10/100/1000Base-T autosensing Ethernet ports.

Table 17 10/100/1000Base-T autosensing Ethernet port specifications

Item	Specification
Connector type	RJ-45
Port transmission rate	<ul style="list-style-type: none"> • 10 Mbps, half/full duplex, MDI/MDI-X autosensing • 100 Mbps, half/full duplex, MDI/MDI-X autosensing • 1000 Mbps, full duplex, MDI/MDI-X autosensing
Transmission medium and max transmission distance	100 m (328.08 ft) over category-5 twisted pair cable
Compatible standards	<ul style="list-style-type: none"> • IEEE 802.3i • IEEE 802.3u • IEEE 802.3ab

1/10GBase-T autosensing Ethernet port

The HPE 5700 32XGT 8XG 2QSFP+ and HPE 5700 32XGT 8XG 2QSFP+ TAA switches have 1/10GBase-T autosensing Ethernet ports.

Table 18 1/10GBase-T autosensing Ethernet port specifications

Item	Specification
Connector type	RJ-45
Port transmission rate	1/10 Gbps, full duplex, MDI/MDI-X autosensing
Transmission medium and max transmission distance	<ul style="list-style-type: none"> • 55 m (180.45 ft) over category-6 unshielded twisted pair cable • 100 m (328.08 ft) over category-6 shielded twisted pair cable • 100 m (328.08 ft) over category-6A or above twisted pair cable
Compatible standards	<ul style="list-style-type: none"> • IEEE 802.3ab • IEEE 802.3an

As a best practice to avoid interference between cables, layer cables as follows:

- Use category-6A or above cables and connectors.
- Do not bundle cables in their first 20 m (65.62 ft).
- Separate power cords and twisted pair cables at and around the distribution frame.
- For ports adjacent to one another on the device, the peer ports on the distribution frame is preferably not adjacent, for example:
 - If the device connects to one distribution frame, connect port 1 on the device to port 1 on the distribution frame, port 2 on the device to port 3 on the distribution frame, and port 3 on the device to port 5 on the distribution frame.
 - If the device connects to two distribution frames, connect port 1 on the device to port 1 on distribution frame 1, port 2 on the device to port 1 on distribution frame 2, and port 3 on the device to port 2 on distribution frame 1.

LEDs

System status LED

The system status LED shows the operating status of the switch.

Table 19 System status LED description

LED mark	Status	Description
SYS	Steady green	The switch is operating correctly.
	Flashing green	The switch is performing power-on self test (POST).
	Steady red	The system has failed to pass POST or has problems such as fan failure.
	Flashing red	Some ports have failed to pass POST.
	Off	The switch is powered off or has failed to start up.

SFP+ port LED

Each SFP+ port has a status LED to show port operating status and activities.

Table 20 SFP+ port LED description

LED status	Description
Steady green	A transceiver module or cable has been correctly installed. A link is present, and the port is operating at 10 Gbps.
Flashing green	The port is sending or receiving data at 10 Gbps.
Steady yellow	A transceiver module or cable has been correctly installed. A link is present, and the port is operating at 1 Gbps.
Flashing yellow	The port is sending or receiving data at 1 Gbps.
Off	No transceiver module or cable has been installed or no link is present on the port.

QSFP+ port LED

Each QSFP+ port has a status LED to show port operating status and activities.

Table 21 QSFP+ port LED description

LED status	Description
Steady green	A transceiver module or cable has been correctly installed. A link is present, and the port is operating at 40 Gbps.
Flashing green	The port is sending or receiving data at 40 Gbps.
Steady yellow	A transceiver module or cable has been correctly installed. A link is present, and the port is operating at 10 Gbps.
Flashing yellow	The port is sending or receiving data at 10 Gbps.
Off	No transceiver module or cable has been installed or no link is present on the port.

10/100/1000Base-T autosensing Ethernet port LEDs

Table 22 10/100/1000Base-T autosensing Ethernet port LED description

Status	Description
Steady green	A link is present, and the port is operating at 1000 Mbps.
Flashing green	The port is sending or receiving data at 1000 Mbps.
Steady yellow	A link is present, and the port is operating at 10/100 Mbps.
Flashing yellow	The port is sending or receiving data at 10/100 Mbps.
Off	No link is present.

1/10GBase-T autosensing Ethernet port LEDs

Table 23 1/10GBase-T autosensing Ethernet port LED description

Status	Description
Steady green	A link is present, and the port is operating at 10 Gbps.
Flashing green	The port is sending or receiving data at 10 Gbps.
Steady yellow	A link is present, and the port is operating at 1 Gbps.
Flashing yellow	The port is sending or receiving data at 1 Gbps.
Off	No link is present.

Management Ethernet port LEDs

A management Ethernet port has one LINK LED and one ACT LED to show its link and data transmission status.

Table 24 Management Ethernet port LED description

LED mark	Status	Description
LINK	Off	The management Ethernet port is not connected.
	Steady green	The management Ethernet port is operating at 10/100/1000 Mbps.

LED mark	Status	Description
ACT	Off	The management Ethernet port is not receiving or sending data.
	Flashing yellow	The management Ethernet port is sending or receiving data.

Appendix D Cooling system

The cooling system of the switch includes air vents in the chassis, fan trays, and built-in fans of power supplies. To guarantee that this cooling system can effectively work, you must consider the site ventilation design when you plan the installation site for the switches.

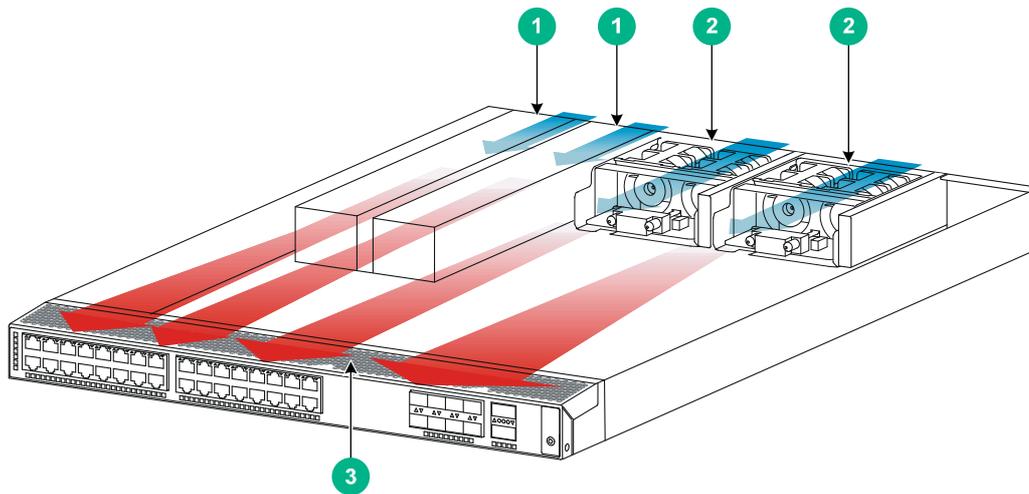
The fan trays in the HPE 5700 48G 4XG 2QSFP+, HPE 5700 48G 4XG 2QSFP+ TAA, HPE 5700 40XG 2QSFP+, and HPE 5700 40XG 2QSFP+ TAA switches must be the same type: LSWM1FANSC or LSWM1FANSCB.

The fan trays in the HPE 5700 32XGT 8XG 2QSFP+ and HPE 5700 32XGT 8XG 2QSFP+ TAA switches must be the same type: LSWM1HFANSC or LSWM1HFANSCB.

When LSWM1FANSC/LSWM1HFANSC fan trays are used, cool air flows in through the air vents in the fan tray panel and the power supply panels, circulates through the chassis and the power supplies, and exhausts at the network port side, as shown in [Figure 44](#).

When LSWM1FANSCB/LSWM1HFANSCB fan trays are used, cool air flows in through the air vents in the network port-side panel and the power supply panels, circulates through the chassis and the power supplies, and exhausts through the air vents in the fan tray panels, as shown in [Figure 45](#).

Figure 44 Airflow through the HPE 5700 32XGT 8XG 2QSFP+ chassis (with LSWM1HFANSC fan trays)

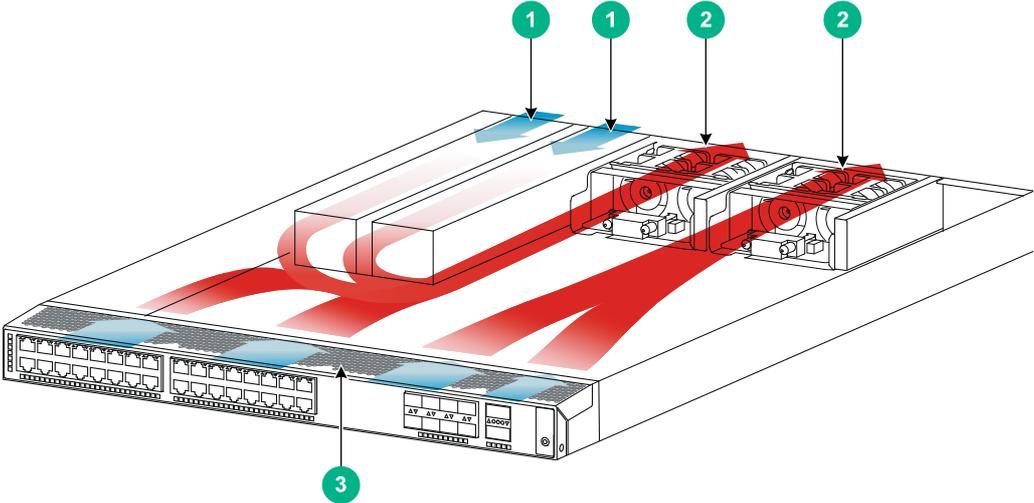


(1) Power supply air vents

(2) Fan tray air vents

(3) Network port-side air vents

Figure 45 Airflow through the HPE 5700 32XGT 8XG 2QSFP+ chassis (with LSWM1HFANSCB fan trays)



-
- | | |
|---------------------------------|------------------------|
| (1) Power supply air vents | (2) Fan tray air vents |
| <hr/> | |
| (3) Network port-side air vents | |
-

! **IMPORTANT:**
The chassis and the power supplies use separate air aisles. Make sure both aisles are not blocked.

Document conventions and icons

Conventions

This section describes the conventions used in the documentation.

Port numbering in examples

The port numbers in this document are for illustration only and might be unavailable on your device.

Command conventions

Convention	Description
Boldface	Bold text represents commands and keywords that you enter literally as shown.
<i>Italic</i>	<i>Italic</i> text represents arguments that you replace with actual values.
[]	Square brackets enclose syntax choices (keywords or arguments) that are optional.
{ x y ... }	Braces enclose a set of required syntax choices separated by vertical bars, from which you select one.
[x y ...]	Square brackets enclose a set of optional syntax choices separated by vertical bars, from which you select one or none.
{ x y ... } *	Asterisk marked braces enclose a set of required syntax choices separated by vertical bars, from which you select at least one.
[x y ...] *	Asterisk marked square brackets enclose optional syntax choices separated by vertical bars, from which you select one choice, multiple choices, or none.
&<1-n>	The argument or keyword and argument combination before the ampersand (&) sign can be entered 1 to n times.
#	A line that starts with a pound (#) sign is comments.

GUI conventions

Convention	Description
Boldface	Window names, button names, field names, and menu items are in Boldface. For example, the New User window appears; click OK .
>	Multi-level menus are separated by angle brackets. For example, File > Create > Folder .

Symbols

Convention	Description
 WARNING!	An alert that calls attention to important information that if not understood or followed can result in personal injury.
 CAUTION:	An alert that calls attention to important information that if not understood or followed can result in data loss, data corruption, or damage to hardware or software.
 IMPORTANT:	An alert that calls attention to essential information.
NOTE:	An alert that contains additional or supplementary information.

Convention	Description
 TIP:	An alert that provides helpful information.

Network topology icons

Convention	Description
	Represents a generic network device, such as a router, switch, or firewall.
	Represents a routing-capable device, such as a router or Layer 3 switch.
	Represents a generic switch, such as a Layer 2 or Layer 3 switch, or a router that supports Layer 2 forwarding and other Layer 2 features.
	Represents an access controller, a unified wired-WLAN module, or the access controller engine on a unified wired-WLAN switch.
	Represents an access point.
	Represents a wireless terminator unit.
	Represents a wireless terminator.
	Represents a mesh access point.
	Represents omnidirectional signals.
	Represents directional signals.
	Represents a security product, such as a firewall, UTM, multiservice security gateway, or load balancing device.
	Represents a security card, such as a firewall, load balancing, NetStream, SSL VPN, IPS, or ACG card.

Support and other resources

Accessing Hewlett Packard Enterprise Support

- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:
www.hpe.com/assistance
- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:
www.hpe.com/support/hpesc

Information to collect

- Technical support registration number (if applicable)
- Product name, model or version, and serial number
- Operating system name and version
- Firmware version
- Error messages
- Product-specific reports and logs
- Add-on products or components
- Third-party products or components

Accessing updates

- Some software products provide a mechanism for accessing software updates through the product interface. Review your product documentation to identify the recommended software update method.
- To download product updates, go to either of the following:
 - Hewlett Packard Enterprise Support Center **Get connected with updates** page:
www.hpe.com/support/e-updates
 - Software Depot website:
www.hpe.com/support/softwaredepot
- To view and update your entitlements, and to link your contracts, Care Packs, and warranties with your profile, go to the Hewlett Packard Enterprise Support Center **More Information on Access to Support Materials** page:
www.hpe.com/support/AccessToSupportMaterials

ⓘ IMPORTANT:

Access to some updates might require product entitlement when accessed through the Hewlett Packard Enterprise Support Center. You must have an HP Passport set up with relevant entitlements.

Websites

Website	Link
Networking websites	
Hewlett Packard Enterprise Information Library for Networking	www.hpe.com/networking/resourcefinder
Hewlett Packard Enterprise Networking website	www.hpe.com/info/networking
Hewlett Packard Enterprise My Networking website	www.hpe.com/networking/support
Hewlett Packard Enterprise My Networking Portal	www.hpe.com/networking/mynetworking
Hewlett Packard Enterprise Networking Warranty	www.hpe.com/networking/warranty
General websites	
Hewlett Packard Enterprise Information Library	www.hpe.com/info/enterprise/docs
Hewlett Packard Enterprise Support Center	www.hpe.com/support/hpesc
Hewlett Packard Enterprise Support Services Central	ssc.hpe.com/portal/site/ssc/
Contact Hewlett Packard Enterprise Worldwide	www.hpe.com/assistance
Subscription Service/Support Alerts	www.hpe.com/support/e-updates
Software Depot	www.hpe.com/support/softwaredepot
Customer Self Repair (not applicable to all devices)	www.hpe.com/support/selfrepair
Insight Remote Support (not applicable to all devices)	www.hpe.com/info/insightremotesupport/docs

Customer self repair

Hewlett Packard Enterprise customer self repair (CSR) programs allow you to repair your product. If a CSR part needs to be replaced, it will be shipped directly to you so that you can install it at your convenience. Some parts do not qualify for CSR. Your Hewlett Packard Enterprise authorized service provider will determine whether a repair can be accomplished by CSR.

For more information about CSR, contact your local service provider or go to the CSR website:

www.hpe.com/support/selfrepair

Remote support

Remote support is available with supported devices as part of your warranty, Care Pack Service, or contractual support agreement. It provides intelligent event diagnosis, and automatic, secure submission of hardware event notifications to Hewlett Packard Enterprise, which will initiate a fast and accurate resolution based on your product's service level. Hewlett Packard Enterprise strongly recommends that you register your device for remote support.

For more information and device support details, go to the following website:

www.hpe.com/info/insightremotesupport/docs

Documentation feedback

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part number, edition, and publication date located on the front cover of the document. For online help content, include the product name, product version, help edition, and publication date located on the legal notices page.

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