ARISTA

QUICK START GUIDE

7300 Series
Modular Data Center Switch

DCS-7304 **DCS-7308** **DCS-7316**
DCS-7324 **DCS-7328** **DCS-7304/8X3**

Arista.com

Headquarters	Support	Sales
5453 Great America Parkway Santa Clara, CA 95054 USA +1-408-547-5500	+1-408-547-5502 +1-866-476-0000	+1-408-547-5501 +1-866-497-0000
www.arista.com/en/	support@arista.com	sales@arista.com

Contents

Chapter 1

Overview

1.1 Scope

This guide is intended for properly trained service personnel and technicians who need to install Arista Networks Data Center Switches.

This guide is intended for the following Arista Networks Data Center Switches:

DCS-7304	DCS-7308	DCS-7316	DCS-7324
DCS-7328	DCS-7304X3	DCS-7308X3	

Important: Only qualified personnel should install, service, or replace this equipment.

Seul le personnel qualifié doit installer, service, ou remplacer cet équipement.

1.2 Receiving and Inspecting the Equipment

Upon receiving the switch, inspect the shipping boxes and record any external damage. Retain packing materials if you suspect that part of the shipment is damaged; the carrier may need to inspect them.

If the boxes were not damaged in transit, unpack them carefully. Ensure that you do not discard any accessories that may be packaged in the same box as the main unit.

Inspect the packing list and confirm that you received all listed items. Compare the packing list with your purchase order. Parts List provides a list of components included with the switch.

1.3 Installation Process

The following tasks are required to install and use the switch:

1. Select and prepare the installation site (Site Selection).
2. Assemble the installation tools listed (Tools Required for Installation).
3. Attach the mounting brackets and install the switch in an equipment rack (Two-Post Rack Mount).
4. Connect the switch to the power source and network devices (Powering the Modular Switch and Connecting Serial and Management Cables).
5. Configure the switch (Configuring the Switch).

Important: Class 1 Laser Product: This product has provisions to install Class 1 laser transceivers that provides optical coupling to the communication network. Once a Class 1 laser product is installed, the equipment is a Class 1 Laser Product (Appareil à Laser de Classe 1). The customer is responsible for selecting and installing the Class 1 laser transceiver and for insuring that the Class 1 AEL (Allowable Emission Limit) per EN/IEC 6-825, CSA E60825-1, and Code of

Federal Regulations 21 CFR 1040 is not exceeded after the laser transceiver have been installed. Do not install laser products whose class rating is greater than 1. Refer to all safety instructions that accompanied the transceiver prior to installation. Only Class 1 laser devices certified for use in the country of installation by the cognizant agency are to be utilized in this product.

Produit Laser de classe 1: Ce produit a des dispositions pour installer des émetteurs-récepteurs de laser de classe 1 qui offre de couplage au réseau de communication optique.Une fois un produit laser de classe 1 est installé, l'équipement est un produit Laser de classe 1 (Appareil à Laser de Classe 1).Le client est responsable pour sélectionner et installer l'émetteur/récepteur de laser de classe 1 et pour assurer que la classe 1 AEL (limite d'émission admissible) par EN/IEC 60825, CSA E60825-1, et Code des règlements fédéraux 21 CFR 1040 ne soit pas dépassée après avoir installé l'émetteur/récepteur de laser. Ne pas installer des appareils à laser dont la cote de classe est supérieure à 1.Voir toutes les consignes de sécurité qui ont accompagné l'émetteur-récepteur avant l'installation. Seuls appareils laser de classe 1 certifiés pour une utilisation dans le pays d'installation par l'organisme compétent doivent être utilisées dans ce produit.

Important:

Ultimate disposal of this product must be handled in accordance with all national laws and regulations.

L'élimination finale de ce produit doit être effectuée conformément à toutes les lois nationales etrèglements.

The fabric module requires special handling when removing, inserting, or handling the component. Fabric and Fan-only Module Description provides instructions for handing fabric modules.

1.4 Safety Information

Refer to the Arista Networks document Safety Information and Translated Safety Warnings at https://www.arista.com/en/support/product-documentation.

1.5 Obtaining Technical Assistance

Any customer, partner, reseller or distributor holding a valid Arista Service Contract can obtain technical support in any of the following ways:

- **Email:** support@arista.com. This is the easiest way to create a new service request.

  Include a detailed description of the problem and the output of "show tech-support".

- **Web:** https://www.arista.com/en/support.

  A support case may be created through the support portal on our website. You may also download the most current software and documentation, as well as view FAQs, Knowledge Base articles, Security Advisories, and Field Notices.

- **Phone:** +1 866-476-0000 or +1 408-547-5502.

Note:

No user serviceable parts inside. Refer all servicing to qualified service personnel.

Aucune pièce réparable par l'utilisateur à l'intérieur. Confiez toute réparation à un technicien qualifié.

1.6 Specifications

Table 1: 7300 Modular Switch and Component Specifications lists specifications of Arista Data Center modular switches and components covered by this guide.

Table 1: 7300 Modular Switch and Component Specifications

	DCS-7304/7324/7304X3	DCS-7308/7328/7308X3	DCS-7316
Height	8 RU: 353mm (13.9 inches)	13 RU: 572 mm (22.5 inches)	21 RU: 930 mm (36.6 inches)
Width	442 mm (17.4 inches)	442 mm (17.4 inches)	442 mm (17.4 inches)
Depth	602 mm (23.7 inches)	602 mm (23.7 inches)	706 mm (27.8 inches)
Weight			
Empty	36 kg (78 lbs)	50 kg (110 lbs)	81 kg (178 lbs)
Fully Loaded	89 kg (196 lbs)	140 kg (309 lbs)	244 kg (536 lbs)
Input Power (per circuit)			
AC Power	200 - 240 VAC, 16 A (20 A US), 50 or 60 Hz	200 - 240 VAC, 16 A (20 A US), 50 or 60 Hz	200 - 240 VAC, 16 A (20 A US), 50 or 60 Hz
DC Power	-48 - -60 VDC, 80 A	-48 - -60 VDC, 80 A	-48 - -60 VDC, 80 A
Branch Circuit Protection			
AC Power	20 A	20 A	20 A
DC Power	100 A	100 A	100 A
Input Power Circuits	1 to 4 circuits	2 to 6 circuits	3 to 8 circuits
Operating Temperature	0° to 40°C (32° to 104°F)	0° to 40°C (32° to 104°F)	0° to 40°C (32° to 104°F)
Storage Temperature	-40° to 70°C (-40° to 158°F)	-40° to 70°C (-40° to 158°F)	-40° to 70°C (-40° to 158°F)
Operating Altitude	0 to 3,000 meters (0 to 10,000 feet)	0 to 3,000 meters (0 to 10,000 feet)	0 to 3,000 meters (0 to 10,000 feet)
Relative Humidity	5 to 90%	5 to 90%	5 to 90%
Cooling	6000 W maximum	9000 W maximum	12000 W maximum

Table 2: 7300 Series Power Specifications lists power specifications of modular switch components.

Table 2: 7300 Series Power Specifications

Module Type	Part Number	Power Draw Typical / Maximum
Supervisor Modules	DCS-7300(-D)-SUP	65 W / 80 W
Linecard Modules	DCS-7300X-32Q-LC DCS-7300X-64S-LC DCS-7300X-64T-LC DCS-7320X-32C-LC DCS-7300X3-32C-LC DCS-7300X3-48YC4-LC	219 W / 372 W 166 W / 232 W 279 W / 430 W 428 W / 516 W 284 W / 491 W 193 W / 228 W
Fabric Modules	DCS-7304X-FM DCS-7308X-FM DCS-7316X-FM DCS-7324X-FM DCS-7328X-FM DCS-7304X3-FM DCS-7308X3-FM	98 W / 172 W 195 W / 343 W 550 W / 760 W 192W / 288 W 380W / 578 W 98 W / 172 W 195 W / 343 W
Fan-Only Modules	DCS-7304-S-FAN DCS-7308-S-FAN	16 W / 32 W 32 W / 64 W
Power Supplies	PWR-2700-DC (fan power PWR-3K-AC (fan power) PWR-3KT-AC (fan power) PWR-3K-DC (fan power)	43 W/ 43 W 43 W/ 43 W 43 W/ 43 W 43 W/ 43 W
7304 Series System	Full chassis loaded with: 4 - DCS-7300X-64T-LC line cards	1573 W / 3048 W
7308 Series System	Full chassis loaded with: 8 - DCS-7300X-64T-LC line cards	3077 W / 4972 W
7316 Series System	Full chassis loaded with: 16 - DCS-7300X-64T-LC line cards	6729 W / 10080 W
7324X Series System	Full chassis loaded with: 4 - DCS-7320X-32C-LC line cards	2545 W / 3376 W
7328X Series System	Full chassis loaded with: 8 - DCS-7320X-32C-LC line cards	5009 W / 6600 W
7304X3 Series System	Full chassis loaded with: 4 - DCS-7300X3-32C-LC line cards	1885 W / 3078 W
7308X3 Series System	Full chassis loaded with: 8 - DCS-7300X3-32C-LC line cards	4005 W / 6490 W

Table 3: 7300X Series lists 7300X Series switch components.

Table 3: 7300X Series

Chassis Model	Fabric Module	Fan-only Module	Fan Spare	Line Card	Power Supply
DCS-7304 (Forward)	DCS-7304X-FM-F	DCS-7304-S-FAN-F	FAN-7002-F	DCS-7300X- 32Q-LC DCS-7300X- 64S-LC DCS-7300X- 64T-LC	PWR-3K-AC-F PWR-2700-DC-F
DCS-7304 (Reverse)	DCS-7304X-FM-R	DCS-7304-S-FAN-R	FAN-7002-R	DCS-7300X- 32Q-LC DCS-7300X- 64S-LC DCS-7300X- 64T-LC	PWR-3K-AC-R PWR-2700-DC-R
DCS-7308 (Forward)	DCS-7308X-FM-F	DCS-7308-S-FAN-F	FAN-7002-F	DCS-7300X- 32Q-LC DCS-7300X -64S-LC DCS-7300X- 64T-LC	PWR-3K-AC-F PWR-2700-DC-F
DCS-7308 (Reverse)	DCS-7308X-FM-R	DCS-7308-S-FAN-R	FAN-7002-R	DCS-7300X- 32Q-LC DCS-7300X- 64S-LC DCS-7300X- 64T-LC	PWR-3K-AC-R PWR-2700-DC-R
DCS-7316 (Forward)	DCS-7316X-FM-F	Not Available	FAN-7002-F	DCS-7300X- 32Q-LC DCS-7300X- 64S-LC DCS-7300X- 64T-LC	PWR-3K-AC-F PWR-2700-DC-F PWR-3K-AC-R PWR-2700-DC-R
DCS-7316 (Reverse)	DCS-7316X-FM-R	Not Available	FAN-7002-R	DCS-7300X- 32Q-LC DCS-7300X- 64S-LC DCS-7300X- 64T-LC	PWR-3K-AC-F PWR-2700-DC-F PWR-3K-AC-R PWR-2700-DC-R

Table 4: 7320X Series lists 7320X Series switch components.

Table 4: 7320X Series

Chassis Model	Fabric Module	Fan Spare	Line Card	Power Supply
DCS-7324X (Forward)	DCS-7324X-FM-F	FAN-7002H-F	DCS-7320X-32C-LC	PWR-3KT-AC-BLUE
DCS-7328X (Forward)	DCS-7328X-FM-F	FAN-7002H-F	DCS-7320X-32C-LC	PWR-3KT-AC-BLUE

Table 5: 7320X3 Series lists 7300X3 Series switch components.

Table 5: 7320X3 Series

Chassis Model	Fabric Module	Fan Spare	Line Card	Power Supply
DCS-7304X3	DCS-7304X3-FM	FAN-7002H-F	DCS-7300X3-32C-LC	PWR-3KT-AC-BLUE
DCS-7308X3	DCS-7308X3-FM	FAN-7002H-F	DCS-7320X-32C-LC	PWR-3KT-AC-BLUE

Table 6: AC/DC PSU Comparison (Circuit, Cabling, and Airflow for DCS-7304, DCS-7308, and DCS-7316) lists an AC and DC Power Supply Unit (PSU) comparison of circuit, cabling, and airflow for the DCS-7304, DCS-7308, and DCS-7316.

Table 6: AC/DC PSU Comparison (Circuit, Cabling, and Airflow for DCS-7304, DCS-7308, and DCS-7316)

Model	Supported Chassis	Input Power (Per Circuit)	Branch Circuit Protection	Required Cabling and Interconnect		
				Description	Qty	PSU Air Flow
PWR-3K-AC-R PWR-3K-AC-F	DCS-7304 DCS-7308 DCS-7316	200 - 240 VAC 16 A (20 A US) 50 or 60 Hz	20 A	Power cables: 14 AWG, C19-C20	One for each AC power supply module supplied with switch.	Reverse (Red) Forward (Blue)
PWR-3KT-AC-BLUE	DCS-7304 DCS-7308	200 - 240 VAC 16 A (20 A US) 50 or 60 Hz	20 A	Power cables: 14 AWG, C19-C20	One for each AC power supply module supplied with switch.	Forward (Blue)
PWR-2700-DC-R PWR-2700-DC-F	DCS-7304 DCS-7308 DCS-7316	-48 to -60 VDC 80 A	100 A	DC Adapter (Arista part number CON-00581) 2 hole compression lug (not included)	One DC adapter per power supply 2 compression lugs per DC Adapter	Reverse (Red) Forward (Blue)
PWR-3K-DC-BLUE	DCS-7304 DCS-7308	-48 to -60 VDC 82.5 A	100 A	2 hole compression lug (not included)	2 compression lugs per DC Adapter	Forward (Blue)

Table 7: Power Supply Setup for LED Status lists the power supply setup for LED status indicators.

Table 7: Power Supply Setup for LED Status

Power Supply State	LED Name	PWR-3K-AC-Blue	PWR-3KT-AC-R	PWR-2700-DC-R	PWR-3K-DC-Blue
		PWR-3K-AC-Red	PWR-3KT-AC -F	PWR-2700-DC-F	PWR-3K-DC-Red
Input power present Normal Operation	Vin Good DC Good Fault	Green Green Off	Green Green Off	Green Green Off	Green
Input power present Main output off	Vin Good DC Good Fault	Green Off Off	Green Off Off	Green Off Off	Blinking Green
Input power present Power Supply Fault	Vin Good DC Good Fault	Green Off Blinking Amber	Green Off Blinking Amber	Green Off Blinking Amber	Blinking Amber, 1 sec on, 1 sec off
No Input Power Supply installed in chassis	Vin Good DC Good Fault	Off Off Off	Off Off Off	Off Off Off	Off
Input power present Supply not seated in chassis	Vin Good DC Good Fault	Off Off Off	Off Off Blinking Green	Off Off Off	Blinking Amber, 0.5 sec on/off

Chapter 2

Preparation

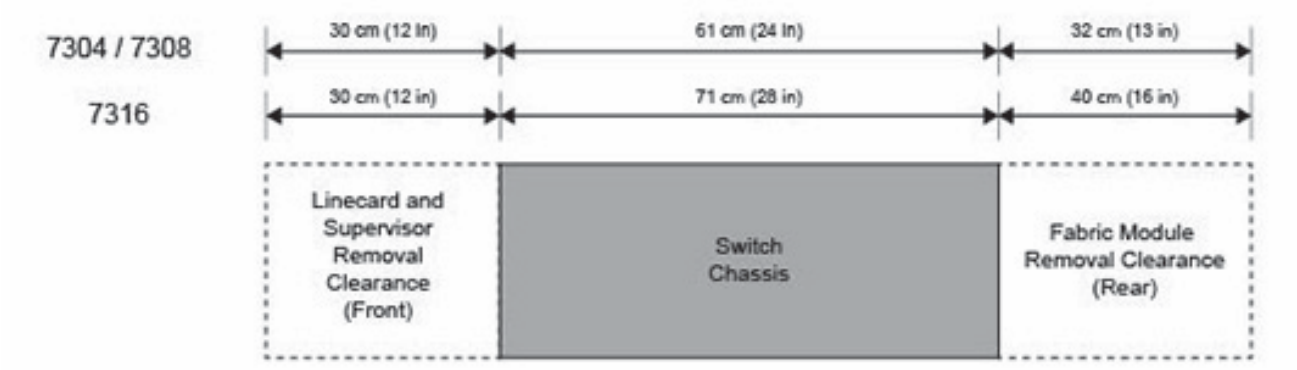
2.1 Site Selection

Describes the location specifications.

Consider the following criteria when selecting a site to install the switch:

Floor Space: Install the switch in an area that provides adequate clearance for removing front and rear components. The following figure displays switch clearance requirements.

Figure 2-1: Switch Component Removal Footprint



1. **Temperature and Ventilation:** For proper ventilation, install the switch with ample airflow to the front and back of the switch. The temperature should not go below 0° or exceed 40°C.

   Important:

   To prevent the switch from overheating, do not operate it in an area where the ambient temperature exceeds 40°C (104°F).

   Pour empêcher l'interrupteur de surchauffe, ne pas utiliser il dans une zone où la température ambiante est supérieure à 40°C (104°F).

2. **Airflow Orientation:** Determine the airflow direction of the fan modules and power supply modules. Fan and power supply module handles indicate airflow direction:
   - **Blue Handle:** Air Inlet module.
   - **Red Handle:** Air Exit module.

The Front Panels display power supply module locations on the front panel. The Rear Panels display fan module locations on the rear panel (DCS-7316 switches may also contain rear panel power supply modules). Verify the airflow direction of all modules satisfies these criteria:

- All rear panel modules have the same color handles.
  - All front panel modules have the same color handles.
  - Rear panel modules must have different color handles than front panel modules.

Orient the switch to ensure the air intake modules face the cool aisle. If the airflow direction is incompatible with the installation site, contact your sales representative to obtain modules that circulate air in the opposite direction.

- **Rack Space:** Install the switch in a 19" rack or cabinet. The switch height depends on the switch model, as specified in the Table 1: 7300 Modular Switch and Component Specifications. Verify that the linecard and supervisor removal clearance (Figure 2-1: Switch Component Removal Footprint) provide adequate space for the power and data cables that connect to the switch.

  When mounting the switch in a partially filled rack, load the rack from bottom to top, with the heaviest equipment at the bottom. Load the switch at the bottom if it is the only item in the rack.

  The accessory kit provides mounting brackets for four-post racks. Contact your sales representative to obtain two-post mounting racks.

- **Power Requirements:** Power requirements vary by switch. Refer to Table 1: 7300 Modular Switch and Component Specifications for information regarding your specific system.

  Multiple circuits provide redundancy protection. The switch uses power cables that have an IEC-320 C19 plug. The accessory kit provides IEC-320 C19 to C20 power cables.

  Important:

  All power input plug-socket combinations must be accessible at all times; they provide the primary method of disconnecting power from the system.

  Toutes les combinaisons de fiche-prise d’entrée de puissance doivent être accessibles en tout temps; ils fournissent le principal moyen de coupure d’alimentation du système.

- **Other Requirements:** Select a site where liquids or objects cannot fall onto the equipment and foreign objects are not drawn into the ventilation holes. Verify these guidelines are met:
  - Clearance areas to the front and rear panels allow for unrestricted cabling.
  - All front and rear panel indicators can be easily read.
  - AC power cords can reach from the AC power outlet to the connectors on the front panel.

  Important:

  Disconnecting power to all input sockets is required to power off the unit completely.

  Coupure d’alimentation sur toutes les entrées il faut pouvoir complètement l’appareil hors tension.

2.2 Tools Required for Installation

Each switch provides an accessory kit that contains parts for installing the switch into a four-post rack. Two-post rack mount parts are available through your sales representative.

Accessory kits do not include screws, nuts, or bolts for attaching the switch to a conventional rack.

In addition to the accessory kit, the following tools are required to install a modular switch:

All Racks

A mechanical device capable of lifting chassis being installed (chassis weight listed in Table 1: 7300 Modular Switch and Component Specifications).

Two-Post Conventional Rack

- Screws or rack mounting nuts and bolts.
- Screwdriver.

Four-Post Tool-less Rack

No additional equipment is required.

Four-Post Conventional Rack

- Screws or rack mounting nuts and bolts.
- Screwdriver.

2.3 Electrostatic Discharge (ESD) Precautions

Observe these guidelines to avoid ESD damage when installing or servicing the switch.

- Assemble or disassemble equipment only in a static-free work area.
- Select a conductive work surface (such as an antistatic mat) to dissipate static charge.
- Wear an ESD wrist strap to dissipate static charge accumulation.
- Minimize handling of assemblies and components.
- Keep replacement parts in their original static-free packaging.
- Remove all plastic, foam, vinyl, paper, and other static-generating materials from the work area.
- Select tools that do not create ESD.

Chapter 3

Rack Mounting the Switch

Important:

The rack mounting procedure is identical for all modular switches. Illustrations in this chapter depict the mounting of an unpopulated DCS-7304 chassis.

Les procédure de montage du bâti est identique pour tous les commutateurs modulaires. Illustrations dans ce chapitre montrent le montage d'un châssis de DCS-7304 inhabité.

- Two-Post Rack Mount provides instructions for mounting the switch in a two-post rack.
- Four-Post Rack Mount provides instructions for mounting the switch in a four-post rack.

After completing the instructions for your rack type, proceed to Powering the Modular Switch.

3.1 Two-Post Rack Mount

To mount the switch to a two-post rack, assemble mounting brackets to the middle of the chassis, then attach the brackets to the rack.

Important:

Two-post rack mount parts are only available through your sales representative. Two-post rack mounting is not supported for DCS-7316 switches.

Pièces de montage rack à deux montants sont uniquement disponibles par l'intermédiaire de votre représentant des ventes. Montage en rack de deux-poteau n'est pas supporté pour les commutateurs DCS-7316.

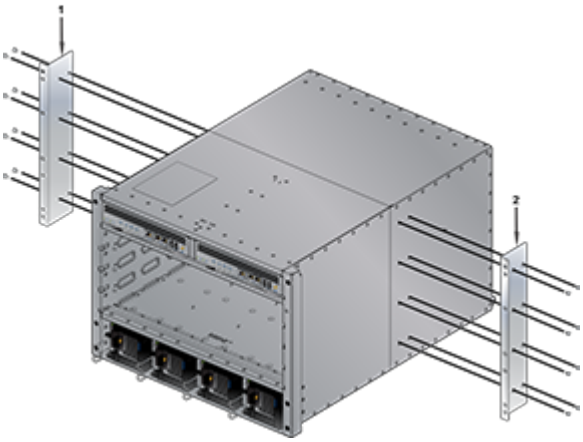
The accessory kit includes the following two-post mounting parts:

- 2 center-mount brackets.
- 16 (DCS-7304) or 20 (DCS-7308) M4x8 panhead Phillips screws.

3.1.1 Attaching Mounting Brackets to the Chassis

1. Orient the switch chassis and the two center-mount brackets (Figure 3-1: Attaching the Center-mount Brackets).

   Figure 3-1: Attaching the Center-mount Brackets



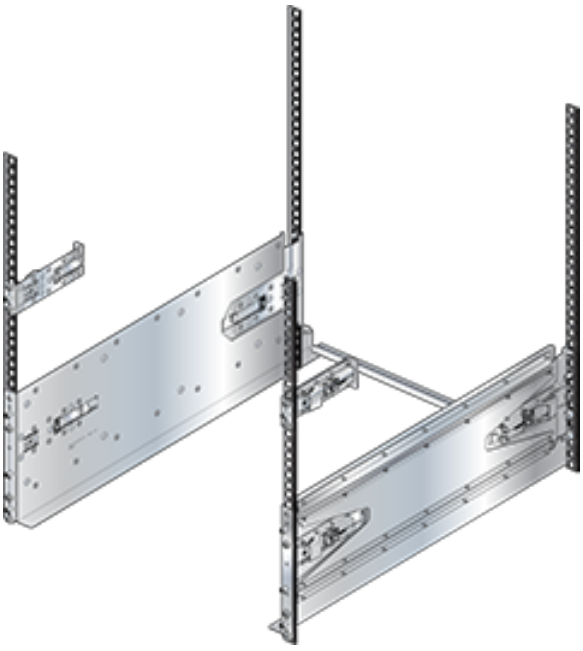
   Position the flanges that attach to the rack posts toward the front of the chassis.

2. Attach both center-mount brackets to the chassis with the provided M4x8 panhead Phillips screws. Secure the bracket by attaching screws through each bracket hole.

3.1.2 Inserting the Switch into the Rack

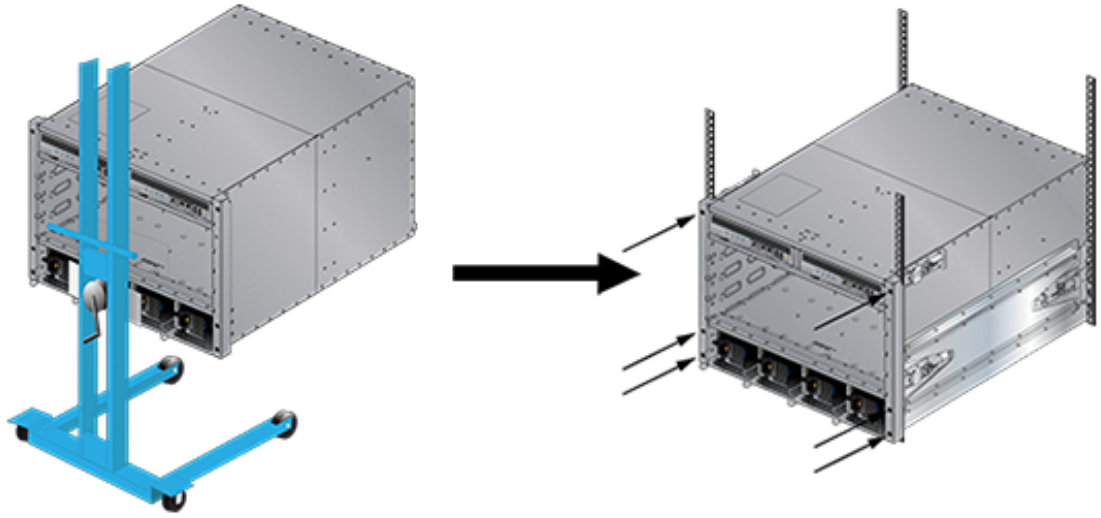
1. Rotate the stabilizer bar from the left shelf toward the right shelf such that the nob at the end of the stabilizer bar inserts into the notch at the rear of the ledge of the right shelf.

   Figure 3-2: Both Switch Shelves Installed



2. Move the chassis to the rack using a mechanical lift (Figure 3-3: Lifting the Switch Chassis). If modules are inserted in the chassis, use the lift carefully to avoid damaging any components.

Figure 3-3: Lifting the Switch Chassis



3. Lift the chassis into the rack.
4. Secure the chassis by tightening the six thumbscrews on the front flanges into the rack posts.

After completing the Four-Post Installation, proceed to Powering the Modular Switch.

3.2 Four-Post Rack Mount

The switch is mounted onto a four-post rack by assembling a shelf into the rack and then attaching the switch to the shelf.

The four-post rack mount instructions include these sections:

- Component Description
- Component Placement
- Switch Mounting Process

3.2.1 Component Description

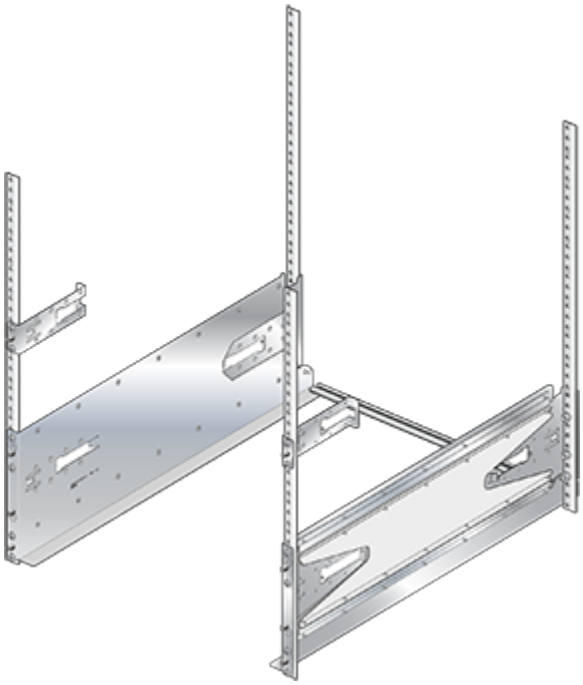
The four-post mount accessory kit contains these components:

- 1 Left Shelf and 1 Right Shelf (Shelves)
- 2 Mounting Ears (Mounting Ears)

Note: Components are designed for tool-less installation in square-hole racks. To install the switch in round hole or threaded hole racks, remove all rack plugs from the rail kit, if required (described below), and attach all components with nuts and bolts that fit the rack.

The finished assembly for rack mounting the device is shown in the Figure 3-5: Left Shelf – Inner View. Detailed mounting instructions for all rack types start from Shelf Installation.

Figure 3-4: Switch Shelves Installed



Note: The parts list for rack kit installations for round and threaded hole racks are listed in the Parts List.

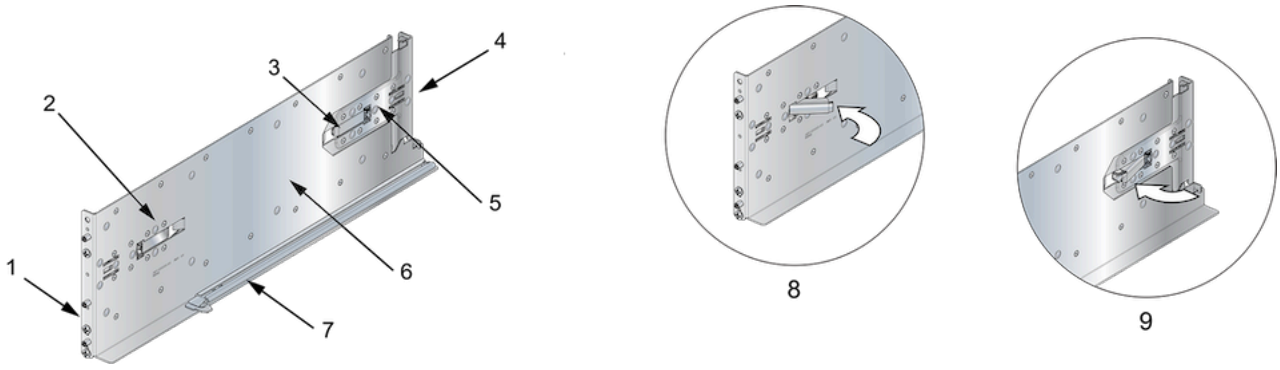
3.2.1.1 Shelves

The two shelves are almost identical, differing in that 1) they are mirror images of each other and 2) the left shelf includes a stabilizer bar. Each shelf has a two-piece mechanism. The ***base*** includes the surface upon which the switch is placed and is oriented towards the front of the rack. The ***slide-end*** adjusts the shelf's length to fit the shelf between the front and rear posts of various size racks.

The Figure 3-5: Left Shelf – Inner View displays the inner view of the left shelf. Depending on the rack kit ordered, each shelf may include latches to the locking mechanism that secures the shelf to the rack. If the locking mechanism is not present, the kit shall be attached with appropriate screws (not included). Figure 3-5:

Left Shelf – Inner View displays latches that are closed. The insets display open latches The inner side of each shelf is oriented toward the center of the rack.

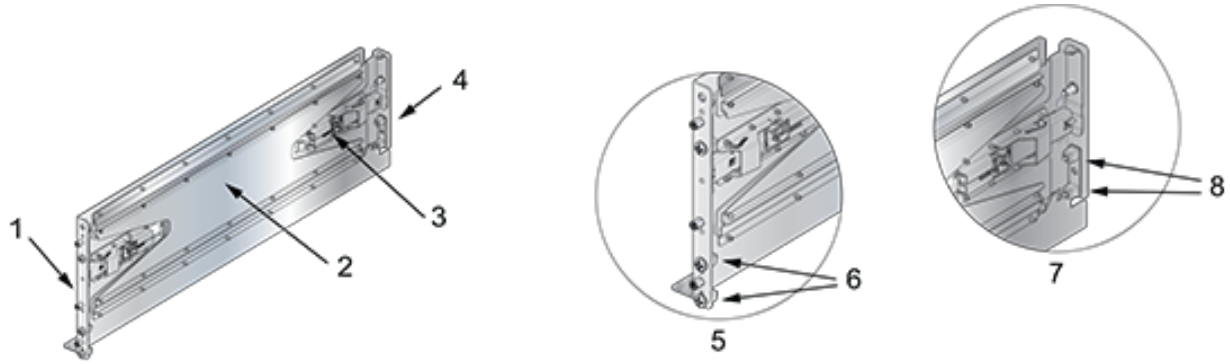
Figure 3-5: Left Shelf – Inner View



1 Front post attachments	4 Rear post attachments	7 Stabilizer bar (left shelf only)
2 Front latch (closed)	5 Slide-end	8 Front latch (open)
3 Rear latch (closed)	6 Base	9 Rear latch (open)

Figure 3-6: Right Shelf – Outer View displays the outside view of the right shelf, from where rack plugs and guide pins that insert into rack posts are visible (Insets A and B). To install shelves into posts with threaded or rounded holes, attach the shelves with bolts that fit the rack. Remove all plugs from the shelves if present.

Figure 3-6: Right Shelf – Outer View



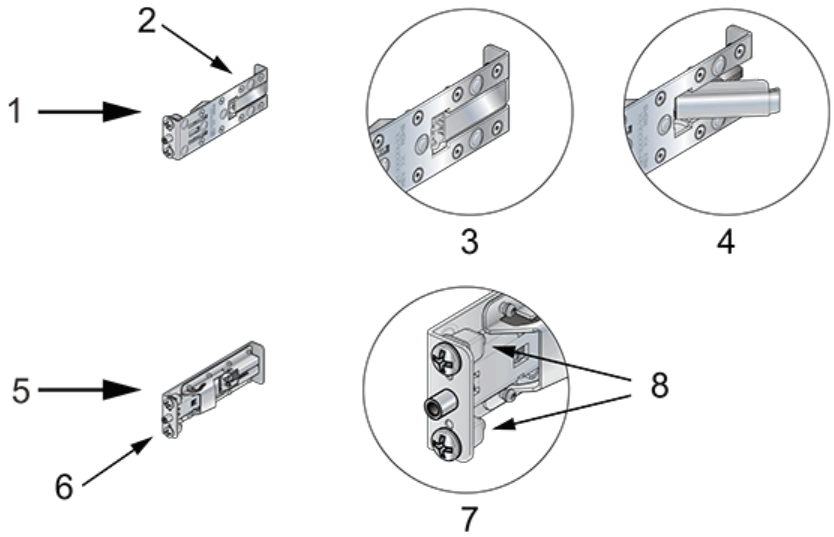
1 Front post attachments (Inset A)	4 Rear post attachments (Inset B)	7 Inset B
2 Base	5 Inset A	8 Rack plugs
3 Slide-end	6 Rack plugs	

3.2.1.2 Mounting Ears

Figure 3-7: Mounting Ears displays the mounting ears, securing the rack's switch top. The two mounting ears are identical and installed above each shelf. The inner side of each ear may include a latch to the locking mechanism that secures the ear to the rack.

Rack posts and guide pins inserted into the rack are visible from the outer side of the ear (Inset B). To install ears into posts with threaded or round holes, remove both plugs from each ear (if required for rail set), then install the ears with screws that fit the rack.

Figure 3-7: Mounting Ears



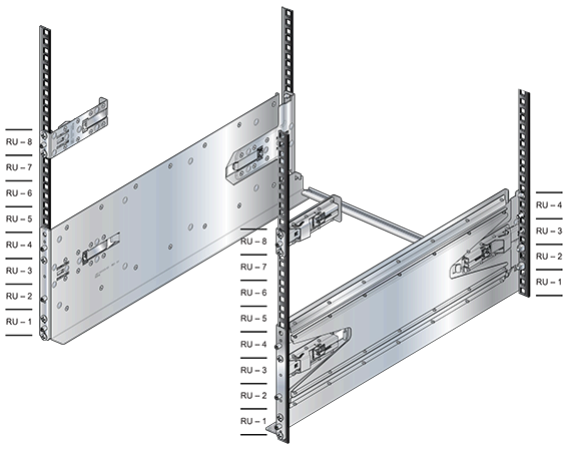
1 Brace (Inner view)
2 Inset A
3 Inset A - Locked
4 Inset A - Released
5 Brace (Outer view)
6 Inset B
7 Inset B (Details)
8 Rack plugs

3.2.2 Component Placement

Figure 3-8: Component Placement displays component placement for a 7304 (8-RU) switch. Mounting ears brace the top of the switch; their rack placement position differs for each switch model. Using the placement of the shelves' bottom front rack plug as a reference (first RU and first hole), the mounting ears are placed as follows:

- 7304: 8th RU (22nd through 24th holes)
- 7308: 13th RU (37th through 39th holes)
- 7316: 21st RU (61st through 63rd holes)

Figure 3-8: Component Placement



3.2.3 Switch Mounting Process

The switch mounting process consists of three steps:

1. Installing the shelves.
2. Installing the mounting ears.
3. Placing and securing the switch upon the shelves.

3.2.3.1 Shelf Installation

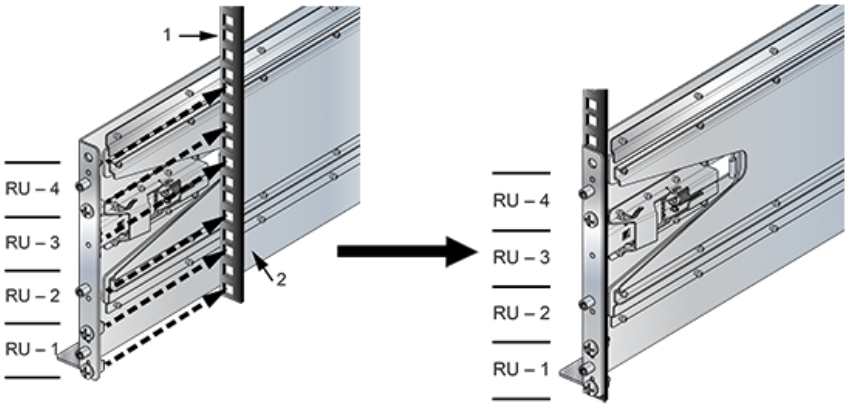
The installation process for each shelf is identical. The shelves must be installed on the same horizontal level. In the following section, inner side illustrations feature the left shelf, and outer side illustrations feature the right shelf.

Perform the following procedure for each shelf:

1. If applicable, verify that both locking mechanism latches on the shelf are open (Figure 3-5: Left Shelf – Inner View, insets A and B). For racks that do not require the locking mechanism, skip to Step 2.
2. Attach the front side of the shelf to its corresponding front rack post by inserting the shelf-side rack plugs and guide pins into post slots (Figure 3-9: Attaching the Right Shelf).

   The shelf ledge must be between the front posts. If the rack plugs were previously removed or not present, use bolts to attach the shelf to the rack and skip to **Step 4**.

   Figure 3-9: Attaching the Right Shelf

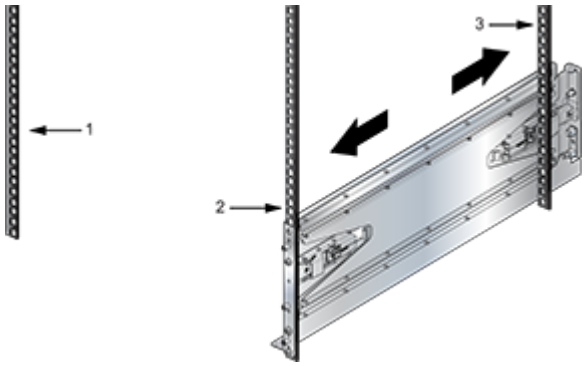


1 Right front rack post 2 Right shelf

3. Close the front locking mechanism latch (Figure 3-6: Right Shelf – Outer View).

4. Glide the slide-end to a position outside its rear rack post (Figure 3-10: Adjusting the Right Shelf).

Figure 3-10: Adjusting the Right Shelf

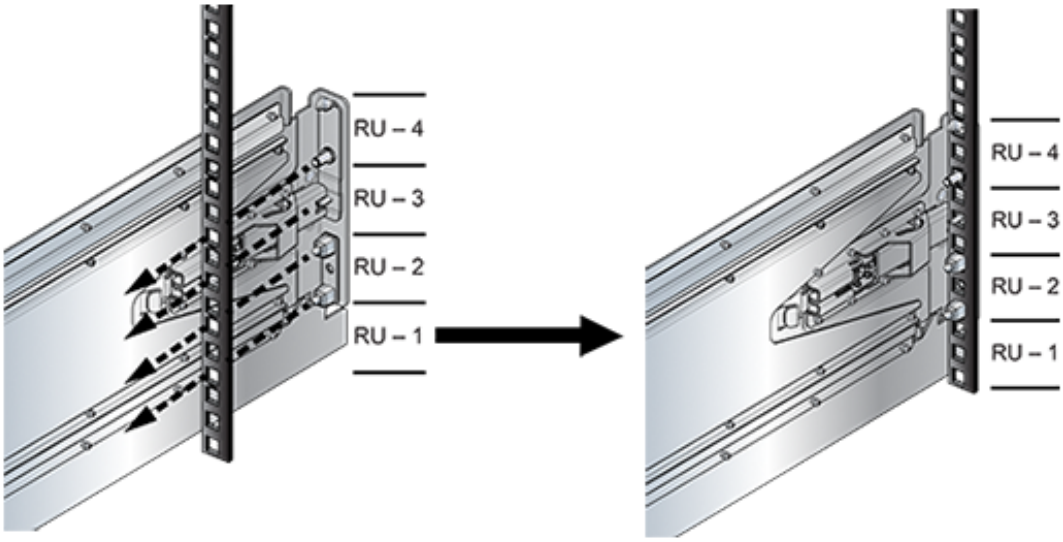


1 Front left rack post 2 Front right rack post 3 Rear right rack post

5. Attach the back side of the shelf into the rear shelf by gliding the slide-end so that the rack plugs (if present) and guide pins are inserted to the rack post holes (Figure 3-11: Seating the Left Shelf).

   The bottom rack plug must be inserted one RU (three rack holes) above the bottom rack plug on the front side of the shelf. If the locking mechanism and plugs are not used, fasten the back side of the shelf to the rear shelf and skip to **Step 6**.

Figure 3-11: Seating the Left Shelf



6. Close the rear locking mechanism latch if present (Figure 3-6: Right Shelf – Outer View).

3.2.3.2 Mounting Ear Installation

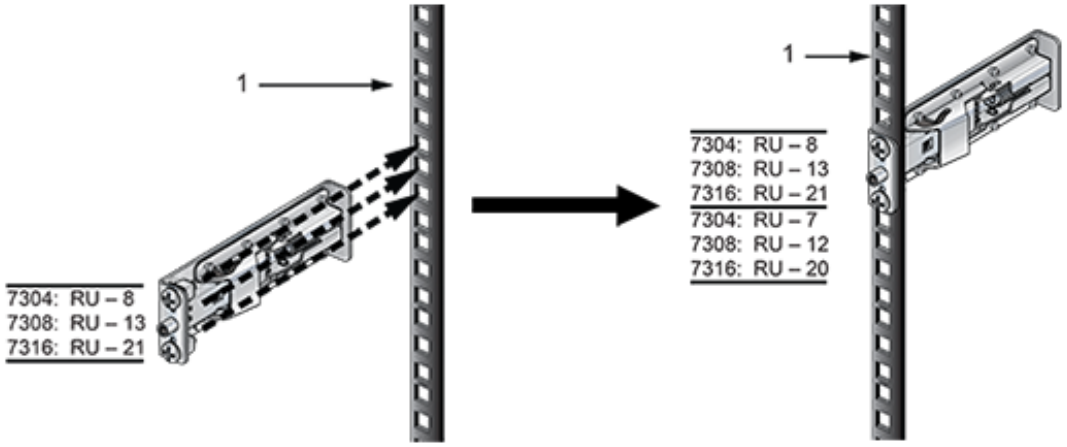
The mounting ears attach the top of the switch to the rack posts. Their placement on the posts depends on the switch model (Component Placement).

The installation process for each mounting ear is identical. The inner side of the mounting ear (which includes the locking mechanism latch) is oriented between the front rack posts. Depending on the rack kit configuration, a locking mechanism may not be present. In the following section, all illustrations feature the right mounting ear.

Perform the following procedure for each mounting ear:

1. Install the mounting ear on the front post by inserting the front rack plugs (if present) and guide pins in the racks specified for the switch model that is being installed (Figure 3-12: Attaching the Right Mounting Ear).

   Figure 3-12: Attaching the Right Mounting Ear



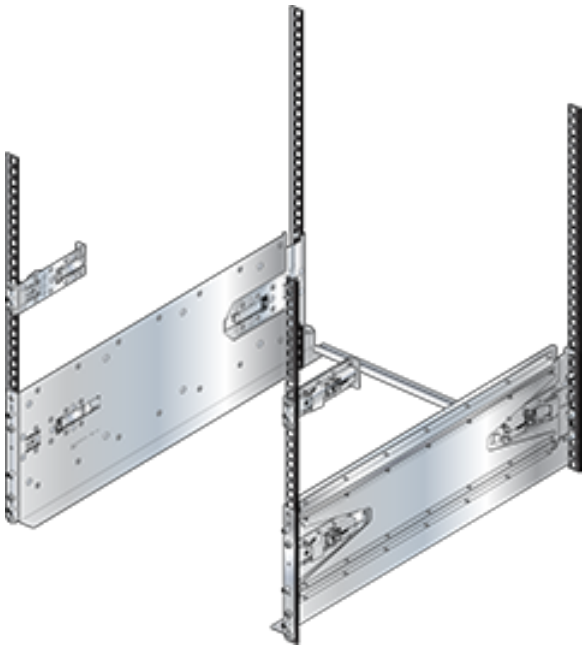
1 Front right rack post

   If rack plugs are not present, align the threaded holes and attach the mounting ears with screws.
2. If applicable, close the front locking mechanism latch (Figure 3-7: Mounting Ears).

3.2.3.3 Inserting the Switch into the Rack

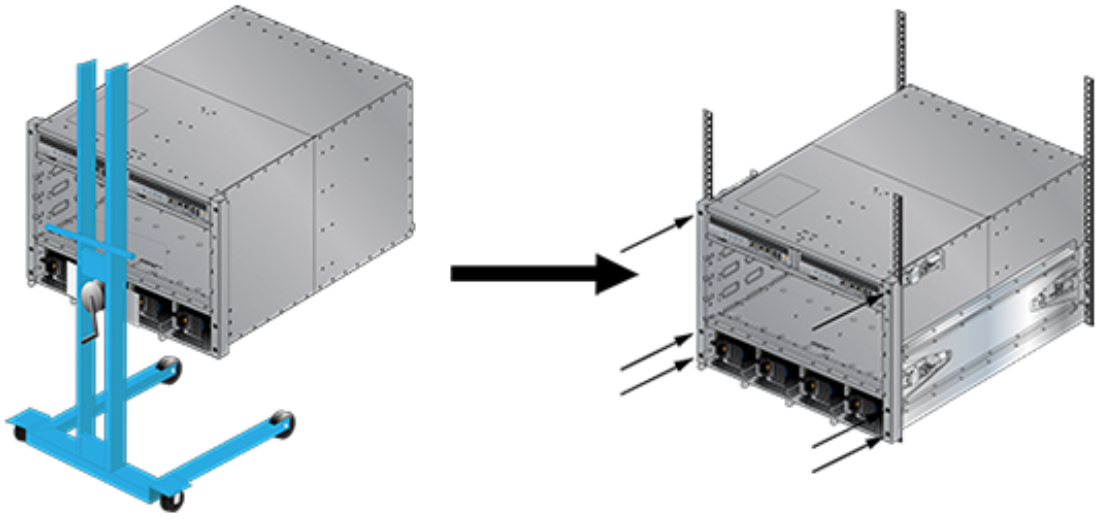
1. Rotate the stabilizer bar from the left shelf toward the right shelf such that the nob at the end of the stabilizer bar inserts into the notch at the rear of the ledge of the right shelf.

Figure 3-13: Both Switch Shelves Installed



2. Move the chassis to the rack using a mechanical lift (Figure 3-14: Lifting the Switch Chassis). If modules are inserted in the chassis, use the lift carefully to avoid damaging any components.

Figure 3-14: Lifting the Switch Chassis



3. Lift the chassis into the rack.
4. Secure the chassis by tightening the six thumbscrews on the front flanges into the rack posts.

After completing the Four-Post Installation, proceed to Powering the Modular Switch.

Chapter 4

Powering the Modular Switch

Important:

Installation of this equipment must comply with local and national electrical codes. Consult with the appropriate regulatory agencies and inspection authorities to ensure compliance if necessary.

Installation de cet équipement doit être conformes aux codes électriques locaux et nationaux. Si nécessaire, consulter les organismes de réglementation appropriés et des autorités de contrôle pour assurer la conformité.

The switch operates with multiple power supplies. Refer to Specifications for information regarding your specific system. The Table 8: Power Supply Capacity and Requirements for 7300 Series Modular Switches list the nyumber of modules each chassis can contain and the minimum operating requirements for each model.

Table 8: Power Supply Capacity and Requirements for 7300 Series Modular Switches

Switch Model	Chassis Capacity	Minimum Operating Requirements
DCS-7304 DCS-7324 DCS-7304X3	Front Panel: 4	1 active circuit
DCS-7308 DCS-7328 DCS-7308X3	Front Panel: 6 modules	2 active circuits
DCS-7316	Front Panel: 6 modules Rear Panel: 2 modules	3 active circuits

The Front Panels display the power supplies' location on the switch's front panel. The Rear Panels display the location of power supplies on the rear panel of DCS-7316 switches.

This section includes sections describing the grounding and cabling procedure for AC and DC power supplies. After completing the instructions for your switch, proceed to Connecting Supervisor Cables.

Important:

Read all installation instructions before connecting the system to the power source.

Lire toutes les instructions d'installation avant de brancher le système à la source d'alimentation.

- **Non-Redundant Configuration:** Provide power to the minimum required power inputs.
- **Redundant Power Supply Configuration:** Connecting power to modules in excess of minimum requirements protects the switch against failed modules and can provide grid-level redundancy.
- **Power down the Switch:** Remove all power cords from the power input sockets.

Important:

This equipment must be grounded. Never defeat the ground conductor. This unit requires over-current protection.

Cet équipement doit être mis à la terre. Ne jamais modifier le conducteur de terre. Cet appareil nécessite de protection contre les surintensités.

4.1 Cabling the AC Power Supply

4.1.1 Grounding the Switch

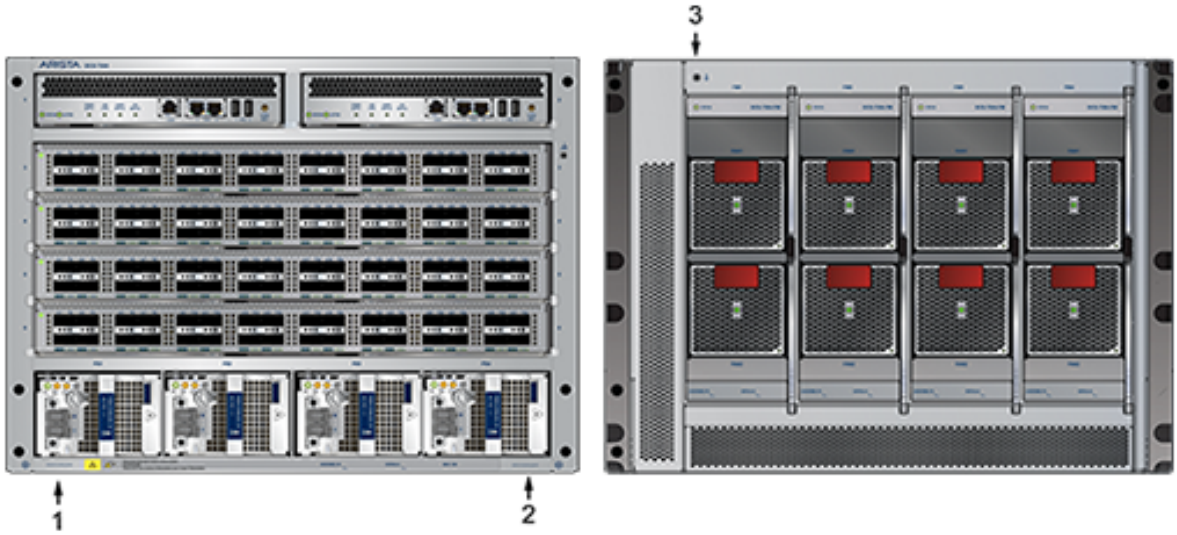
After mounting the switch into the rack, connect the switch to the data center ground. Figure 4-1: Grounding Pad and ESD Grounding Pad Sockets display the grounding pads' location on the front panel (left illustration) and rear panel (right illustration). After the switch is grounded, ESD wrist straps can be grounded by connecting them to one of the grounding pads.

Important:

Grounding wires and grounding lugs (M4 x 0.7) are not supplied. Wire size should meet local and national installation requirements. Commercially available 6 AWG wire is recommended for installations in the U.S.

À la terre et de mise à la terre fils cosses (M4 x 0.7) ne sont pas fournis. Calibre des fils doit satisfaire des exigences de l'installation locale et nationale. Disponible dans le commerce des câbles 6 AWG sont recommandé pour les installations aux États-Unis.

Figure 4-1: Grounding Pad and ESD Grounding Pad Sockets



1 Secondary ground

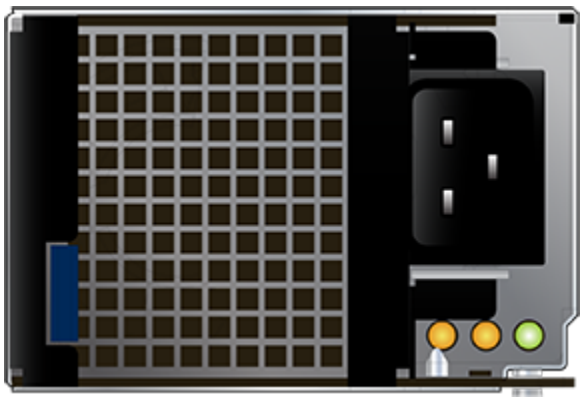
2 Secondary ground

3 Earth grounding pad

4.1.2 Connecting Power Cables to an AC Power Supply

The Figure 4-2: Power Input Sockets display an AC power supply module, including the power input socket.

Figure 4-2: Power Input Sockets



The power supplies require power cables that comply with the IEC-320 C19 plug. The accessory kit provides 14 AWG and C19 to C20 power cables.

To insert a power cable:

1. Pull the retaining clip back on each power input socket.

> **Note:** The retaining clip is optional (if provided).

2. Plug the power cables into the sockets.
3. Adjust the retaining clips for your power cords (if a retaining clip was provided).
4. Push the retaining clip back down over the cable (if retaining clip was provided).

4.2 Cabling the DC Power Supply

The Figure 4-3: Secondary Ground Pads display the location of the secondary grounding pads on the front panel (left illustration) of the switch chassis. After mounting the switch into the rack, connect at least one of the secondary grounds to the data center ground. After the switch is grounded, ESD wrist straps can be grounded by connecting them to one of the attach points.

Important:

Grounding wires and grounding lugs (M4 x 0.7) are not supplied. Wire size should meet local and national installation requirements. Commercially available 4 AWG wire is recommended for installations in the U.S.

À la terre et de mise à la terre fils cosses (M4 x 0.7) ne sont pas fournis. Calibre des fils doit satisfaire des exigences de l'installation locale et nationale. Disponible dans le commerce des câbles 4 AWG sont recommandé pour les installations aux États-Unis.

Important:

The -48V and Battery-Return leads are a pair and should run adjacent and be approximately the same length.

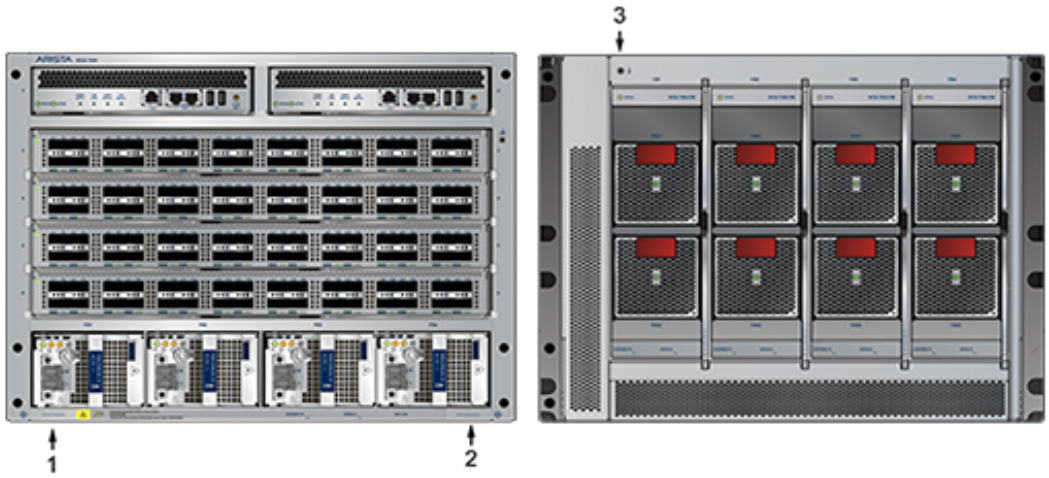
Le - 48V et câbles de batterie-retour sont une paire courir à côté de l'autre et doivent être à peu près la même longueur.

4.2.1 DC Power Supplies

The 7300 Series chassis supports two DC power supplies (Figure 4-4). Only specified power supplies are available for use in a particular switch configuration.

- PWR-2700-DC-R (Figure 4-8: PWR-2700-DC-R Power Supply).
  - PWR-3K-DC-Blue is also referred to as PWR-3K-DC-F (Figure 4-7: PWR-3K-DC-Blue Power Supply).

Figure 4-3: Secondary Ground Pads



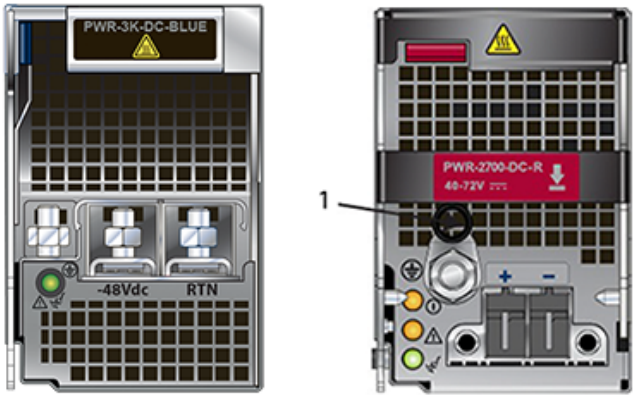
1 Secondary ground

2 Secondary ground

3 Earth grounding pad

Note: Your device's power supply orientation may differ from the one shown in Figure 4-4: PWR-3K-DC-Blue and PWR-2700-DC-R Power Supplies.

Figure 4-4: PWR-3K-DC-Blue and PWR-2700-DC-R Power Supplies



1 Primary ground

4.2.2 Wire and Lug Preparation

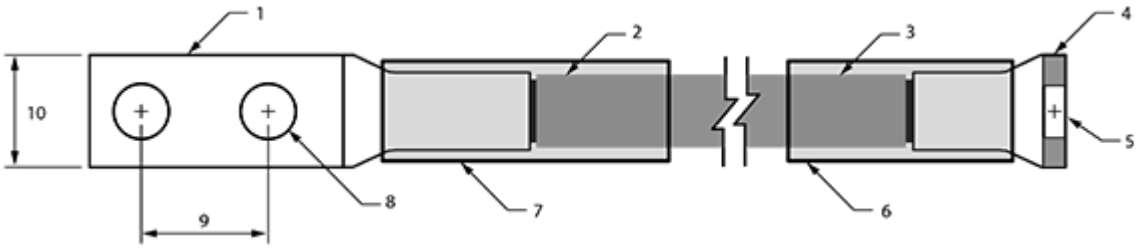
Before installing, remove power from DC circuits by turning off the power line servicing the circuits. Prepare the stranded wiring before you begin a DC power installation.

1. Stranded copper wiring is required.
   - Commercially available 2 to 4 AWG wire is recommended for installations in the U.S.
   - Wire size should meet local and national installation requirements.
   - Grounding wires and grounding lugs are not supplied.
   - Strip the wires to the appropriate length for the lugs.

   The wires connecting the DC power supply to the power source must meet the following requirements:

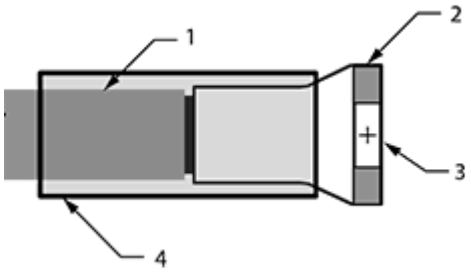
   - DC Input Wire Size: 2 – 4 AWG (33.6 mm^2 to 21.2 mm^2).
   - Primary Ground Wire Size: 2 – 4 AWG (33.6 mm^2 to 21.2 mm^2) per power supply.
   - The conductors are copper.

Figure 4-5: Lugs Wiring Terminations



1 -48V + RTN lug	5 5/16”	9 5/8”
2 Insulated wire	6 Heat-shrink tubing	10 1/2”
3 Insulated wire	7 Heat-shrink tubing	
4 Ground lug (right angle)	8 1/4”	

Figure 4-6: Ground Lug Wiring Termination (PWR-2700W-DC-R)



1 Insulated wire	3 5/16”
2 Ground lug (right angle)	4 Heat-shrink tubing

Note: You can also use a 45° angled connector instead of the straight connector shown.

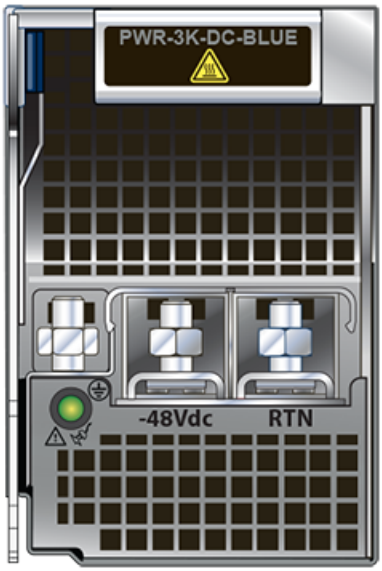
2. Select agency-approved compression (pressure) lugs for wiring terminations with a single 5/16" mounting hole. Two-hole lugs should have 1/4" mounting holes on 5/8" centers.

   The PWR-2700W-DC-R ground lug is a right-angle lug. Check the terminations for the appropriate wire size. Use a ground wire of at least 2 – 4 AWG. Use only copper wire.
3. Slip on heat-shrink tubing on the wire ends before assembling the lugs onto the wire.
   - The lugs must be crimped with the proper tool.
   - The tubing should extend over the lug's barrel and the wire's insulator.
4. Shrink the tubing with a heat gun.

4.2.3 PWR-3K-DC-Blue Power Supply

Figure 4-7: PWR-3K-DC-Blue Power Supply displays the PWR-3K-DC-Blue power supply.

Figure 4-7: PWR-3K-DC-Blue Power Supply



1. Prepare the stranded wiring; see Wire and Lug Preparation.
2. Attach the power cable to the supply terminals.
3. Tightening Torque: 2.7 N-m (24 in.-lbs.)

4.3 DC Power Adapter Installation for PWR-2700-DC-R

4.3.1 Connecting the Power Cable Lug to the Terminal Studs

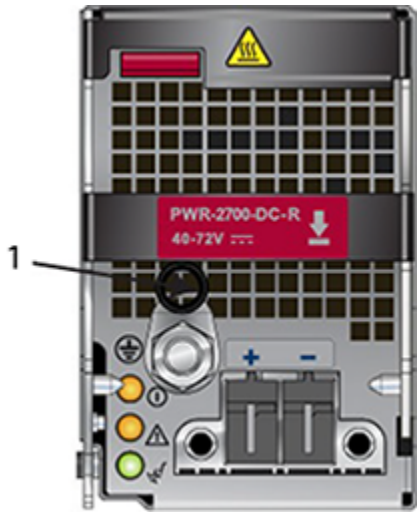
1. Prepare the stranded wiring; see Wire and Lug Preparation.
2. Remove the clear plastic cover protecting the terminal studs on the adapter by lifting the small center tab while sliding the cover off the adapter.

4.3.2 Connecting the Ground to PWR-2700-DC-R Power Supply

The primary ground on the system requires a 2 – 4 AWG 5/16 inch lug per power supply.

Figure 4-8: PWR-2700-DC-R Power Supply displays the PWR-2700-DC-R power supply without the DC adapter.

Figure 4-8: PWR-2700-DC-R Power Supply



1 Primary ground

1. Prepare the stranded wiring; see Wire and Lug Preparation.
2. Attach the ground cable to the ground stud.
3. Tightening Torque: 2.7 N-m (24 in.-lbs.).

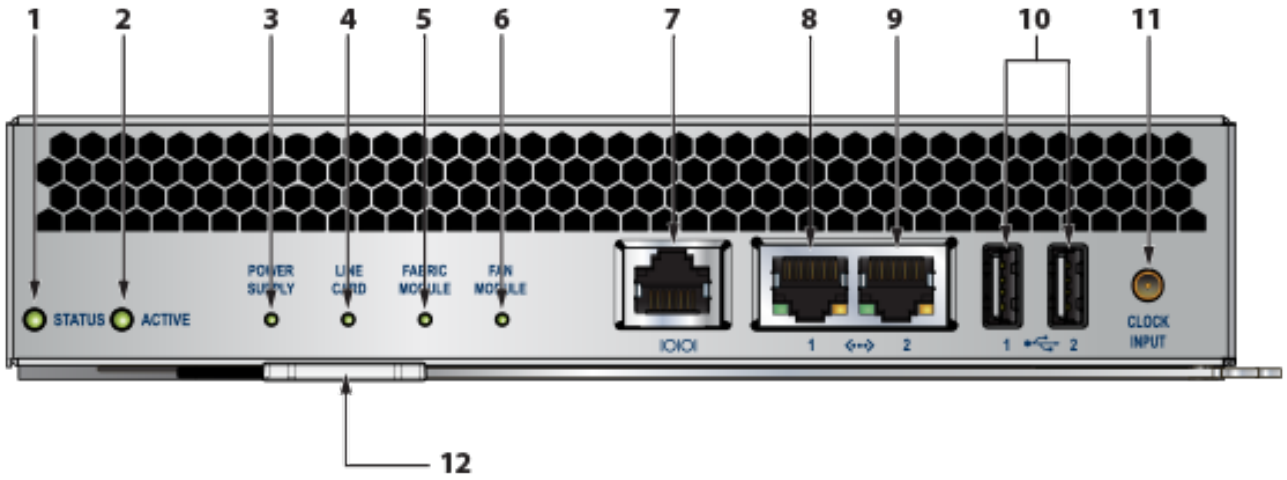
Chapter 5

Connecting Serial and Management Cables

5.1 Connecting Supervisor Cables

Supervisor modules contain console, management, and USB ports. Figure 5-1: Supervisor Ports (DCS-7300(-D)-SUP) displays status LED and port locations on the 7300 Series Modular switch supervisor.

Figure 5-1: Supervisor Ports (DCS-7300(-D)-SUP)



1	Status LED	5	Fabric module status LED	9	Ethernet management port
2	Active LED	6	Fan module status LED	10	USB ports
3	Power supply status LED	7	Console serial port	11	Clock input port
4	Line card status LED	8	Ethernet management port	12	Release lever

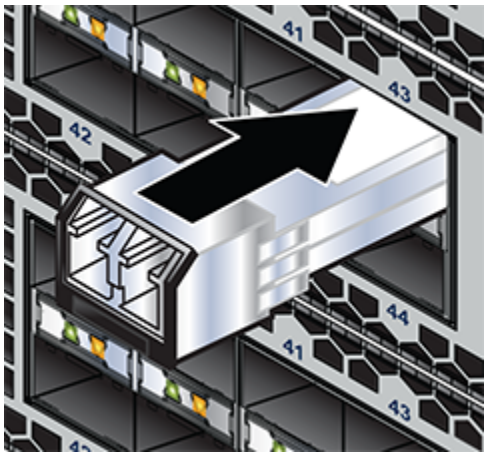
- **Console (Serial) Port:** Connect to a PC with RJ-45 to DB-9 serial adapter cable. Default switch settings include:
  - 9600 baud
  - No flow control
  - 1 stop bit
  - No parity bits
  - 8 data bits
- **Ethernet Management Port:** Connect to 10/100/1000 management network with RJ-45 cable.
- **USB Port:** This may be used for software or configuration updates.
- **Clock Input Port:** The port type is MCX connector, 2-5.5V, 50 ohm termination.

5.2 Connecting Linecard Modules and Cables

Install required SFP, SFP+, and QSFP+ optic modules in linecard module ports (Figure 5-2: SFP or SFP+ Ports).

Connect cables as required to linecard module ports or RJ45 ports.

Figure 5-2: SFP or SFP+ Ports



CAUTION: Excessive bending can damage interface cables, especially optical cables.

Chapter 6

Configuring the Switch

Arista switches ship from the factory in Zero Touch Provisioning (ZTP) mode. ZTP configures the switch without user intervention by downloading a startup configuration file or a boot script from a location specified by a DHCP server. To manually configure a switch, ZTP is bypassed. The initial configuration provides one username (***admin***) that is accessible only through the console port because it has no password.

When bypassing ZTP, initial switch access requires logging in as ***admin***, with no password, through the console port. Then, you can configure an ***admin*** password and other password-protected usernames.

This manual configuration procedure cancels ZTP mode, logs into the switch, assigns a password to ***admin***, assigns an IP address to the management port, and defines a default route to a network gateway.

1. Provide power to the switch (Powering the Modular Switch).
2. Connect the console port to a PC (Connecting Serial and Management Cables).

   As the switch boots without a ***startup-config*** file, it displays this message through the console:

```
The device is in Zero Touch Provisioning mode and is attempting to
download the startup-config from a remote system. The device will not
be fully functional until either a valid startup-config is downloaded
from a remote system or Zero Touch Provisioning is cancelled. To cancel
Zero Touch Provisioning, login as admin and type 'zerotouch cancel'
at the CLI.

localhost login:
```

3. Log into the switch by typing **`admin`** at the login prompt.

```
localhost login: admin
```

4. Cancel ZTP mode by typing **`zerotouch cancel`**.

   Important: This step initiates a switch reboot.

```
localhost> zerotouch cancel
```

5. After the switch boots, log into the switch again by typing **`admin`** at the login prompt.

```
Arista EOS
localhost login:admin
Last login: Fri Mar 15 13:17:13 on console
```

6. Enter global configuration mode.

```
localhost>enable
localhost# config
```

7. Assign a password to the ***admin*** username using the **`username secret`** command.

```
localhost(config)# username admin secret pxq123
```

8. Configure a default route to the network gateway.

```
localhost(config)# ip route 0.0.0.0/0 192.0.2.1
```

9. Assign an IP address (***192.0.2.8/24*** in this example) to an Ethernet management port.

```
localhost(config)# interface management 1/1
localhost(config-if-Ma1/1)# ip address 192.0.2.8/24
```

10. Save the configuration by typing **`write memory`** or **`copy running-config startup-config`**.

```
localhost# copy running-config startup-config
```

11. When the management port IP address is configured, use this command to access the switch from a host using the address configured in **Step 9**:

```
ssh admin@192.0.2.8
```

Refer to the *Arista Networks User Manual* for complete switch configuration information.

Appendix A

Status Indicators

This section discusses the several status indicators, their location, and the meaning of their display status.

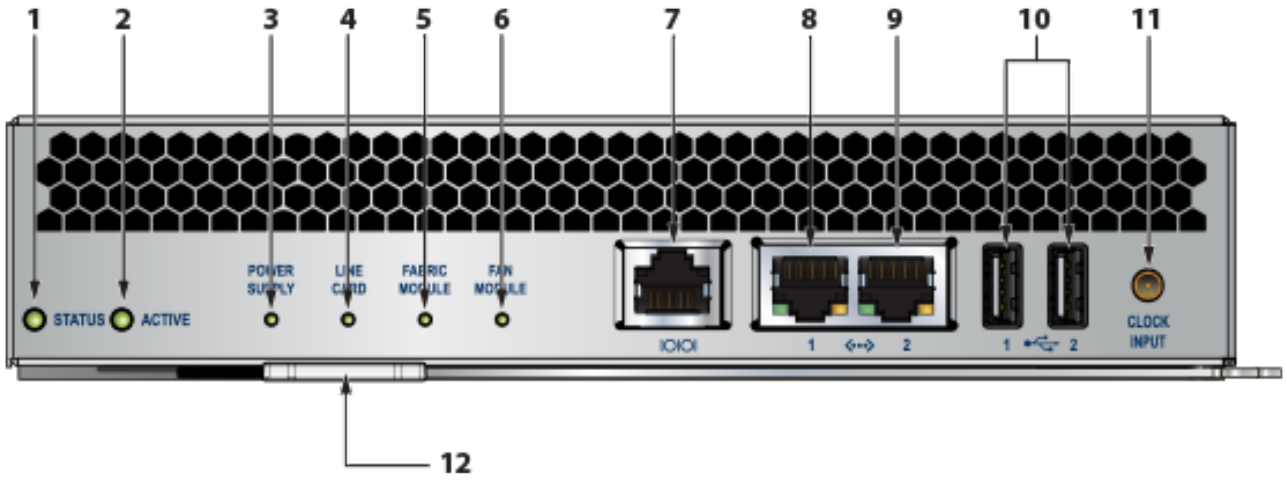
A.1 Supervisor Module

While the front panel of each switch can house two supervisors, switch operations require only one. Supervisors display switch component status and contain Ethernet management and console ports.

Fabric and Fan-only Module Description displays the supervisor location on each switch.

The supervisor provides one serial console port, two Ethernet management ports, two USB ports, and one clock input port. Supervisor activity is reported by LEDs in the lower left corner. Four LEDs located right of these LEDs report status of other switch components. Figure A-1: Supervisor Module (DCS-7300(-D)-SUP) displays the Supervisor Module.

Figure A-1: Supervisor Module (DCS-7300(-D)-SUP)



1	Status LED	5	Fabric module status LED	9	Ethernet management port
2	Active LED	6	Fan module status LED	10	USB ports
3	Power supply status LED	7	Console serial port	11	Clock input port
4	Line card status LED	8	Ethernet management port	12	Release lever

Supervisor Activity Status LEDs

Table 9: Supervisor Activity LED States interprets the states of the Status and Active LEDs.

Table 9: Supervisor Activity LED States

LED Name	LED State	Supervisor State
Status	Off	Module failed or is improperly inserted.
	Green	Supervisor operating normally.
	Red	Module failed.
Active	Off	Supervisor is not active.
	Green	Supervisor is active and controlling the switch.

Component Activity Status LEDs

LEDs located below the vents and left of the input ports display summary indicators for power supplies, fabric modules, fan modules, and line cards. Table 10: Component Activity LED States interprets the states of these indicators. When error conditions are indicated, refer to LEDs on the specified modules to determine the condition's source.

Table 10: Component Activity LED States

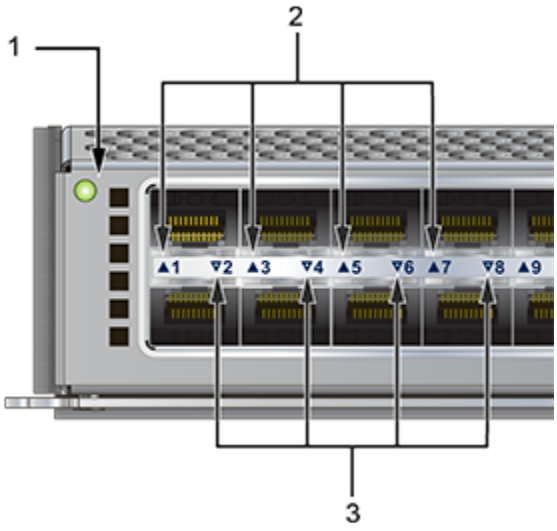
LED Name	LED State	Module State
Power Supply Line Card Fabric Module	Off	No modules are present or powered.
	Green	All powered modules are operating normally.
	Red	At least one module has failed.
Fan Modules	Off	Module not inserted.
	Amber	At least one fan is missing or has failed.
	Green	All modules are operating normally.
	Red	There are insufficient functional fans installed in the switch.

A.2 Linecard Module Indicators

Each linecard module provides one status LED plus LEDs for each port on the card.

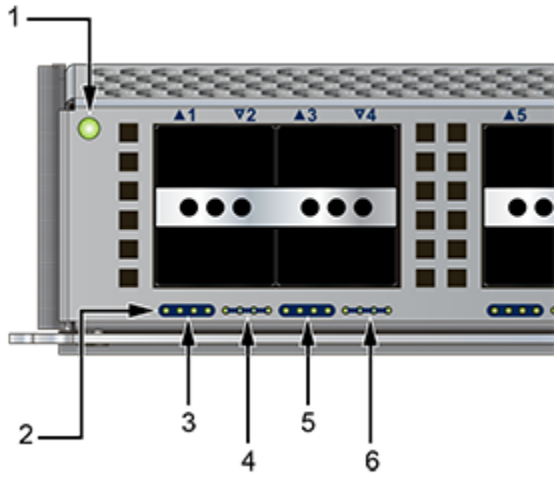
The figures in Linecards indicate the location of the LEDs on each linecard. Figure A-2-left displays the status LED and Port LEDs on the left side of the DCS-7300X-64S-LC linecard. Figure A-2-right displays the status LED and Port LEDs on the left side of the DCS-7300X-32Q-LC linecard.

Figure A-2: Linecard Status LEDs (DCS-7300X-LC)



1 Status LED
2 Upper port status LED
3 Lower port status LED

Figure A-3: Linecard Status LEDs (DCS-7300X-32Q-LC)



1 Status LED
2 10G/40G QSFP Port LEDs
3 QSFP 1
4 QSFP 2
5 QSFP 3
6 QSFP 4

The Linecard Status LED is in the top left corner of the DCS-7300X Linecard. Table 11: Linecard Status LED States interprets the states of the Status LED.

Table 11: Linecard Status LED States

LED State	Status
Off	Linecard not inserted.
Green	Linecard is operating normally.
Yellow	Linecard administratively shut down.
Red	Module has failed.

The linecard provides LEDs for each port module socket:

- Figure A-2: Linecard Status LEDs (DCS-7300X-LC) display SFP module LEDs. Each LED corresponds to a module.
- Figure A-3: Linecard Status LEDs (DCS-7300X-32Q-LC) display QSFP module LEDs. A set of four LEDs correspond to each module. The first LED in the set reports status when the module is programmed as a 40G port. When the module is programmed as four 10G ports, each port is assigned to an LED within the set.

Table 12: Linecard Port LED States interprets port LED states.

Table 12: Linecard Port LED States

LED State	Status
Off	The port link is down.
Green	The port link is up.
Yellow	The port is disabled in the software.

A.3 Fan and Fabric Status Indicators

You can access the fan and fabric modules from the rear panel. Fabric modules are inserted into the switch, and fan modules are inserted into the fabric modules.

Each switch contains four fabric modules; the fan module capacity varies by switch model, as displayed inTable 13: Fan Module Capacity.

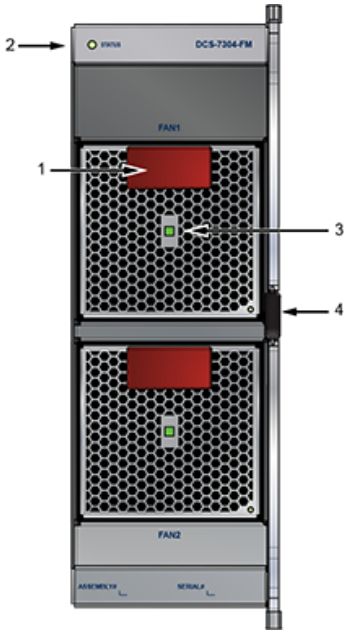
Table 13: Fan Module Capacity

Switch Model	Fabric Capacity	Switch Capacity
DCS-7304	2 fan modules	8 fan modules
DCS-7308	4 fan modules	16 fan modules
DCS-7316	8 fan modules	32 fan modules

The Rear Panels display the rear panel of all switches this guide covers. The Figure A-4: Fan Status and Fabric Status LEDs display a DCS-7304-FM fabric module and the fan modules that it contains.

The fan and fabric module indicators are displayed in the Figure A-4: Fan Status and Fabric Status LEDs. The fan handle indicates the fan direction. All fan modules must have the same color handle.

Figure A-4: Fan Status and Fabric Status LEDs



1 Handle (color indicates airflow orientation)
2 Fabric status LED
3 Fan module installation indicator
4 Fan module status LED

The **fan module installation indicator** is green when the fan module is properly installed or red when the module is not fully installed. The Table 14: Fan and Fabric Status LED States table interprets the states of the Fan and Fabric Status LEDs.

Table 14: Fan and Fabric Status LED States

LED State	Status
Off	The module is inserted but not receiving power – it may not be properly seated.
Green	The module is operating normally.
Red	The module has failed.

A.4 Power Supply Status Indicators

Power Supply LEDs are on power supply modules. The front panel contains power supply modules for all switches; the DCS-7316 rear panel may also contain power supply modules.

Front Panels and Rear Panels display the position of these LEDs on each switch.

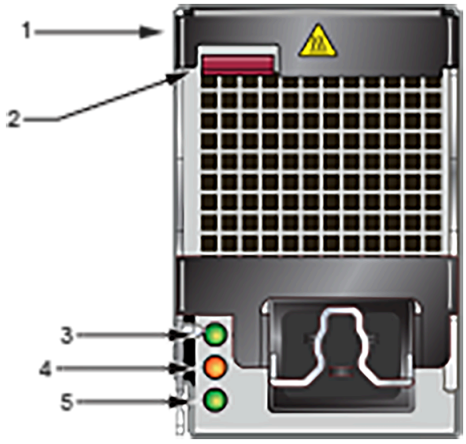
The Figure A-5: Power Supply displays a power supply module.

The power supply handle indicates the power supply fan direction. Verify the airflow direction of all modules satisfies these criteria:

- All rear panel modules (fan and power supply modules) have the same color handles.
- All front panels (power supply modules) have the same color handles.

- Rear panel modules and front panel modules have different color handles.

Figure A-5: Power Supply



1 Release	3 DC OK LED	5 AC OK LED
2 Ejector (color indicates airflow orientation)	4 Fault LED	

The Table 15: Power Supply Status interprets the states of the Power Supply Status LED.

Table 15: Power Supply Status

AC OK LED	Fault LED	DC OK LED	Status
Green	Off	Green	Power Supply module operating normally.
Green	Off	Off	AC is present, Main output is off.
Off	Off	Off	No AC power to the module.
Green	Amber Blinking	Off	Module has faulted.

Appendix B

Fabric and Fan-only Module Description

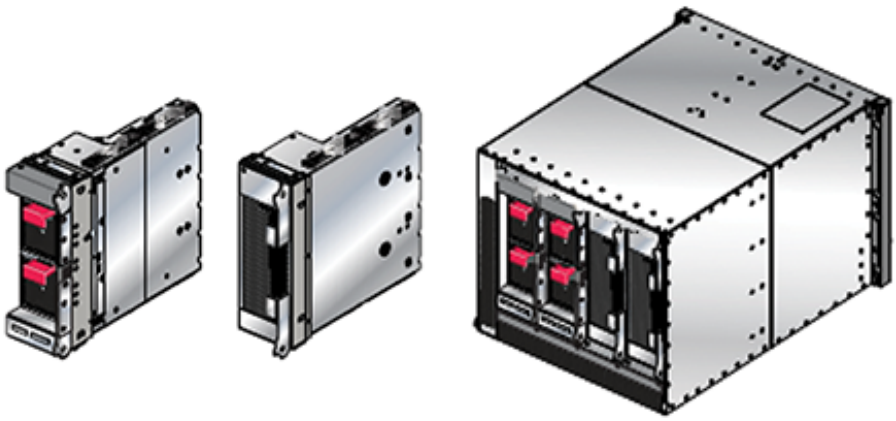
Each switch has four rear slots for **fabric modules**. In addition to providing the data transport media, fabric modules contain fan modules that circulate air through the switch. Proper switch operation requires the population of each rear slot.

Switches are configured for maximum traffic capacity and contain a fabric module in each rear slot. In network configurations that do not require maximum traffic capacity, an economical alternative is to replace two fabric modules with **fan-only modules**.

Each fan-only module provides the cooling capacity of the corresponding fabric module through a set of fans integrated into the module. The fans of a fan-only module are not removable, unlike the fabric module that requires the insertion of individual fan modules.

Fan-only modules are available for the 7304 and 7308 switches. Fabric and Fan Modules: Extracted-left displays a 7304 fabric module and a 7304 fan-only module that is removed from the switch. Fabric and Fan Modules: Installed-right displays the rear panel of a 7304 switch that contains two fabric modules and two fan-only modules.

Figure B-1: Fabric and Fan-only Modules: Extracted (left) and Installed (right)



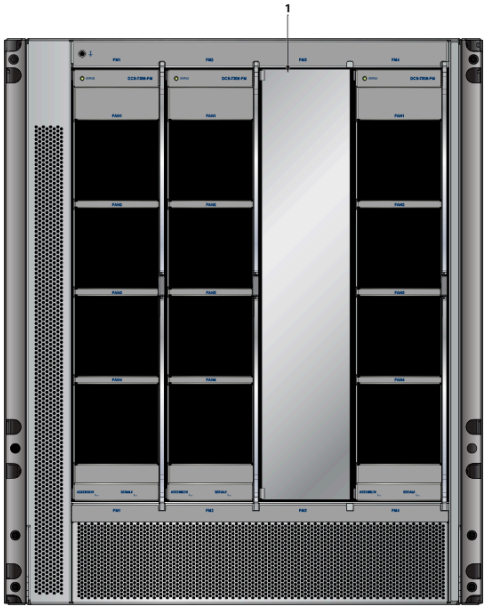
Each module includes lock levers that secure it to the chassis. The module and the lock levers are easily damaged by improperly removing, inserting, or handling the fabric module. Never use the lock levers to lift or move the module after it is removed from the chassis.

The color of the fan modules specifies the fan direction of the fabric modules. The fan direction on fan-only modules is denoted by the indicator located below the top handle (Figure B-5: DCS-7304 Fabric and Fan-only Module (left); DCS-7304 Fan-only Module (right)).

The following module combinations are the only valid rear panel configurations:

- Fabric Modules in slots 1 – 4
- Fabric Modules in slots 1 – 2; Fan-only modules in slots 3 – 4.

Note: On the 7308, if a fan-only module is not inserted, a metal piece covers the slot, as shown below.



1 Metal covering

Part Numbers

Table 16: Fabric and Fan-only Module Part Numbers lists the part numbers of Fabric and Fan-only Modules.

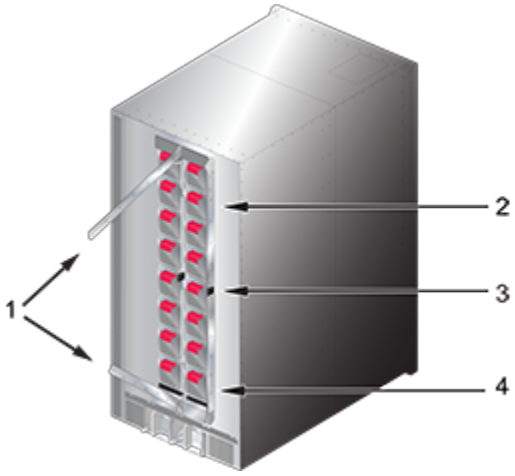
Table 16: Fabric and Fan-only Module Part Numbers

Switch Model	Fabric Module	Fan-only Module
DCS-7304 (Air Inlet) DCS-7304 (Air Exit)	DCS-7304X-FM-R DCS-7304X-FM-F	DCS-7304-S-FAN-R DCS-7304-S-FAN-F
DCS-7308 (Air Inlet) DCS-7308 (Air Exit)	DCS-7308X-FM-F DCS-7308X-FM-R	DCS-7308-S-FAN-R DCS-7308-S-FAN-F
DCS-7316 (Air Inlet) DCS-7316 (Air Exit)	DCS-7316X-FM-F DCS-7316X-FM-R	Not Available Not Available
DCS-7324 (Air Exit Only)	DCS-7324-FM-F	Not Supported
DCS-7328 (Air Exit Only	DCS-7328-FM-F	Not Supported

B.1 Handling Fabric Modules

Figure B-2: Locking Mechanism: DCS-7316 Fabric depicts a DCS-7316 chassis with the inner two fabric modules installed. Lock levers are shown in the open and closed position, along with the button that releases them into the open position. The lock levers are in the closed position when the switch is in service.

Figure B-2: Locking Mechanism: DCS-7316 Fabric



1 Lock levers open (FM2)
2 Upper lock lever closed (FM3)
3 Release button (FM3)
4 Lower lock lever closed (FM3)

These sections describe fabric module handling procedures. Illustrations depict a DCS-7316 chassis and fabric modules. While proper handling of DCS-7316 components is imperative because of their size and weight, the instructions also describe best practices for handling DCS-7304 and DCS-7308 components.

B.1.1 Removing Fabric Modules

Note: While removing and replacing a fabric module in a gen3 chassis (7304X3, 7308X3), issue a command to offload traffic before removing the module to avoid potential traffic loss.

This procedure removes a fabric from the switch chassis.

1. Release the lock levers from the module frame (Fabric Module Removal: Initial Position-left).
2. Extend the lock levers towards the top and bottom of the chassis (Fabric Module Removal: Initial Position-right).
3. Use the lock levers to pull the module three to four inches (Fabric Module Removal: Edging the Module Out-left).
4. Return the lock levers to the closed position (Fabric Module Removal: Edging the Module Out Closing the Lock Levers-right).

5. Grasp the module frame and pull it until it is completely outside the chassis.

Figure B-3: Fabric Module Removal: Initial Position and Opening the Lock-Levers

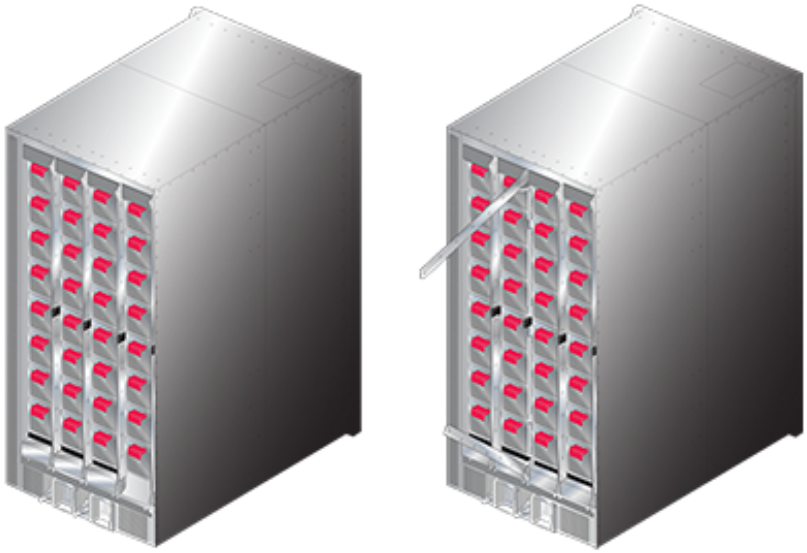
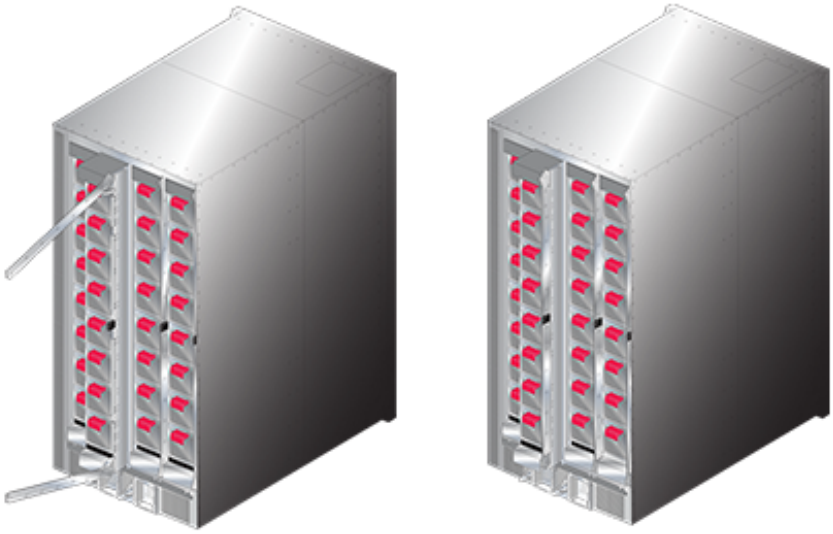


Figure B-4: Fabric Module Removal: Edging the Module Out and Closing the Lock-Levers



The DCS-7316 fabric module is almost three feet long and weighs close to 40 pounds. Use necessary precautions to safely manage the component outside of the chassis.

B.1.2 Inserting Fabric Modules

The fabric module insertion process is the inverse of the removal procedure. These instructions describe the method of inserting the fabric module into a chassis.

1. Grasping the module by its frame, place the module chassis railing that corresponds to the slot where it is to be placed. The lock levers should be in the closed position.

2. Slide the module into the chassis until it's within three to four inches of being fully inserted (Fabric Module-right).
3. Press the Release Button to release the lock levers into the open position (Fabric Module-left).
4. Continue inserting the module into the chassis. If other fabric modules are in the chassis, the module being installed should be in the same relative position (Fabric Module-right).
5. Return the lock levers to the closed position, securing the module to the chassis (Fabric Module-left).

B.2 Handling Fan-only Modules

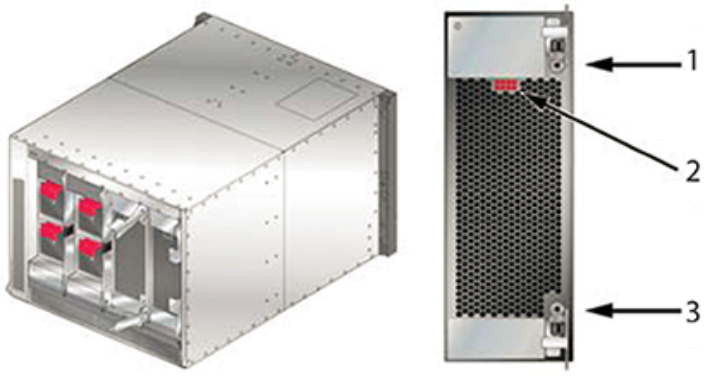
DCS-7304 Fabric and Fan-only Module (left) depicts a DCS-7304 chassis with installed fabric modules (slots 1 and 2) and fan-only modules (slots 3 and 4). Lock levers are shown in the open (slot 3) and closed (slot 4) position DCS-7304 Fan-only Module (right) displays the position of the lock lever release screw (below the extended handles).

The fan direction indicator is located below the top handle. Refer to Site Selection for airflow configuration requirements.

The following configuration is mandatory when fan-only modules are installed:

- Slots 1 and 2 contain fabric modules.
- Slots 3 and 4 contain fan-only modules.

Figure B-5: DCS-7304 Fabric and Fan-only Module (left); DCS-7304 Fan-only Module (right)



1 Lock lever release screw

2 Fan airflow direction (color indicates airflow direction)

3 Lock lever release screw

B.2.1 Removing Fan-only Modules

This procedure describes the proper method for removing fan-only modules from the switch:

1. Release the lock levers from the module frame by rotating each handle's release screw counter-clockwise (DCS-7304 Fan-only Module (right)).
2. Extend the lock levers towards the top and bottom of the chassis (DCS-7304 Fabric and Fan-only Module (left)).
3. Use the lock levers to pull the module three to four inches from the installed position.

4. Return the lock levers to the closed position.
5. Grasp the module frame and pull the module until it is completely outside of the chassis.

B.2.2 Inserting Fan-only Modules

The fabric module insertion process is the inverse of the removal procedure. These instructions describe the method of inserting the fabric module into a chassis.

1. Grasping the module by its frame, place the chassis railing corresponding to the slot where it is to be placed. The lock levers should be in the closed position.
2. Slide the module into the chassis until it is within three to four inches of being fully inserted.
3. Extend the lock levers towards the top and bottom of the chassis.
4. Continue inserting the module into the chassis.
5. Return the lock levers to the closed position, securing the module to the chassis.
6. Secure each lock lever handle to the module by inserting the release screw into the module body and rotating clockwise.

Appendix C

Parts List

Each switch provides an accessory kit containing the parts required to install the switch into a four-post rack. Two-post rack mount parts are available through your sales representative. The following sections list the installation parts provided by the accessory kit.

C.1 Parts Used in All Configurations

Quantity	Description
One for each AC power supply module supplied with a switch.	Power cables: 14 AWG, C19-C20.
One for each DC power supply module supplied with a switch.	DC Adapter (Arista part number CON-00581; part number G10TBL2021100211HR; Figure C-1: DC Adapter), Terminal Block, M4 Lug.
One	RJ-45 Patch Panel Cable, 2 meters.
One	RJ-45 to DB9 Adapter Cable, 2 meters.

Warning: All provided power cables are for use only with Arista products.

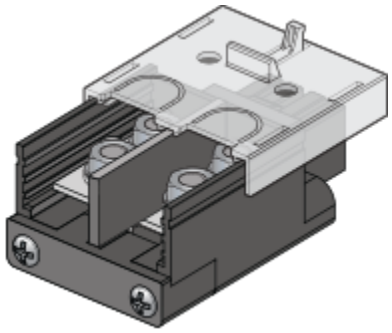
Câbles d'alimentation doivent être utilisés uniquement avec des produits de Arista.

Warning:

警告
すべての電源コードは提供する製品で使用するためだけを目的としている。

電源コードの他の製品での使用の禁止
Aristaが提供するすべての電源コードは、Aristaの製品でのみ使用してください。

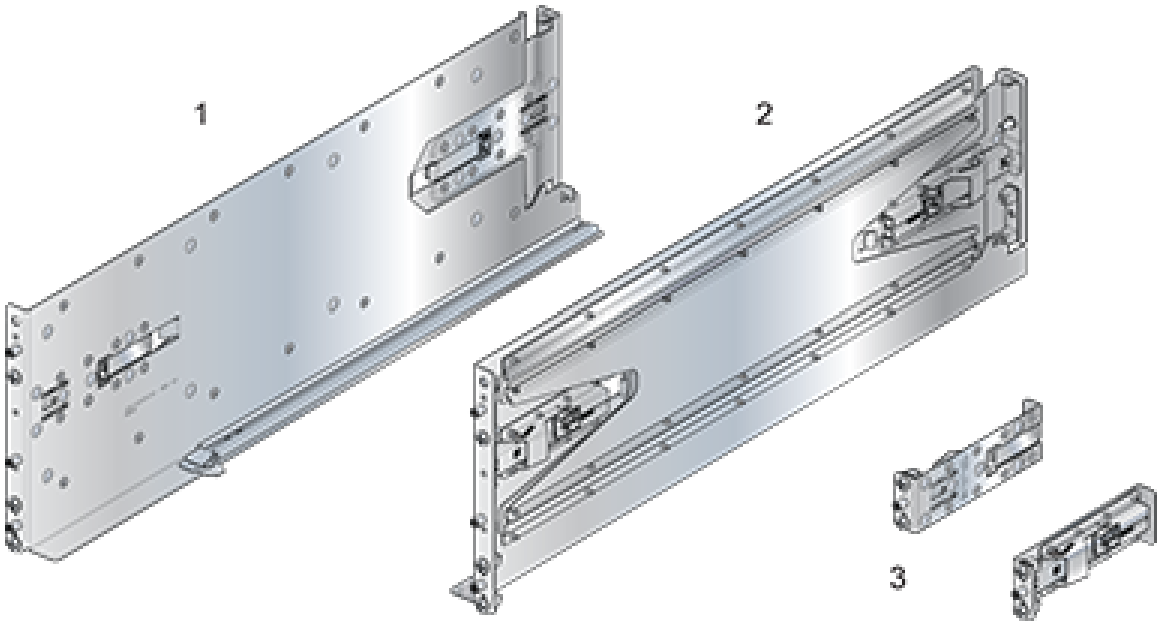
Figure C-1: DC Adapter



C.2 Four-Post Rack Mount Parts

Quantity	Description
2	Mounting Ears
1	Left shelf
1	Right shelf

Figure C-2: Four-Post Rack Mount Parts



1 Left shelf 2 Right shelf 3 Mounting ears

C.3 Four-Post Rack Mount Kit (Optional - 106-575-074-00)

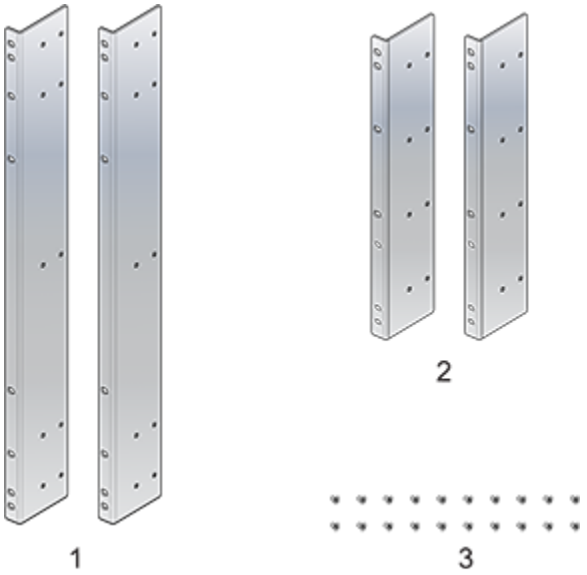
Part Number	Quantity	Description	Rack Type
036-030-014	18	M610 clip nuts	Round hole
036-023-025	18	M6 cage nuts	Square hole
036-020-051	18	12-24 x .50 screws	Threaded hole
106002508	18	M6 x .50 screws	Square, round, and threaded hole
036-701-148	18	10-32 x .50 screws	Threaded hole

C.4 Two-Post Rack Mount Parts

Two-post rack mount parts for DCS-7304 and DCS-7308 switches are available through your sales representative. Two-post rack mounts are not supported for DCS-7316 switches.

Quantity	Description
2	Center-mount brackets.
16 (DCS-7304) 20 (DCS-7308)	M4x8 panhead Phillips screws.

Figure C-3: Two-Post Rack Mount Parts



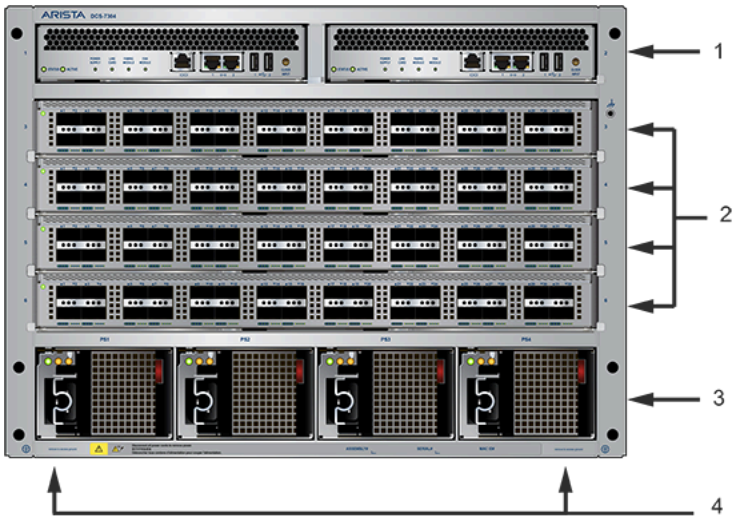
1 Center-mount brackets (7308 only) 2 Center-mount brackets (7304 only) 3 M4x8 panhead Phillip Screws

Appendix D

Front Panels

This Front Panel section displays the front panel of all switches covered by this guide.

DCS-7304 and DCS-7324 Front Panel (fully populated)



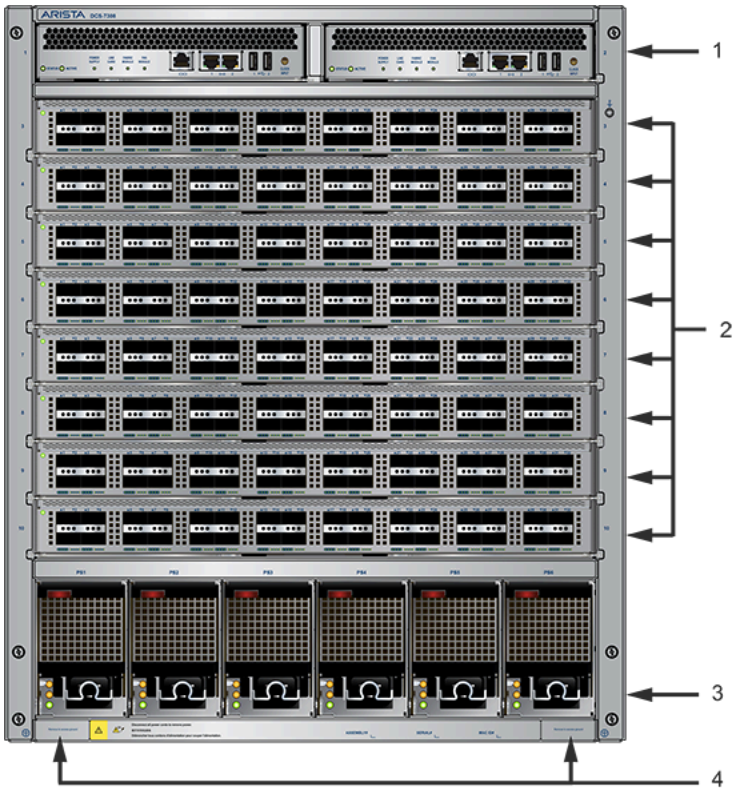
1 Supervisor modules (slots 1-2)

2 Linecard modules (slots 3-6)

3 Power supply modules

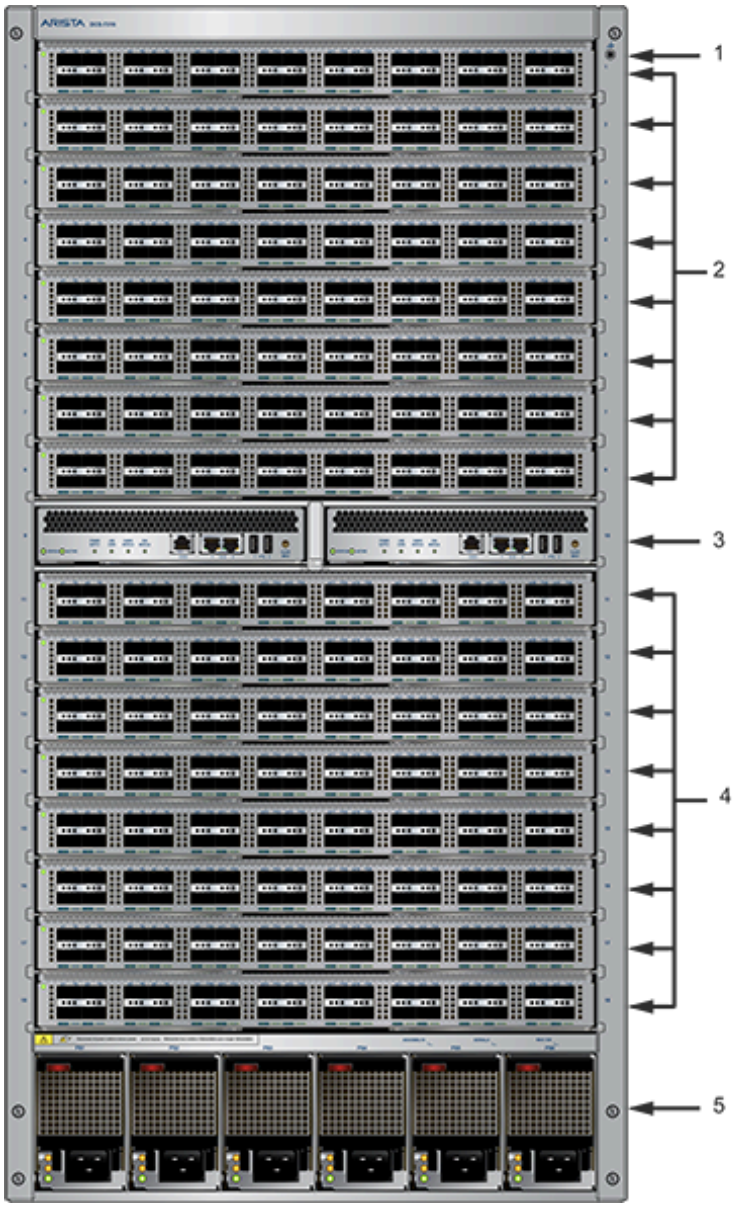
4 Earth grounding pads (behind covers)

DCS-7308 and DCS-7328 Front Panel (fully populated)



1 Supervisor modules (slots 1-2)
2 Linecard modules (slots 3-10)
3 Power supply modules
4 Earth grounding pads (behind covers)

DCS-7316 Front Panel (fully populated)



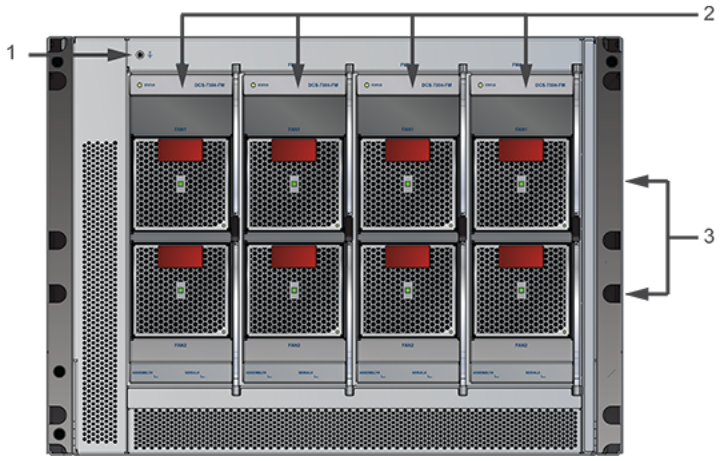
1	ESD grounding port	2	Linecard modules (slots 3-10)	3	Supervisor modules (slots 1-2)
4	Linecard modules (slots 11-18)	5	Power supply modules		

Appendix E

Rear Panels

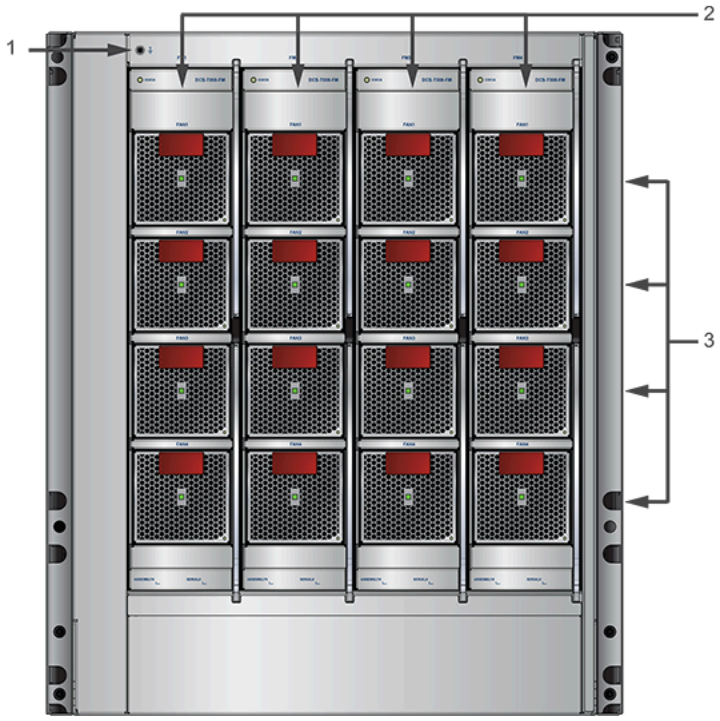
This Rear panel section displays the rear panel of all switches covered by this guide.

DCS-7304 and DCS-7324 Rear Panel



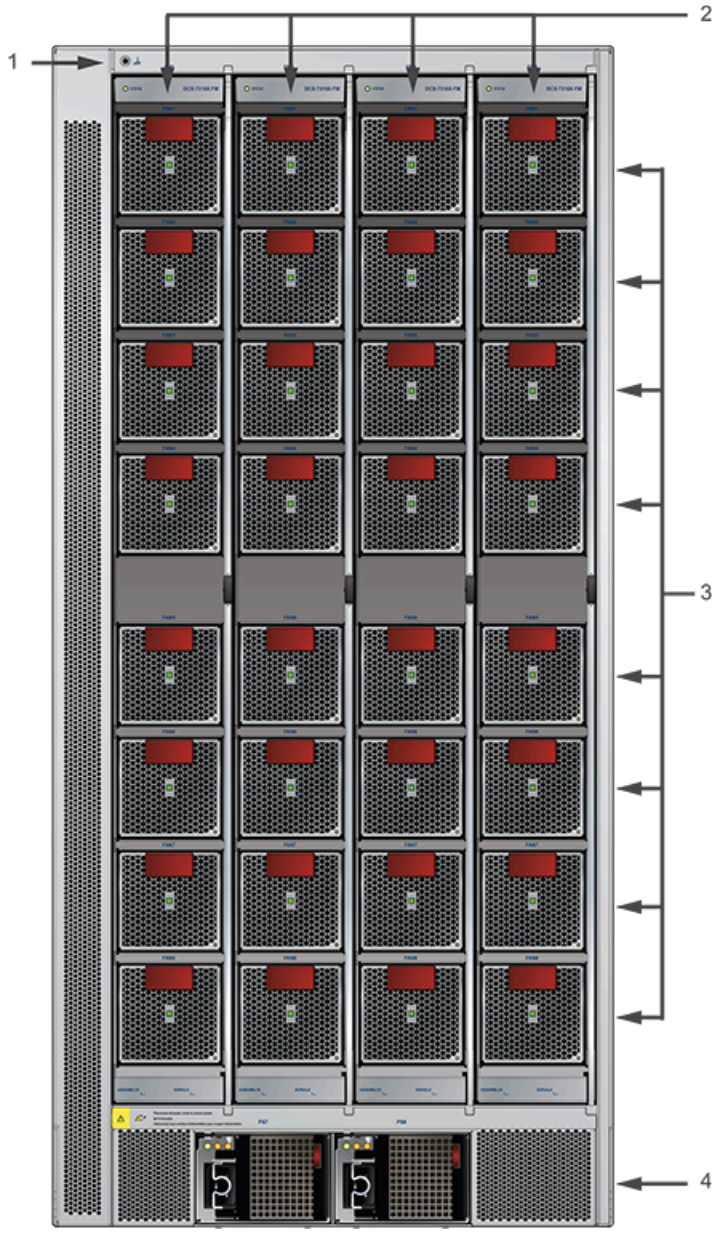
1 ESD grounding port 2 Fabric modules 3 Fan modules

DCS-7308 and DCS-7328 Rear Panel



1 ESD grounding port 2 Fabric modules 3 Fan modules

DCS-7316 Rear Panel



1 ESD grounding port

2 Fabric modules

3 Fan modules

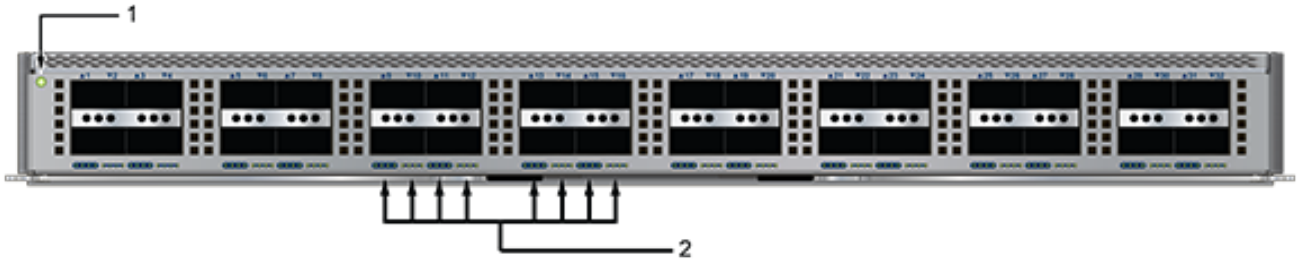
4 Power Supply Modules

Appendix F

Linecards

This linecard section displays the linecards supported by modular switches covered by this guide.

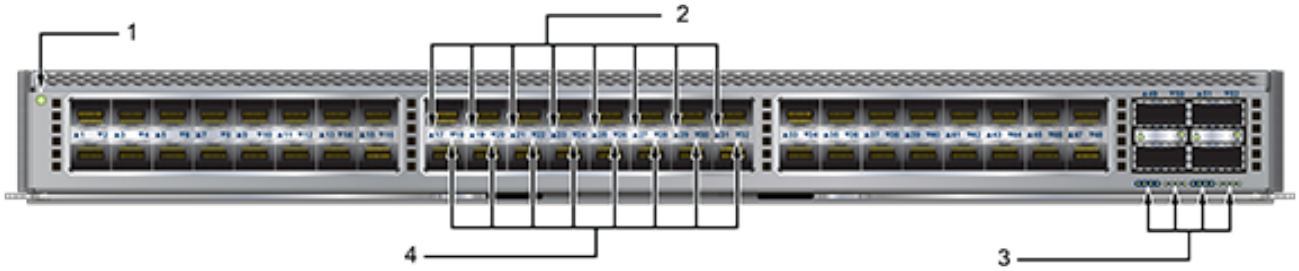
DCS-7300X-32Q-LC



1 Status LED

2 10G/40G port LEDs

DCS-7300X-64S-LC



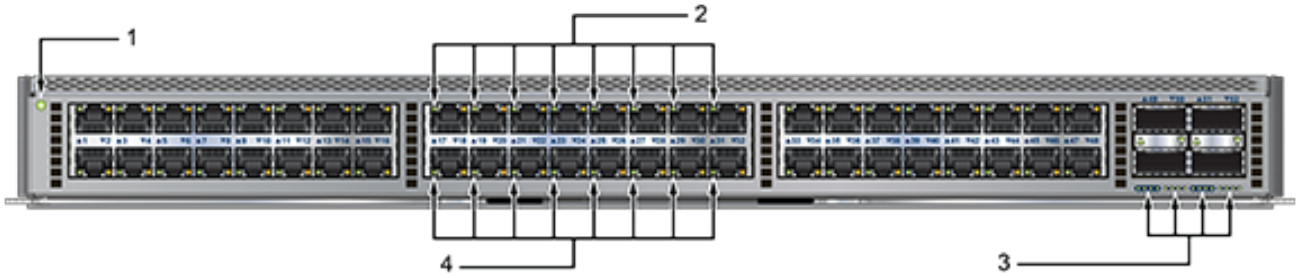
1 Status LED

2 10G upper port LEDs

3 10G/40G Port LEDs

4 10G lower port LEDs

DCS-7300X-64T-LC



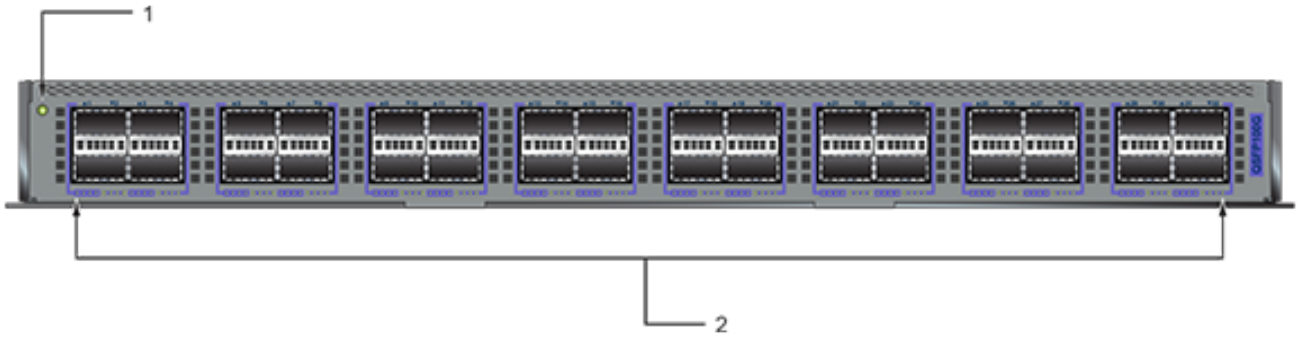
1 Status LED

2 10G upper port LEDs

3 10G/40G Port LEDs

4 10G lower port LEDs

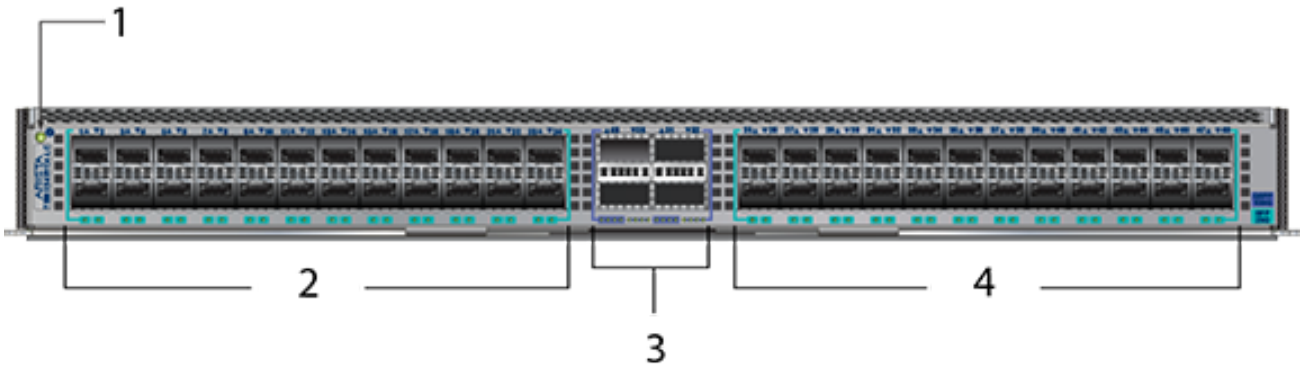
DCS-7320X-32C-LC and DCS-7300X3-32C-LC



1 Status LED

2 100G port LEDs

DCS-7300X3-48YC4-LC



1 Status LED

2 SFP 25G port LEDs

3 QSFP 100G port LEDs

4 SFP 25G port LEDs

Appendix G

Taiwan RoHS Information

This section provides the Taiwan RoHS information for switches covered by this guide.

For the Taiwan BSMI RoHS Table, go to https://www.arista.com/assets/data/pdf/AristaBSMIRoHS.pdf.