

ARISTA

Quick Start Guide

**7020SR-32C2 Series 1 RU (Gen 3)
Data Center Switches**

Arista Networks

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Overview


The following topics are covered in the section:

- [Scope](#)
- [Receiving and Inspecting the Equipment](#)
- [Installation Process](#)
- [Safety Information](#)
- [Obtaining Technical Assistance](#)
- [Specifications](#)

1.1 Scope

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

DCS-7020SR-32C2

-  **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 and Parts Required for Installation](#)).
3. Attach the mounting brackets and install the switch in an equipment rack ([Rack Mounting the Switch](#)).
4. Connect the switch to the power source and network devices ([Cabling the Switch](#)).
5. Configure the switch ([Configuring the Switch](#)).

 **Important:**

Class 1 Laser Product: This product has provisions to install Class 1 laser transceivers which provide optical coupling to the communication network. Once a Class 1 laser product is installed, the equipment is a Class 1 Laser Product. 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 60825, 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 6-825, 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 should 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 et règlements.

1.4 Safety Information

Refer to the Arista Networks document *Safety Information and Translated Safety Warnings* available 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.



Important:

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: Switch Specifications (Dimensions and Weights)

Switch	Size (W x H x D)	Weight
DCS-7020SR-32C2	48.3 x 4.4 x 34.7 cm (19 x 1.75 x 13.6 inches)	6.4 kg (14.4 lbs.)

Table 2: Switch Specifications (Operational and Storage)

Switch	Operating Temperature	Storage Temperature	Operating Altitude	Relative Humidity
All	0° to 40°C (32° to 104°F)	-25° to 70°C (-13° to 158°F)	0 to 3,000 meters (0 to 10,000 feet)	5 to 90% (non-condensing)

Table 3: Switch Specifications (Power Input)

Power Source	PSU Models	Ratings
Power Input (AC Power)	PWR-400AC	100 - 240 VAC, 4.5 A (max), 50/60 Hz

Table 4: Switch Specifications (Power Input)

Power Source	PSU Models	Ratings
Power Input (DC Power)	PWR-400-DC	24 VDC / 16 A, 48 VDC / 11 A, 60 VDC / 9 A



Note: All PSU models are not supported by all switches. Some switches described in this guide could use power supplies that may no longer be available. Contact your local Arista representative for more information.

Table 5: Switch Specifications (Power Draw)

Switch	Power Draw (Typical / Maximum)	Supported Power Supply
DCS-7020SR-32C2	160 W / 189 W	PWR-400AC, PWR-400-DC

Preparation

The following topics are covered in this section:

- [Site Selection](#)
- [Tools and Parts Required for Installation](#)
- [Electrostatic Discharge \(ESD\) Precautions](#)

2.1 Site Selection

The following criteria should be considered when selecting a site to install the switch:

- **Temperature and Ventilation:** For proper ventilation, install the switch where there is ample airflow to the front and back of the switch. The ambient 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 surchauffer, ne pas utiliser il dans une zone où la température ambiante est supérieure à 40°C (104°F).

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

[Airflow Direction](#) displays fan and power supply module locations on the device. Base the switch orientation on the airflow direction of the modules to assure the air inlet is always oriented toward the cool aisle.

- **Air Exit modules:** orient the rear panel toward the hot aisle.
- **Air Inlet modules:** orient the rear panel toward the cool aisle.

If the airflow direction is not compatible with the installation site, contact your sales representative to obtain modules that circulate air in the opposite direction.

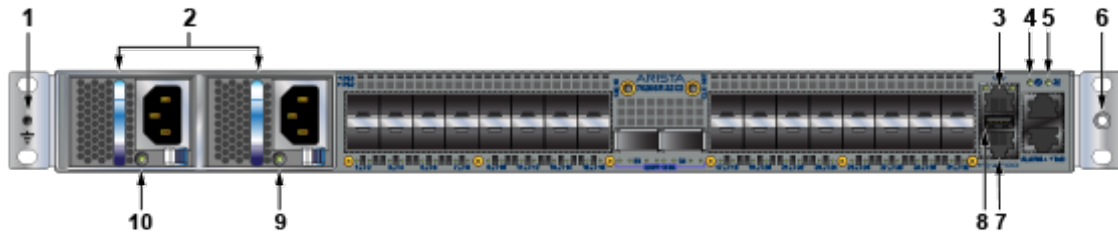
- **Rack Space:** Install the switch in a 19" rack or cabinet. The switch height is 1 RU. The accessory kit provides mounting brackets for two-post and four-post racks.

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.

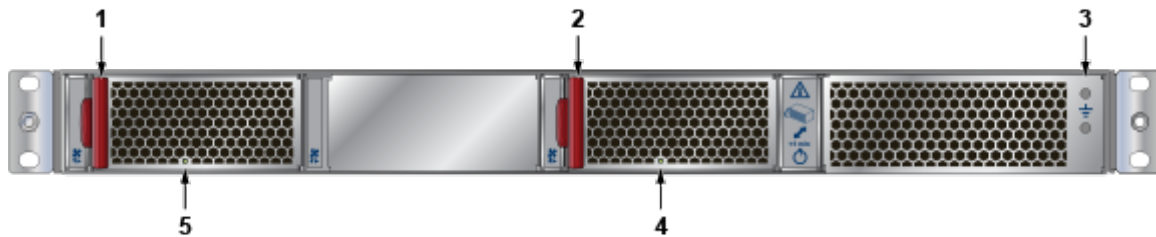
- **Power Requirements:** Power requirements vary by switch and power supply model. Refer to [Table 4: Switch Specifications \(Power Input\)](#) and [Table 5: Switch Specifications \(Power Draw\)](#) for information regarding your specific system.

Two circuits provide redundancy protection. [Cabling the Switch](#) describes power cable requirements.

Figure 1: Airflow Direction



- | | |
|--|------------------------------|
| 1 Ground Lug | 6 ESD |
| 2 Blue Handles indicates forward airflow | 7 Console (Serial) Port |
| 3 Ethernet Management Port | 8 USB Port |
| 4 System Status LED | 9 Power Supply 2 Status LED |
| 5 Fan Status LED | 10 Power Supply 1 Status LED |



- | | |
|-----------------------|---------------------------|
| 1 Fan Module 1 Handle | 4 Fan Module 3 Status LED |
| 2 Fan Module 3 Handle | 5 Fan Module 1 Status LED |
| 3 Ground | |



Important:

The power input plug-socket combination must be accessible at all times; it provides the primary method of disconnecting power from the system.

La combinaison de la puissance-prise d'entrée doit être accessible en tout temps ; Il fournit 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.
- Power cords can reach from the power outlet to the connector on the rear panel.



Important:

All power connections must be removed to de-energize the unit.

Toutes les connexions d'alimentation doivent être enlevées pour hors tension l'appareil.

2.2 Tools and Parts Required for Installation

Each switch provides an accessory kit that contains parts that are required to install the switch. In addition to the accessory kit, the following tools and equipment are required to install the switch:

Two-Post Rack

- Screws or rack mounting nuts and bolts.
- Screwdriver



Note: For DCS-7020SR-32C2, four-post rack kits are optional and sold separately.

Four-Post Rack (Tool-less)

No additional equipment required.

Four-Post Rack (Conventional)

- Screws or rack mounting nuts and bolts.
- Screwdriver

Accessory kit does not include screws for attaching the switch to the equipment rack. When installing the switch into an equipment rack with unthreaded post holes, nuts are also required to secure the switch to the rack posts.

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.
- Use a conductive work surface (such as an anti-static mat) to dissipate static charge.
- Wear a conductive 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.
- Use tools that do not create ESD.

Rack Mounting the Switch

! **Important:**

The rack mounting procedure is identical for all switches covered by this guide. Illustrations in this chapter depict the mounting of a DCS-7020SR-32C2 switch.

Les procédures de montage du bâti est identique pour tous les commutateurs visés par ce guide. Illustrations dans ce chapitre montrent le montage d'un interrupteur de DCS-7020SR-32C2.

- [Two-Post Rack Mount](#) provides instructions for mounting all switches in a two-post rack.
- [Four-Post Rack Mount](#) provides instructions for mounting all switches in a four-post rack.

After completing the instructions for your rack type, proceed to [Cabling the Switch](#).

3.1 Two-Post Rack Mount

To mount the switch onto a two-post rack, attach the mounting ears to the chassis, then attach the ears to the rack posts. Two-post accessory kit includes 2x mounting ears as two-post mounting parts.

! **Important:**

Attachment pins must engage all three upper bracket holes.

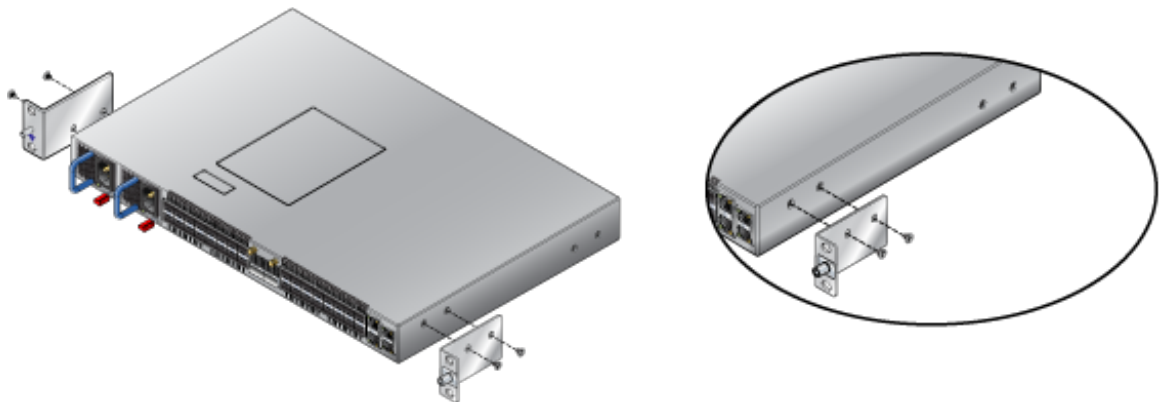
Goupilles de fixation doivent être bloquer tous les trois trous de la bride supérieure.

3.1.1 Attaching Mounting Brackets to the Chassis

This procedure attaches mounting brackets to the switch chassis as depicted by [Figure 2: Attaching Mounting Brackets to the Switch Chassis](#).

1. Align the mounting brackets with the sides of the chassis.
2. Use the screws to attach the brackets to the chassis.

Figure 2: Attaching Mounting Brackets to the Switch Chassis




Note: DCS-7020SR-32C2 supports front mount only.

3.1.2 Inserting the Switch into the Rack

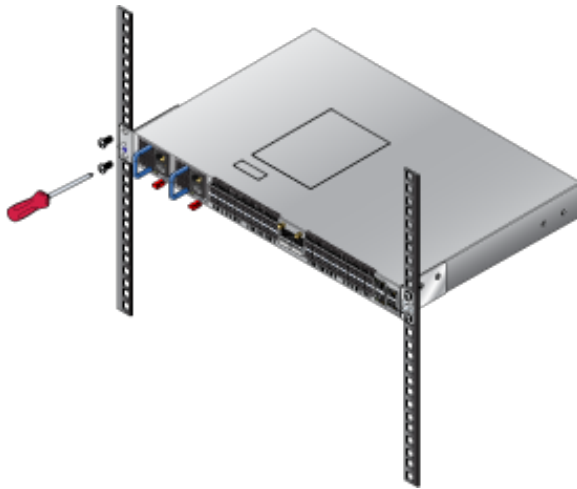
This procedure attaches the switch to the rack ([Figure 3-2](#)).

1. Lift the chassis into the rack. Position the mounting ears against the rack posts.

 **Note:** The mounting ears should be at the same height to ensure that the device is level.


2. Select mounting screws that fit your equipment rack.
3. Attach the mounting ears to the rack posts.

Figure 3: Inserting the Switch into the Rack



After completing the two-post rack mount, proceed to [Cabling the Switch](#).

3.2 Four-Post Rack Mount

 **Note:** For DCS-7020SR-32C2, four-post rack kits are optional and sold separately.

The switch is mounted onto a four-post rack by assembling two rails onto the rear posts, sliding the switch onto the rails, then securing the switch to the front posts.

The installation kit provides the following four-post mounting parts:

- 2x mounting brackets
- 2x rail-rods
- 2x rail-slides

The rail-rods and rail-slides assemble into two identical slide-rails.

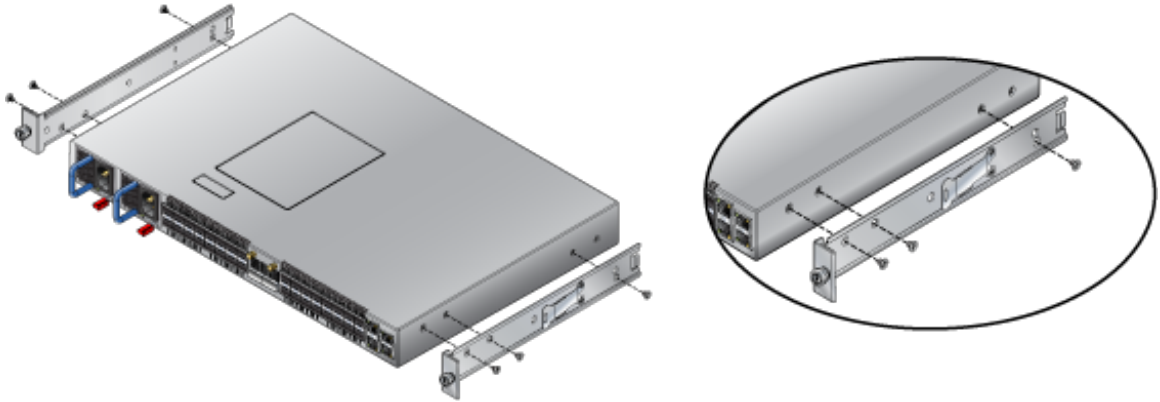
3.2.1 Attaching Mounting Brackets to the Chassis

This procedure attaches mounting brackets to the switch chassis as depicted by [Figure 2: Attaching Mounting Brackets to the Switch Chassis](#).

1. Align the mounting brackets with the sides of the chassis.

2. Use the screws to attach the brackets to the chassis.

Figure 4: Attaching Mounting Brackets to the Switch Chassis

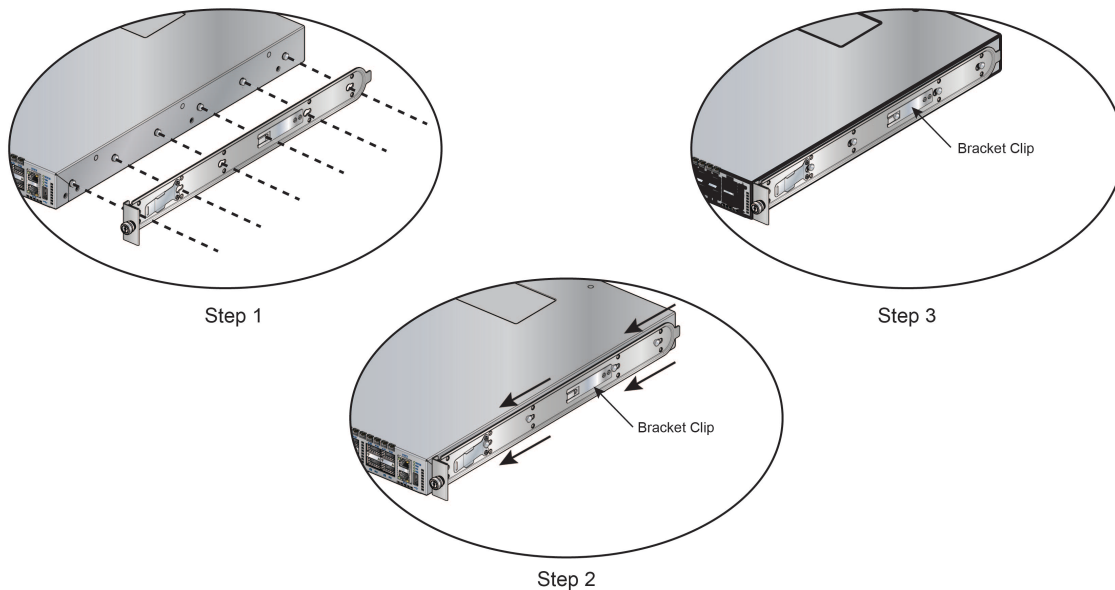


3.2.2 Assembling the Rails onto the Equipment Rack

Rail-rods and rail-slides assemble into two identical rails. Each rail connects a front post to a rear post. When the rails are installed, the switch slides on the rails into the rack. Each bracket includes a screw that attaches the switch to the rail.

Each end of an assembled rail contains two rack plugs ([Figure 5: Attaching the Mounting Brackets to the Switch Chassis](#)). The rails are installed into a rack by inserting the plugs into rack slots. When installing rails into posts with threaded or rounded holes, remove all plugs located on both sides of the assembled rails, then install the rails with bolts that fit the rack.

Figure 5: Attaching the Mounting Brackets to the Switch Chassis



This procedure attaches the rails to a four post rack:

1. Slide a rail-rod into a rail-slide ([Figure 6: Assembling the Rails](#)) until the rail clip makes an audible click.


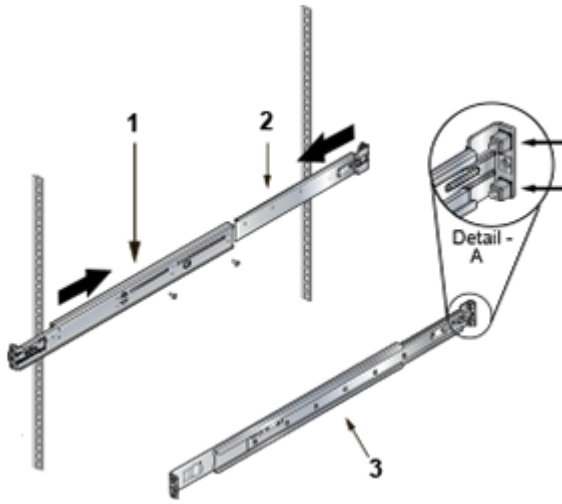
 **Note:** The rail clip prevents the extension of the rail beyond the maximum supported distance between the front and rear rack posts.

Figure 6: Assembling the Rails




1 Rail Slide

2 Rail Rod

3 Rail (assembled)

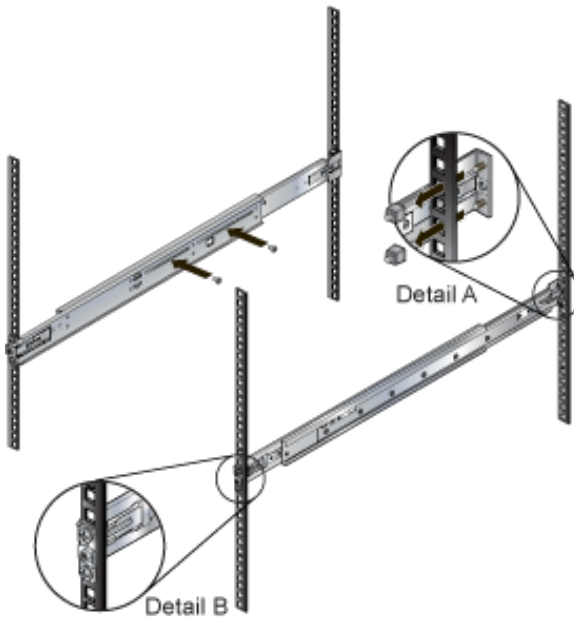
A Rack Plugs

2. Attach rail to the right rear rack post by inserting rod-end rack plugs into post slots ([Figure 7: Attaching the Rails](#)). The slide assembly must be inside the right posts, relative to the left rack posts.

 **Note:** If the rack plugs were previously removed, use bolts to attach the rail to the rack.

3. Attach the slide end of the rail to the front post by extending the rail end past the post, then contracting the rail while guiding the rack plugs into the post ([Figure 7: Attaching the Rails](#)).
4. Repeat Step 1 through Step 3 for the left posts. Ensure the rails are on the same horizontal level.

Figure 7: Attaching the Rails



3.2.3 Attaching the Switch to the Rack

After the rails are installed, the switch slides on the rails into the rack. Each bracket includes a thumb screw that attaches the switch to the rail.

1. Lift the switch into the rack and insert the mounting brackets into the slide rails ([Figure 8: Inserting the Switch onto the Rails](#)).

Figure 8: Inserting the Switch onto the Rails



2. Slide the switch on the rails, toward the rear posts, until the mounting bracket flanges are flush with the rail flanges attached to the rack posts.
3. Attach the bracket flanges to the rack post using the quick-release thumb screws supplied with the brackets ([Figure 9: Attaching the Switch to the Rack Posts](#)).

Figure 9: Attaching the Switch to the Rack Posts



After completing the four-post rack mount, proceed to [Cabling the Switch](#).

Cabling the Switch

The following topics are covered in this section:

- [Grounding the Switch](#)
- [Connecting Power Cables](#)
- [Connecting Serial and Management Cables](#)

4.1 Grounding the Switch

After mounting the switch into the rack, connect the switch to the data center ground. Figure 4-1 displays the location of the grounding lug on the front, left mounting ear for the DCS-7020SR-32C2

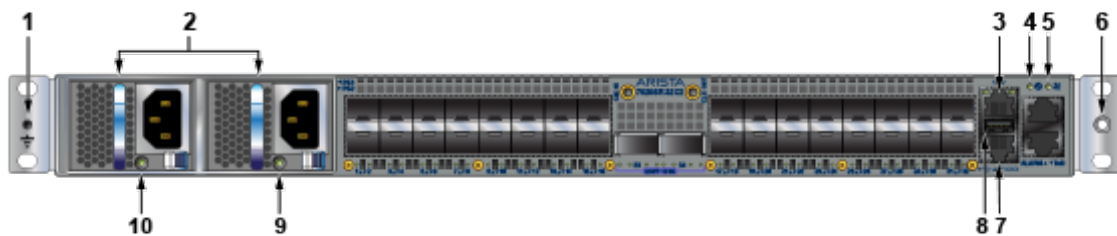


Important:

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 6 fils AWG est recommandé pour les installations aux États-Unis.

Figure 10: Earth Grounding Pad Sockets for DCS-7020SR-32C2



- | | |
|---|------------------------------|
| 1 Ground lug | 6 ESD |
| 2 Blue handle indicates forward airflow | 7 Console (Serial) port |
| 3 Ethernet management port | 8 USB port |
| 4 System status LED | 9 Power supply 2 status LED |
| 5 Fan status LED | 10 Power supply 1 status LED |

4.2 Connecting Power Cables



Important:

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

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 two installed power supplies. At least one power supply must connect to a power source. Two circuits provide redundancy protection.

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:** Connect power to either of the two power supplies.
- **Redundant Power Supply Configuration:** Connect power to both power supplies.
- **Power down the Switch:** Remove all power cords and wires from the power supplies.

Important:

This equipment must be grounded. Never defeat the ground conductor.

Cet équipement doit être mis à la terre. Ne jamais modifier le conducteur de terre.

Important:

This unit requires overcurrent protection.

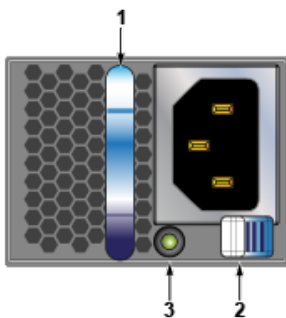
Cet appareil requiert une protection contre les surintensités.

4.2.1 AC Power Supplies

The PWR-400AC power supply is supported.

[Figure 11: AC Power Supply \(PWR-400AC\)](#) displays an AC power supply. It connects to a circuit that provides the required power, as specified by [Table 5: Switch Specifications \(Power Draw\)](#).

Figure 11: AC Power Supply (PWR-400AC)



1 Power Supply Handle

3 Power Supply Status LED

2 Power Supply Release Lever

The power supply requires power cables that comply with IEC-320 and have a C13 plug. The accessory kit provides two IEC-320 C13 to C14 power cables.

Important:

Apply ground connection to the switch first during installation and remove last when removing power.

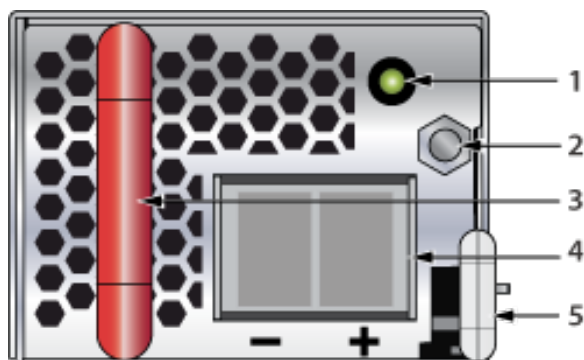
Appliquer connexion à la terre à l'interrupteur premier lors de l'installation et de supprimer la dernière alimentation lors du débranchement.

4.2.2 DC Power Supplies

The PWR-400-DC power supply is supported.

The following figure displays a PWR-400-DC power supply. It connects to a circuit that provides the required power, as specified by [Table 5: Switch Specifications \(Power Draw\)](#).

Figure 12: DC Power Supply (PWR-400-DC)



1 Status LED

2 Ground terminal

3 PSU Handle

4 Terminals

5 Release lever

! **Important:**

A disconnect device must be provided as part of the installation .

Un dispositif de sectionnement doit être fourni dans le cadre de l'installation.

! **Important:**

Ensure power is removed from DC circuits before performing any installation actions. Locate the disconnect device, circuit breakers or fuses on DC power lines servicing the circuits. Turn off the power line circuits or remove the fuses.

Pouvoir assurer qu'il est retiré de circuits DC avant d'effectuer des actions d'installation .
Localiser les disjoncteurs ou des fusibles sur les lignes de courant continu desservant les circuits. Coupez les circuits de lignes d'alimentation ou retirer les fusibles.

! **Important:**

Wire size must comply with local and national requirements and electrical codes. Use only copper wire.

Le calibre du fil doit être conforme aux exigences locales et nationales et les codes électriques.
Utiliser du fil de cuivre.

! **Important:**

Apply ground connection to the switch first during installation and remove last when removing power.

Appliquer connexion à la terre à l'interrupteur premier lors de l'installation et de supprimer la dernière alimentation lors du débranchement.

4.2.2.1 Wire and Lug Preparation

Before performing any installation actions, ensure power is removed from DC circuits by turning off the power line servicing the circuits. Prepare the stranded wiring before you begin a DC power installation.

📄 Note: Stranded copper wiring is required and should meet local and national installation requirements. Wires and grounding lugs are not supplied.

1. Attach an ESD grounding strap.
2. Prepare the stranded copper wiring for the power supply to be used. [Table 6: Wiring, Lug, and Tightening Torques for DC PSUs](#) provides wiring, lug, and tightening torque information for the power supplies covered in this guide.

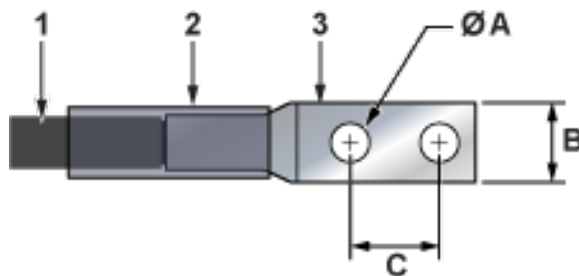
Table 6: Wiring, Lug, and Tightening Torques for DC PSUs

PSU	Wire Size ⁽¹⁾		Lug Type	Tightening Torque	
	(AWG)	(mm ²)		N • m	in. • lbs.
PWR-400-DC	10 - 12	6.0 - 4.0	M3.5 - single hole	1.0	9

¹Unless otherwise noted, wire size applies to -48V, Battery return, and Protective earth wires.

3. Strip the wires to the appropriate length for the lugs to be used.
4. Use agency-approved compression (pressure) lugs for wiring terminations.
5. Slip on heat-shrink tubing on the wire ends before assembling the lugs on to the wire.
6. Crimp the lugs with the proper tool, and ensure that the tubing extends over the barrel of the lugs and the insulation on the wires ([Figure 13: Lug Preparation \(two-hole lug shown\)](#)).

Figure 13: Lug Preparation (two-hole lug shown)




- | | | |
|----------------------|--------|--------|
| 1 Insulated wire | 3 Lug | B 1/2" |
| 2 Heat-shrink tubing | A 1/4" | C 5/8" |

7. Shrink the tubing with a heat gun.

4.2.2.2 Connecting a DC Power Supply to Power Source

To connect a DC power supply to power source:

1. Prepare the stranded wiring ([Wire and Lug Preparation](#)).
2. Attach the appropriate lugs to the source DC wires.
3. Connect the DC-input wires to the appropriate terminals using the specified torque ([Table 6: Wiring, Lug, and Tightening Torques for DC PSUs](#)) in the following order:

 **Note:** Remove terminal covers as needed.

- a. Ground wire to the Protective Earth (PE) terminal.
- b. Negative source DC cable to the negative (- / -48V) terminal.
- c. Positive (+) source DC cable to the positive (+ / Rtn) terminal.

 **Important:**

Ensure power is removed from DC circuits before performing any installation actions. Locate circuit breakers or fuses on DC power lines servicing the circuits. Turn off the power line circuits or remove the fuses.

Assurez-vous de pouvoir retirer des circuits en courant continu avant d'effectuer toute action d'installation. Localiser les disjoncteurs ou fusibles sur les lignes électriques DC entretien des circuits. Mettez hors tension le circuit ligne ou retirez les fusibles.



Important:

Wire size must comply with local and national requirements and electrical codes. Use only copper wire.

Calibre doit respecter les exigences locales et nationales et les codes de l'électricité. Utiliser seulement du fil de cuivre.



Important:

Apply the ground connection first during installation and remove last when removing power.

Appliquer le motif connexion tout d'abord pendant l'installation et supprimer dernière lors du retrait de puissance.

4. Replace the terminal covers as required.

4.3 Connecting Serial and Management Cables

The accessory kit includes the following cables:

- RJ-45 to DB-9 serial adapter cable.
- RJ-45 Ethernet cable.

[Table 7: RJ-45 to DB-9 Connections](#) lists the pin connections of the RJ-45 to DB-9 adapter cable.

Table 7: RJ-45 to DB-9 Connections

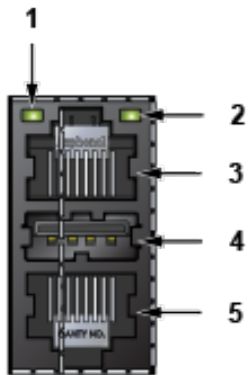
RJ-45		DB-9		RJ-45		DB-9	
RTS	1	8	CTS	GND	5	5	GND
DTR	2	6	DSR	RXD	6	3	TXD
TXD	3	2	RXD	DSR	7	4	DTR
GND	4	5	GND	CTS	8	7	RTS



Note: RJ-45 to DB-9 connections: RJ-45 pin 1 (RTS) is connected to RJ-45 pin 8 (CTS); RJ-45 pin 2 (DTR) and RJ-45 pin 7 (DSR) are not electrically connected to any signal.

Figure 14: Management Ports display the management, console, and USB ports on the front panel.

Figure 14: Management Ports



- | | |
|----------------------------|-------------------------|
| 1 Link status LED | 4 USB port |
| 2 Activity status LED | 5 Serial (console) port |
| 3 Ethernet Management port | |

Connect the ports as follows:

- **Console (Serial) Port:** Connect to a PC with the RJ-45 to DB-9 serial adapter cable. The switch uses the following default settings:
 - 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 Ethernet cable.
- **USB Port:** The USB port may be used for software or configuration updates.



Note: The DCS-7020SR-32C2 chassis has other ports labeled as Alarm, Clk in, Clk Out and ToD. These ports are not supported. Do not connect any cables to these ports



CAUTION:

Excessive bending can damage interface cables, especially optical cables.

Flexion excessive peut endommager les câbles d'interface, notamment des câbles optiques.

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**) 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 ([Grounding the 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 the following 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 into global configuration mode.

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

7. Assign a password to the **admin** username with 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  
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
```

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.

Status Indicator LEDs

The following topics are covered in this section:

- [System-Level Status Indicator LEDs](#)
- [Component Status Indicators](#)

A.1 System-Level Status Indicator LEDs

Status indicator LEDs are located on the chassis and on some of the components like PSUs and Fan modules. LEDs are located on the front ([Front Panel](#)) and the rear ([Rear Panel](#)) of the switch.

The following topics are covered in this section:

- [System Status Indicator LED](#)
- [Fan Status Indicator LED](#)
- [Port Status Indicator LEDs](#)

A.1.1 System Status Indicator LED

[Figure 15: System Status and Fan Status Indicators](#) display the system and the fan status LEDs.

Figure 15: System Status and Fan Status Indicators



1 System status LED

2 Fan status LED

Table 8: System Status Indicator LED States

LED Name	LED State	Device Status
System Status LED	Blinking Green	System is powering up.
	Green	Normal operations. Due to power supply and fan redundancy, this LED will remain green if a single fan or power supply is missing or in a failed state.
	Blue	The locator function is active.
	Amber	Two or more fans (any combination of fan modules or PSU fans) are disconnected or malfunctioning. The switch will automatically execute a “graceful shutdown” shortly.


 **Note:** Arista fixed-form switches take approximately 5 to 10 minutes to boot completely.

A.1.2 Fan Status Indicator LED

Figure 15: System Status and Fan Status Indicators display the fan status LED for the system.

Table 9: Fan Status Indicator LED States

LED Name	LED State	Device Status
Fan Status LED	Green	All fan and power modules are operating normally.
	Amber	Single fan module is removed or malfunctioning. It is also amber when a PSU is completely removed or has a stuck fan rotor.
	Red	Two or more fans (any combination of fan modules or PSU fans) are disconnected or malfunctioning. The switch will automatically execute a “graceful shutdown” shortly.

 **Note:** Fan Module status LED is located on the fan module and displays the status of the corresponding fan module.

A.1.3 Port Status Indicator LEDs

Port LEDs, located in the vicinity of their corresponding ports, provide link and operational status. Figure A-2 displays a representative Port LED location on the DCS-7020SR-32C2 switch.

Figure 16: Port Status LEDs



1 Port LED

2 Port number

Table 10: Port LED States (Front) provides status conditions that correspond to port LED states. Port LED behavior for QSFP+ and SFP+ ports is consistent.

Table 10: Port LED States (Front)

LED State	Status
Off	Port link is down.
Green	Port link is up.
Yellow	Port is software disabled.
Flashing Yellow	Port failed diagnostics.

A.2 Component Status Indicators

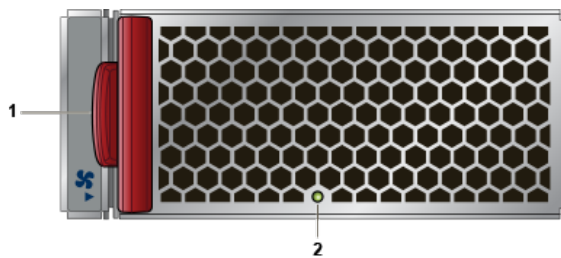
The following topics are covered in this section:

- [Fan Module Status LED](#)
- [PSU Module Status LED](#)

A.2.1 Fan Module Status LED

Each fan and power supply module has an LED that reports the module status. Fan module status LED is on the fan module ([Figure 17: Fan Module Status LED](#)) and is different from the system-level fan status LED ([Fan Status Indicator LED](#)).

Figure 17: Fan Module Status LED



1 Release lever

2 Fan module LED

[Table 11: Fan Module Status LED States](#) provides status conditions that correspond to fan module status LED states.

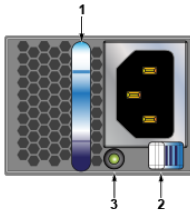
Table 11: Fan Module Status LED States

LED State	Status
Off	The fan module is not detected. If it is inserted, it may not be seated properly.
Green	The fan is operating normally. This LED state is exclusive to its fan module, and independent of the states of its neighboring fans and power supplies.
Red	The fan has failed.

A.2.2 PSU Module Status LED

The AC power supply module status LEDs are on the power supply modules ([Figure 18: AC Power Supply Status LED](#)).

Figure 18: AC Power Supply Status LED



1 Power supply handle

3 Power supply status LED

2 Power supply release lever

[Table 12: AC Power Supply Status LED States](#) provide status conditions that correspond to the AC power supply status LED states.

Table 12: AC Power Supply Status LED States


Power Supply State	PWR-400AC
Input power present Normal operation	Green
Input power present Power Supply fault	Yellow
No Input power Supply installed in chassis	Blinking Yellow
Input power present Supply not installed in chassis	Blinking Green



Note: You can narrow down the error condition by logging in to the switch to view the specific device state. Refer to the Arista User Manual's Switch Environment Control chapter, under the topic Viewing Environment Status, for further information on the `show environment` commands.

Parts List

Each switch provides an accessory kit that contains parts that are required to install the switch. This appendix lists the installation parts contained in the switch accessory kit.

 **Note:** The accessory kit is included in a bag. For DCS-7020SR-32C2, four-post rack kit is optional and sold separately.

The following topics are covered in this section:

- [Rack Mount Parts](#)
- [Cables](#)

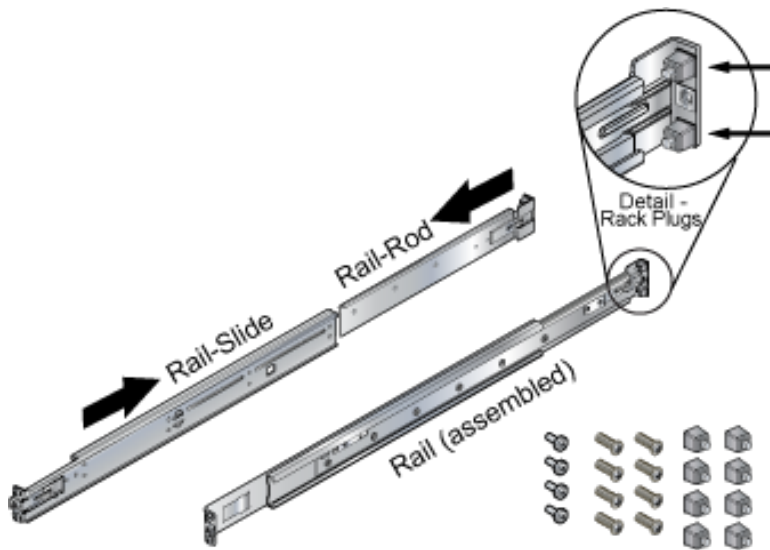
B.1 Rack Mount Parts

The following topics are covered in this section:

- [Figure 19: Four-Post Rack Mount Parts](#)
- [Two-Post Rack Mount Parts](#)

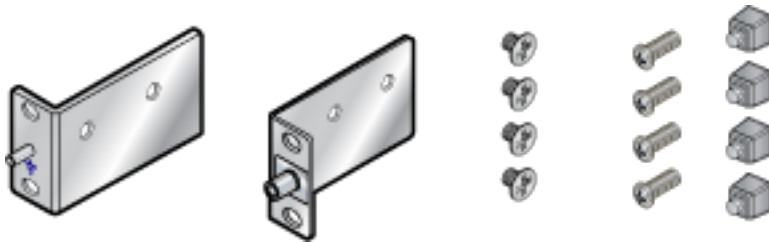
B.1.1 Four-Post Rack Mount Parts

Figure 19: Four-Post Rack Mount Parts



B.1.2 Two-Post Rack Mount Parts

Figure 20: Two-Post Rack Mount Parts for DCS-7020SR-32C2



B.2 Cables

Quantity	Description
2	Power cables: IEC-320/C13-C14, 13 A, 250 V
1	RJ-45 Patch Panel Cable
1	RJ-45 to DB9 Adapter Cable

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

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

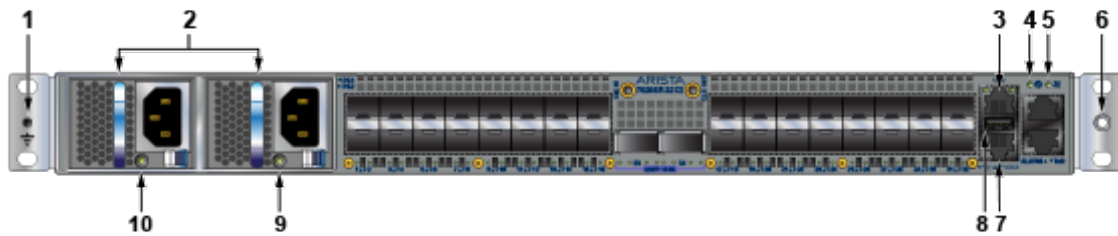
Aristaが提供するすべての電源コードは、Aristaの製品でのみ使用してください。

Front Panel

This appendix displays the front panel of all switches covered by this guide.

 **Note:** Depending on the power supplies installed, your switch may look different.

Figure 21: DCS-7020SR-32C2

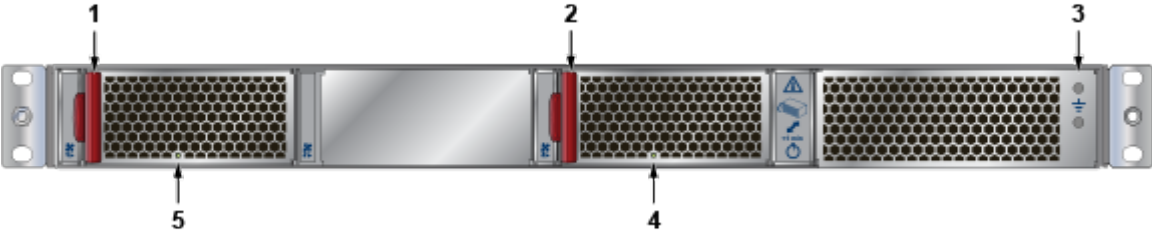


- | | |
|---|------------------------------|
| 1 Ground lug | 6 ESD |
| 2 Blue handle indicates forward airflow | 7 Console (serial) port |
| 3 Ethernet management port | 8 USB port |
| 4 System status LED | 9 Power supply 2 status LED |
| 5 Fan status LED | 10 Power supply 1 status LED |

Rear Panel

All switches covered by this guide use the rear panel shown below.

Figure 22: DCS-7020SR-32C2



- 1 Fan module 1 handle
- 2 Fan module 3 handle
- 3 Ground
- 4 Fan module 3 status LED
- 5 Fan module 1 status LED

Maintenance and Field Replacement

The following topics are covered in this section:

- [Considerations](#)
- [Power Supplies](#)
- [Fan Modules](#)

E.1 Considerations

- All fans and power supplies are hot swappable.
- The switch can be running while a power supply is being installed or removed, but the power supply being replaced must not be connected to a power source.
- All slots must be filled or covered with a blank for operation (even though power supply or fans may not be functional).
- Replacement parts should be the same or compatible with those being replaced.
- Before you begin, refer to the Arista Networks document Safety Information and Translated Safety Warnings available at: <https://www.arista.com/en/support/product-documentation>.



Note: Refer to the front ([Front Panel](#)) and rear ([Rear Panel](#)) panel illustrations of your device to locate the appropriate LED, the release lever or handle, and the handle for the power supply and fan modules.

E.2 Power Supplies

The following steps are required when removing power supplies from a switch:

- [Removing a Power Supply](#).
- [Installing a Power Supply](#).


E.2.1 Removing a Power Supply

1. Ground yourself with an ESD wrist strap.
2. Power down the power supply to be removed by disconnecting the AC power cable.
3. Push the power supply release lever and remove the power supply.

E.2.2 Installing a Power Supply


You must make space for installing the power supply by removing an existing one ([Removing a Power Supply](#)).

1. Remove the replacement power supply from its packaging.
2. Slide the new power supply into the empty slot.
3. Slide the new power supply into the switch until the power supply is fully seated and the release lever snaps into place.
4. Connect the power cord to the power supply.
5. Verify the LED(s) on the power supply.


 **Note:** The Power Supply status LED should be a steady green for normal operation.

6. Verify the new power supply operation by issuing the `show environment power` command.

```
switch#show environment power
```

 **Note:** The output of the command lists the power supplies in operation and should include the one you replaced.

E.3 Fan Modules

 **Note:** Hot swap fans within 30 seconds to prevent the switch from overheating. Ensure that the module you are replacing matches those already installed in the switch.

E.3.1 Removing a Fan Module


The following steps are required when removing or replacing fans from a switch:

1. Ground yourself with an ESD wrist strap.
2. Push the fan module release lever and slide the fan module out of the switch.

E.3.2 Installing a Fan Module

You must make space for installing the fan module by removing an existing one ([Removing a Fan Module](#)).

1. Remove the replacement fan from its packaging.
2. Slide the new fan module into the switch until the module is fully seated and the release lever snaps into place.
3. Verify that the fan module is working normally.

 **Note:** The fan module status LED should be a steady green for normal operation.

Regulatory Model Numbers

This appendix lists the Regulatory Model Numbers (RMNs), where applicable, for the product models for the switches described in this document.

Table 13: Regulatory Model Numbers and Product Numbers

Regulatory Model Number (RMN)	Product Number(s)
AN1723	DCS-7020SR-32C2

Taiwan RoHS Information

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

For Taiwan BSMI RoHS Table, go to <https://www.arista.com/assets/data/pdf/AristaBSMIroHS.pdf>.

