

## Quick Start Guide

# 750 Series Modular <br> Cognitive Campus Switches 

## Arista Networks

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## Chapter

## Overview

The following topics are covered in this 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.

- CCS-755
- CCS-758
!
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 750 Series Modular Switches 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 Modular Switch.
5. Configure the switch Configuring the Modular 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. 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 émetteursrécepteurs 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 should be handled in accordance with all national laws and regulations.

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

### 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

Modular Switch Specifications lists the specifications of Arista Data Center modular switches covered by this guide.

Table 1: Modular Switch Specifications

|  | CCS-755 | CCS-758 |
| :---: | :---: | :---: |
| Height | $7 \mathrm{RU}: 305 \mathrm{~mm}$ (12.0 inches) | 10 RU: 439.4 mm (17.3 inches) |
| Width | 441 mm (17.36 inches) maximum | 441 mm (17.36 inches) maximum |
| Depth | 940 mm (16.5 inches) | 940 mm (16.5 inches) |
| Weight | 65.4 kg (143.9 lbs) fully loaded | 91.6 kg (201.5 lbs) fully loaded |
| AC Branch Circuit Protection | 20 A | 20 A |
| Input Power Circuits | 6 circuits | 10 circuits |
| Ambient Temperature Storage Temperature <br> Relative Humidity <br> Altitude | $0^{\circ}$ to $40^{\circ} \mathrm{C}\left(32^{\circ}\right.$ to $\left.104^{\circ} \mathrm{F}\right)-40^{\circ}$ to $70^{\circ} \mathrm{C}\left(-40^{\circ}\right.$ to $\left.158^{\circ} \mathrm{F}\right)$ <br> 5 to $90 \%$ <br> 0 to 3,000 meters ( 0 to 10,000 feet) |  |
| Cooling | See Power draw configurations in Table 2: 750 Series Power Specifications | See Power draw configurations inTable 2: 750 Series Power Specifications |

The Table 2: 750 Series Power Specifications lists the power specifications of the modular switch components.

Table 2: 750 Series Power Specifications

| Module Type | Part Number | Power Draw <br> (Typical / Maximum - <br> non PoE) | Available Power (for <br> PoE) |
| :--- | :--- | :--- | :--- |
| Supervisor Modules | CCS-750-Sup100 <br> CCS-750-Sup25 | $79 \mathrm{~W} / 94 \mathrm{~W} 70 \mathrm{~W} / 80$ <br> W |  |
| Linecard Modules | CCS-750X-48TP-LC <br> CCS-750X-48ZP-LC <br> CCS-750X-48ZXP-LC | $40 \mathrm{~W} / 42 \mathrm{~W} 81 \mathrm{~W} / 85$ <br> $\mathrm{~W} 232 \mathrm{~W} / 232 \mathrm{~W}$ |  |
| Switch Card <br> Modules | CCS-755-X3-SC <br> CCS-758-X3-SC | $82 \mathrm{~W} / 159 \mathrm{~W} 101 \mathrm{~W} /$ <br> 174 W |  |
| Power Supply (AC) | PWR-3351-AC-RED | $5^{2} \mathrm{~W}$ |  |


| 755 Series System | Full chassis <br> loaded with 2 <br> CCS-750-Sup100 2 <br> CCS-755-X3-SC 5 <br> CCS-750X-48ZP 6 <br> PWR-3351-AC-RED | $1026 \mathrm{~W} / 1251 \mathrm{~W}$ | 18871 W |
| :--- | :--- | :--- | :--- |
| 758 Series System | Full chassis <br> loaded with 2 <br> CCS-750-Sup100 2 <br> CCS-755-X3-SC 8 <br> CCS-750X-48ZP 10 <br> PWR-3351-AC-RED | $1338 \mathrm{~W} / 1566 \mathrm{~W}$ | 31789 W |

[^0]
## 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.

- Floor Space: Install the switch in an area that provides adequate clearance for removing front and rear components.
- Figure 1: Clearance Requirements and Footprint for Switches displays the dimensions and footprint of the switch clearance requirements for the switches.


Figure 1: Clearance Requirements and Footprint for Switches
Table 3: Clearance Requirements and Footprint Dimensions shows the dimensions for each of the modular switches.

Table 3: Clearance Requirements and Footprint Dimensions

| Switch | Clearance Requirements Dimensions |  |  |
| :--- | :--- | :--- | :--- |
|  | A | B | C |
| CCS-755 | $24.2 \mathrm{~cm}(9.5 \mathrm{in})$. | $94.0 \mathrm{~cm}(16.5 \mathrm{in})$. | $35.1 \mathrm{~cm}(13.8 \mathrm{in})$. |
| CCS-758 | $24.2 \mathrm{~cm}(9.5 \mathrm{in})$. | $94.0 \mathrm{~cm}(16.5 \mathrm{in})$. | $35.1 \mathrm{~cm}(13.8 \mathrm{in})$. |

- Temperature and Ventilation: For proper ventilation, install the switch where there is ample airflow to the front and back of the switch. The temperature should not go below $0^{\circ}$ or exceed $40^{\circ} \mathrm{C}$.

Important: To prevent the switch from overheating, do not operate it in an area where the ambient temperature exceeds $40^{\circ} \mathrm{C}\left(104^{\circ} \mathrm{F}\right)$.

Pour empêcher l'interrupteur de surchauffe, ne pas utiliser il dans une zone où la température ambiante est supérieure à $40^{\circ} \mathrm{C}\left(104^{\circ} \mathrm{F}\right)$.

- Airflow Orientation: The fans direct air from the front panel to the rear panel. Orient the front panel toward the cool aisle.
- Rack Space Requirements: Table 4: Rack Space Requirements shows the rack space requirements for each of the modular switches.

Table 4: Rack Space Requirements

| Switch | Rack or Cabinet (standard 19" EIA) Mount Kit |  |  |
| :--- | :--- | :--- | :--- |
|  | 2-post | 4-post | Switch Height (RU) |
| CCS-755 | KIT-CCS-750-2P | KIT-CCS-750-4P | 7 |
| CCS-758 | KIT-CCS-750-2P | KIT-CCS-750-4P | 10 |

Note: The accessory kit provides the required mounting hardware for each switch.

- Power Requirements: Arista switches require a minimum number of operating power supplies in all chassis, and for each power domain of switches with multiple power domains. Refer to Cabling the Modular Switch for more details regarding your switch.
- 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 input connectors.


### 2.2 Tools and Parts Required for Installation

The following tools are required to install a modular switch.

- Mechanical device capable of lifting chassis being installed Table 5: Rack Component Requirements.
- Torque reading nut driver (for DC power supplies).
- \#2 Phillips head screwdriver.

Rack Mount: Shows the Rack Components Required for each of the Modular Switches.
The following table shows the rack components required for each of the modular switches.
Table 5: Rack Component Requirements

| Switch | Rack or Cabinet (standard 19" EIA) |  |  |
| :--- | :--- | :--- | :--- |
|  | Rack screws $^{(1)}$ | Rack Nuts $^{(2)}$ | Notes |
| CCS-755 | 14 | 14 | 2-post installation, 4- <br> post installation |
| CCS-758 | 18 | 18 | 2-post installation, 4- <br> post installation |

The accessory kit includes screws that fit many common equipment racks.
Rack nuts are only for racks with unthreaded, rack-post holes.

### 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 surfaces (such as an anti-static 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.
- Use tools that do not create ESD.


## Chapter

## Rack Mounting the Switch

The following topics are covered in this section:

- Two-post Rack Mount
- Four-post Rack Mount (Optional)

The switches can be installed in two-post Two-post Rack Mount or four-post Four-post Rack Mount (Optional) racks. The appropriate accessory kit provides components for installing the switch in the rack. The chassis can be mounted in the following three positions:

- Front
- Center
- Back (rear)

Attaching Mounting Brackets to the CCS-755 and Attaching Mounting Brackets to the CCS-755 show examples for attaching mounting ears to the CCS-755 and CCS-758 chassis to support each of the three mounting locations.

Note: Four-post rack mount kit is optional.
Illustrations in this chapter depict the mounting of a chassis in a single orientation. After completing the instructions for your rack type, proceed to Cabling the Modular Switch.

### 3.1 Two-post Rack Mount

The switch can be mounted in either forward orientation (line cards and supervisors facing forward) or backward orientation (fans and PSUs facing forward). For each of these orientations, the switch supports a front, center or rear mount into a two-post rack.
The accessory kit includes the following two-post mounting parts:

- Two-post rack cradle
- mounting brackets
- 18 screws
$\square$ Note: The following illustrations highlight a front-mount.


### 3.1.1 Rack Mounting the CCS-755

To mount the switch to the rack, perform the following tasks.

- Attach the mounting brackets to the switch for the desired orientation and position supported Attaching Mounting Brackets to the CCS-755.
- Insert and secure the two-post cradle to the rack Attaching Cradle to the Racks for 755.
- Insert and secure the switch into the rack Inserting and Securing the Switch into the Rack for Fourpost 755.


### 3.1.1.1 Attaching Mounting Brackets to the CCS-755

Attach the mounting brackets to both sides of the chassis using the screws provided in the kit for the desired orientation and position. The following figure shows the CCS-755 chassis with the mounting brackets for Forward-Front, Forward-Center, and Backward-Front mounting.

Figure 2: Attaching the Mounting Brackets for 755


国 Note: Note Center and rear mount are not supported for four-post rack mounting.

### 3.1.1.2 Attaching Cradle to the Racks for 755

Attach the two-post cradle to the rack using the screws provided. Use rack nuts if needed.


Figure 3: Attaching the Cradle to the Rack

### 3.1.1.3 Inserting and Securing Chassis into Rack for 755

1. Move the chassis to the rack using a mechanical lift.

If modules are inserted in the chassis, use the lift carefully to avoid damaging any components.
2. Lift and slide the chassis into the rack cradle in the desired orientation


Figure 4: Inserting the Switch into the Two-post Rack
国 Note: shows an unthreaded rack example with rack nuts.
3. Secure the chassis to the rack using the screws.


Figure 5: Securing the chassis (755 Forward-Front)
After completing the two-post Installation, proceed to Cabling the Modular Switch.

### 3.1.2 Rack Mounting the CCS-758

To mount the switch to the rack, perform the following tasks:

- Attach the mounting bracket(s) to the switch for the desired orientation and position supported (Attaching Mounting Brackets to the Four Post CCS-758).
- Insert and secure the two-post cradle to the rack Attaching Cradle to the Racks for 758.
- Insert and secure the switch into the rack Inserting and Securing CCS-758 Chassis into Rack.


### 3.1.2.1 Attaching Mounting Brackets to the CCS-758

Attach the mounting brackets to both sides of the chassis using the screws provided in the kit for the desired orientation and position. The following figure shows the CCS-758 chassis with the mounting brackets for Forward-Front, Forward-Center, and Backward-Front mounting.


Figure 6: Attaching the Mounting Brackets for CCS-758

### 3.1.2.2 Attaching Cradle to the Racks for 758

Attach the two-post cradle to the rack using the screws provided. Use rack nuts if needed.


Figure 7: Attaching the Cradle to the Rack

### 3.1.2.3 Inserting and Securing CCS-758 Chassis into Rack

1. Move the chassis to the rack using a mechanical lift.

国 Note: If modules are inserted in the chassis, use the lift carefully to avoid damaging any components.
2. Lift and slide the chassis into the rack cradle in the desired orientation.

国
Note: The following figure shows an unthreaded rack example with rack nuts.


Figure 8: Inserting the Switch into the Two-post Rack (758 Forward-Front)
3. Secure the chassis to the rack as shown in the following figure.


Figure 9: Securing the Chassis (758 Forward-Front)
After completing the two-post Installation, proceed to Cabling the Modular Switch.

### 3.2 Four-post Rack Mount (Optional)

The switch can be mounted in either forward orientation (line cards and supervisors facing forward) or backward orientation (fans and PSUs facing forward) in a four-post rack.
The accessory kit includes the following four-post mounting parts:

- 4-post rack cradle
- mounting brackets
- 18 screws


### 3.2.1 Rack Mounting the CCS-755

To mount the switch to the rack, perform the following tasks.

- Attach the mounting brackets to the switch for the desired orientation and position supported Attaching Mounting Brackets to the CCS-755 .
- Insert and secure the two-post cradle to the rack Attaching Cradle to the Racks for 755.
- Insert and secure the switch into the rack Inserting and Securing the Switch into the Rack for Fourpost 755 .


### 3.2.1.1 Attaching Mounting Brackets to the CCS-755

Attach the mounting brackets to both sides of the chassis using the screws provided in the kit for the desired orientation and position. The following figure shows the CCS-755 chassis with the mounting brackets for Forward-Front, Forward-Center, and Backward-Front mounting.
Figure 10: Attaching the Mounting Brackets for 755


玉 Note: Note Center and rear mount are not supported for four-post rack mounting.

### 3.2.1.2 Inserting and Securing the Cradle to the Racks for Four Post 755

1. Insert two screws loosely in the two front rack posts and two in the back two rack posts at the same level for the figure below.


Figure 11: Attaching Mounting Screws to the Rack Posts for 755
2. Buckle the straps on the cradle together, prior to installation, so the left and right sides are angled slightly inwards for the figure below.


Figure 12: Buckling the Straps
3. Pull out the rear sliding rails slightly beyond the back rack posts.
4. Insert the cradle so that the notches in the cradle engage behind the loosely mounted front screws for the figure below.
5. Slide the rear sliding rails back in so that they are flush with the back rack posts, the notches in the cradle engage behind the loosely mounted screws, and the bottom of the cradle is horizontal and level for the figure below.


Figure 13: Inserting the Cradle
6. Release the clasp on the connector to rotate the left and right sides so they are vertical for the figure below.


Figure 14: Aligning the Cradle in the Rack
7. Secure the cradle to the rack posts using the remaining screws, and tighten the loosely mounted screws for the figure below.


Figure 15: Figure 3-14: Securing the Cradle in the Rack

### 3.2.1.3 Inserting and Securing the Switch into the Rack for Four-post 755

1. Move the chassis to the rack using a mechanical lift.

国 Note: If modules are inserted in the chassis, use the lift carefully to avoid damaging any components.
2. Lift the chassis into the rack and slide it into the cradle for the figure below.


Figure 16: Inserting the Chassis (755 Forward-Front)
3. Secure the chassis by tightening additional screws on the front flanges into the rack posts for the figure below.


Figure 17: Securing the Chassis (755 Forward-Front)
After completing the Four-Post Installation, proceed to Cabling the Modular Switch.

### 3.2.2 Rack Mounting the CCS-758

To mount the switch to the rack, perform the following tasks:

- Attach the mounting bracket(s) to the switch for the desired orientation and position supported (Attaching Mounting Brackets to the Four Post CCS-758).
- Insert and secure the two-post cradle to the rack Attaching Cradle to the Racks for 758.
- Insert and secure the switch into the rack Inserting and Securing CCS-758 Chassis into Rack.


### 3.2.2.1 Attaching Mounting Brackets to the Four Post CCS-758

Attach the mounting brackets to both sides of the chassis using the screws provided in the kit for the desired orientation and position. The figure below shows the 758 chassis with the mounting brackets for Forward-Front and Backward-Front mounting.



Figure 18: Attaching the Mounting Brackets for 758
国 Note: Center mount is not supported for four-post rack mounting.

### 3.2.2.2 Inserting and Securing the Cradle to the Racks for Four Post CCS-758

To insert and secure the cradle assembly to the rack use the following steps.

1. Insert two screws loosely in the two front rack posts and two in the back two rack posts at the same level for the figure below.


Figure 19: Figure 3-18: Attaching Mounting Screws to the Rack Posts for 758
2. Buckle the straps on the cradle together, prior to installation, so the left and right sides are angled slightly inwards for the figure below.


Figure 20: Figure 3-19: Buckling the straps
3. Pull out the rear sliding rails slightly beyond the back rack posts.
4. Insert the cradle so that the notches in the cradle engage behind the loosely mounted front screws for the figure below.
5. Slide the rear sliding rails back in so that they are flush with the back rack posts, the notches in the cradle engage behind the loosely mounted screws, and the bottom of the cradle is horizontal and level for the figure below.


Figure 21: Figure 3-20: Inserting the cradle
6. Release the clasp on the connector to rotate the left and right sides so they are vertical for the figure below.


Figure 22: Figure 3-21: Aligning the cradle in the rack
7. Secure the cradle to the rack posts using the remaining screws, and tighten the loosely mounted screws for the figuer below.


Figure 23: Figure 3-22: Securing the cradle in the rack

### 3.2.2.3 Inserting and Securing the Switch into the Rack for Four Post CCS-758

Note: If modules are inserted in the chassis, use the lift carefully to avoid damaging any components.

1. Lift the chassis into the rack and slide it into the cradle for the figure below.


Figure 24: Inserting the Chassis (758 Forward-Front)
2. Secure the chassis by tightening additional screws on the front flanges into the rack posts for the figure below.


Figure 25: Securing the Chassis (758 Forward-Front)
After completing the Four-Post Installation, proceed to Cabling the Modular Switch

## Chapter

## Cabling the Modular Switch

The following topics are covered in this section:

- Cabling the Power Supplies
- Cabling Chassis Ground
- Cabling the AC Power Supplies
- Power Supply Specifications
- Connecting Supervisor Cables
- Connecting Linecard Modules and Cables


### 4.1 Cabling the Power Supplies

Before you begin, refer to the Arista Networks document Compliance and Safety Guide available at: https://www.arista.com/en/support/product-documentation

Important: Power down the switch: Remove all power cords from the power inlets.
Mettez le commutateur: Retirez tous les cordons d'alimentation des prises d'alimentation.
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.

国 Note: Many configurations will require additional power supplies.
Nombreuses configurations exigera des alimentations supplémentaires.
(!) 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.

Power Supply Configurations shows the minimum number of operating power supplies that must be connected to active circuits for each switch to operate.

Note: PSU input voltage for all PSUs in the system must be the same.
Table 6: Power Supply Configurations

| Modular Switch | Recommended <br> Number of PSUs (for <br> redundancy) | Minimum Number of <br> PSUs Required | Maximum Number of <br> PSUs Supported |
| :--- | :--- | :--- | :--- |
| CCS-755 | 3 | 1 | 6 |


| CCS-758 | 5 | 1 | 10 |
| :--- | :--- | :--- | :--- |

Each power supply includes a fan that maintains proper power supply temperature. The appendices display the location of components for all switches described in this guide.

### 4.2 Cabling Chassis Ground

Figure 26: Chassis Ground Locations (CCS-755) and Figure 27: Chassis Ground Locations (CCS-758) display the location of the chassis grounding locations on the front panel of the switches. Chassis ground locations are also located on the rear panel of the switch chassis (Rear Panel). After mounting the switch into the rack, connect at least one of the chassis grounds to the data center ground using two-hole ground lugs with 16 mm ( $5 / 8 \mathrm{in}$.) spacing, and two $\mathrm{M} 4 \times 0.7$ screws. 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 are not supplied. Wire size should meet local and national installation requirements. Commercially available 2 or 4 AWG wire is recommended for installations in the U.S.
À la terre et de mise à la terre fils cosses ne sont pas fournis. Calibre des fils doit satisfaire des exigences de l'installation locale et nationale. Disponible dans le commerce 2 ou 4 AWG fil est recommandé pour les installations aux États-Unis.
(1) 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.

Important: Secondary Grounding wires, lugs, and screws ( $\mathrm{M} 4 \times 0.7$ ) are not supplied.
Secondaire à la terre, câbles, cosses et vis ( $\mathrm{M} 4 \times 0.7$ ) ne sont pas fournis.


Figure 26: Chassis Ground Locations (CCS-755)
1 Grounding locations
2 ESD attach point
3 Line cards
4 Supervisor modules


Figure 27: Chassis Ground Locations (CCS-758)

1 Grounding locations
2 ESD attach point

3 Line cards
4 Supervisor modules

To power down the switch, remove all power cords from the power inlets.

### 4.3 Cabling the AC Power Supplies

The switches use PWR-3351-AC-RED (Figure 28: AC Power Supply (PWR-3351-AC-RED)) AC power supplies. Power cables are included with the accessory kit (Parts List). To power the switch, connect the cables to the C20 connectors on the PSU inputs, and insert the other side of the cables into the main power providing circuit(s).

玉 Note: The power supply, handle color, orientation, etc. may be different in your device from the one shown in Figure 28: AC Power Supply (PWR-3351-AC-RED).


Figure 28: AC Power Supply (PWR-3351-AC-RED)

The Rear Panel displays the rear panel location of the power supplies.
Note: After disconnection from main power, LED(s) on the PSU remain on for a short period of time. The actual duration varies for each PSU model, but the LED(s) will eventually turn off. The PSU fan will ramp up and run at maximum speed for a few seconds before shutting down.

### 4.4 Power Supply Specifications

Table 7: Power Supply Specifications (each PSU) shows the power supply specifications for each of the PSUs supported.

Table 7: Power Supply Specifications (each PSU)

| Power Supply | Maximum <br> Output Power <br> Rating (DC) | Input Voltage <br> and Frequency | Maximum Input <br> Current | Input Branch <br> Circuit <br> Protection |
| :--- | :--- | :--- | :--- | :--- |
| PWR-3351-AC- | 1400 W 3000 W | 100 to 127 VAC | 16 A | 20 A |
| RED | 3300 W | 200 to 220 VAC <br> 220 to 240 VAC <br> $50 / 60 \mathrm{~Hz}$ |  |  |

Important: Each power supply requires input branch circuit protection in compliance with AHJ requirements.

Chaque alimentation nécessite une protection du circuit de la branche d'entrée conformément aux exigences de l'AHJ.

### 4.4.1 Recommendations for Power Supply Usage

- Use separate circuits ( $\mathrm{A} \& B$ ) with required protection for each power supply.
- Use the same PSU model when replacing a failed PSU. Any suitable alternative must be approved before using if the original model is no longer supported or available.
- Unless your switch allows for mixing power supplies, do not mix power supply types.
- Populate the PSU slots sequentially.
- Valid redundancy configurations for each domain are described in Power Supply Redundancy section.


### 4.4.2 Power Supply Redundancy

(!) 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.
(!)
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.

Most installations will have redundant, dual, independent power feeds. Each independent power feed will be referenced as $A$ and $B$.

The recommended installation is to wire each supply to independent power feed (A or B).
Each power supply includes a fan that maintains proper power supply temperature. The following appendices display the location of the following component on all switches described in this guide.

The Front Panel displays the front panel location of the supervisor modules and line cards.
The Rear Panel displays the rear panel location of switch card modules (not visible), fans, and PSUs.
(!) Important: This unit requires over-current protection.
Cet appareil nécessite de protection contre les surintensités.
(!) Important: Unused slots must be occupied or covered with a blank to ensure proper airflow through the chassis.

Les emplacements inutilisés doivent être occupés ou recouvert d'un blanc pour assurer la bonne circulation d'air dans le châssis.

### 4.5 Connecting Supervisor Cables

Supervisor modules contain console, management, and USB ports. Figure 29: Supervisor CCS-750SUP100 display port and status LED locations on the supervisors. Refer to the chassis specification in Connecting Supervisor Cables for additional information about the serial port.
Figure 29: Supervisor CCS-750-SUP100


Figure 30: Supervisor CCS-750-SUP25

1 Supervisor status LED


2 Supervisor active status LED

3 PSU status LED
4 Linecard status LED

6 Fan status LED

7 Uplink status LED
8 Supervisor/Uplink ports (4x SFP25)

10 RJ-45 Serial management port
11 USB Port
12 Release

- 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

The supervisor cards must be installed in one of the two slots designated for them. They are shown on the Front Panel for the switches.

Table 8: RJ-45 tp 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 |

- Ethernet management port: Connect to 10/100/1000 management network with RJ-45 cable.
- USB Port: May be used for software or configuration updates.
- Uplink Port: Use the relevant optics for connection.


### 4.6 Connecting Linecard Modules and Cables

Install required SFP, SFP+, QSFP+, QSFP100, OSFP, and QSFP-DD optic modules in linecard module ports Figure 31: SFP or SFP+ Ports .


Figure 31: SFP or SFP+ Ports
Connect cables as required to linecard module ports. Supervisor and linecard module ejectors on the front of the chassis assist with cable management.

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

Flexion excessive peut endommager les câbles d'interface, en particulier les câbles optiques.
Note: You must ensure that any open slots for modules, supervisors, linecards, etc. are covered by the appropriate "blank" plates. Check with your local Arista Networks representative if you have questions.

## Chapter

## Configuring the Modular 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 Configuring the Modular Switch.
2. Connect the console port to a PC.

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>enablelocalhost#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 1/1
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

## Status Indicators

The following topics are covered in this section:

- Supervisor Module
- Linecard Module Indicators
- Switchcard Module Status Indicators
- Fan Module Status Indicators
- Power Supply Status Indicators


## A. 1 Supervisor Module

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

- one serial console port.
- two Ethernet management ports (one RJ-45, one optical).
- one USB port.
- two QSFP100 (CCS-750-SUP100) or four SFP25 (CCS-750-SUP25) supervisor/uplink ports.
- several system level status indicator LEDs Status Indicators.


## A.1.1 System Level Status Indicator LEDs: CCS-750-SUP100

The system status indicator LEDs are shown in Figure 32: Supervisor CCS-750-SUP100 and Figure 33: Supervisor CCS-750-SUP25 .


Figure 32: Supervisor CCS-750-SUP100

| 1 | Supervisor status LED | 5 | Switch card status LED |
| :--- | :--- | :--- | :--- | | 9Ethernet management <br> ports |
| :---: |
| 2Supervisor active status |
| LED |
| 3 PSU status LED |

[^1]

Figure 33: Supervisor CCS-750-SUP25

| 1 | Supervisor status LED | 5 | Switch card status LED | 9Ethernet management <br> ports |
| :--- | :--- | :--- | :--- | :--- |
| 2Supervisor active status <br> LED | 6 | Fan status LED | 10 | RJ-45 Serial console port |

${ }^{1}$ There is a similar mechanism on the left.

## A.1.2 Supervisor Status LEDs Behavior

$\equiv \quad$ Note: LED behavior is described for the active supervisor, except where noted.

## A.1.2.1 Supervisor Status LED

Table 9: Supervisor Status LED States interprets the states of the supervisor status LEDs for both the active and the redundant supervisor module.

Table 9: Supervisor Status LED States

| State | Status |
| :--- | :--- |
| Off | Supervisor has no power or is <br> powering up. |
| Blinking Green | Supervisor is booting. System <br> can take up to 30 minutes to <br> come up. All other LEDs will <br> also be off. |
| Green | Supervisor is operating <br> normally (master supervisor). <br> System is good. |
| Yellow/Amber/Orange | System is overheating or has <br> been disabled by software. |
| Blinking Blue | Locater function enabled by <br> CLI (Beacon). |

## A. 2 PSU Status LED

Table 10: PSU Status LED States interprets the states of the PSU status LED.

Table 10: PSU Status LED States

| State | Status |
| :--- | :--- |
| Off | PSU not detected, installed or <br> powered. |
| Green | All installed PSUs are <br> operating normally. |
| Red | One or more PSU has a fault. |

## A. 3 Linecard Status LED

Table 11: Linecard Status LED States interprets the states of the Linecard status LED.
Table 11: Linecard Status LED States

| State | Status |
| :--- | :--- |
| Off | Linecard not detected, <br> installed or powered. |
| Green | All installed linecards are <br> operating normally. |
| Yellow/Amber/Orange | One or more linecard is <br> booting up or being updated. |
| Red | One or more linecards have <br> failed. |

## A. 4 Switchcard Status LED

Table 12: Switchcard Status LED States interprets the states of the switchcard status LED.
Table 12: Switchcard Status LED States

| State | Status |
| :--- | :--- |
| Off | Switchcard not detected, <br> installed or powered. |
| Green | All installed switchcards are <br> operating normally. |
| Yellow/Amber/Orange | One or more switchcard is <br> booting up or being updated. |
| Red | One or more switchcards have <br> failed. |

## A. 5 Fan Status LED

Table 13: Fan Status LED States interprets the states of the Fan status LED.

Table 13: Fan Status LED States

| State | Status |
| :--- | :--- |
| Off | No fan detected. |
| Green | All installed fans are operating <br> normally. |
| Yellow/Amber/Orange | One or more fans has failed or <br> is missing. |
| Red | Fans are insufficient or <br> incompatible. |

## A. 6 Management Ethernet Port Status LED

Table 14: Management Ethernet Port Status LED States interprets the states of the management Ethernet port status LED.

Table 14: Management Ethernet Port Status LED States

| LED | State | Status |
| :--- | :--- | :--- |
| Left | Off | Port is not linked up. |
| Left | Green | Port is linked up. |
| Right | Off | Port has no activity. |
| Right | Green | Port has activity. |

## A. 7 Uplink Status LED

Table 15: Uplink Status LED States interprets the states of the uplink status LED.
Table 15: Uplink Status LED States

| State | Status |
| :--- | :--- |
| Off | Supervisor is not powered up <br> or inserted. |
| Green | Uplink card is operating <br> normally. |
| Yellow/Amber/Orange | Uplink card is booting up or <br> being updated. |
| Red | Uplink card power has failed. |

Note: Uplink and supervisor are on independent power domains so one can be up while the other is down.

## A. 8 Linecard Module Indicators

Each linecard module provides one status LED plus LEDs for each port on the card.Figure 34: Linecard Module Status LEDs shows a representative line card. The figures in Linecards indicate the location of the LEDs on each linecard.


Figure 34: Linecard Module Status LEDs
1 Linecard module status LED

2 Port status LED

## A.8.1 Linecard Module Status LEDs Behavior

Table 16: Linecard Module Status LED States interprets the states of the linecard module status LED located on the individual linecard.

## A.8.2 Linecard Module Status LED

Table 16: Linecard Module Status LED States

| State | Status |
| :--- | :--- |
| Off | Linecard not inserted or <br> powered. |
| Green | Linecard operating normally. |
| Yellow/Amber/Orange | Linecard is booting up or being <br> updated. |
| Blinking Red | Locater function is enabled <br> (Beacon). |
| Red | Linecard has failed. |

Table 17: Port Status LED States interprets the states of the port status LED located by each port on the linecard.

Table 17: Port Status LED States

| State | Status |
| :--- | :--- |
| Off | Port link is down. |
| Green | Port link is up. |
| Yellow/Amber/Orange | Port is being administered by <br> software. |


| Blinking Yellow/Amber/Orange | Locater function is enabled <br> (Beacon). |
| :--- | :--- |

## A. 9 Switchcard Module Status Indicators

Rear Panel displays the position of the Switch Card Module Status LEDs on the rear of each switch. 755 Switchcard Module and Fan Module Status LEDs displays fan module status and switch card module status LEDs on the 755 switch.


Figure 35: 755 Switchcard Module and Fan Module Status LEDs

| 1 | Fan module 1 status LED | 4 | Switchcard release | 7 |
| :--- | :--- | :--- | :--- | :--- | | Switchcard release |
| :--- |
| 2 | Fan module 1 | 5 | Switchcard module status <br> LED |  |
| :--- | :--- | :--- |
| 3 | Fan module 1 release | 6Switchcard module active <br> status LED |

758 Switchcard Module and Fan Module Status LEDs displays fan module status and switchcard module status LEDs on the 758 switch.


Figure 36: 758 Switchcard Module and Fan Module Status LEDs
1 Fan module 1 status LED
4 Switchcard release
7 Switchcard release
2 Fan module 1

3 Fan module 1 release
5 Switchcard module status LED

6 Switchcard module active status LED

## A.9.1 Switchcard Module Status LEDs Behavior

There are two LEDs for the switchcard status. Only one of the switch cards is active. The second provides redundancy. The switchcard module LEDs are on the rear panel of the switches.

国 Note: LED behavior is described for the active switchcard, except where noted.

## A.9.2 Switchcard Module Status LED

Table 18: Switchcard Module Status LED States interprets the states of the switch card module status LED.

Table 18: Switchcard Module Status LED States

| State | Status |
| :--- | :--- |
| Off | Switchcard does not have power. |
| Green | All installed switchcards are working normally. |
| Yellow/Amber/Orange | Switchcard is booting up or being updated. |
| Red | One or more switchcards have failed. |

## A.9.3 Switchcard Module Active Status LED

Switchcard Module Active Status LED States interprets the states of the switch card module active status LED.

Table 19: Switchcard Module Active Status LED States

| State | Status |
| :--- | :--- |
| Off | Switchcard is in standby mode. |
| Green | Switchcard is in active mode. |

## A. 10 Fan Module Status Indicators

The fan module status LED are on the fan modules. Figure 37: Fan Module Status LED displays the LED on the fan module.


Figure 37: Fan Module Status LED
1 Release
2 Fan module status LED

国 Note: Bezel color indicates airflow direction.
Table 20: Fan Module Status LED States interprets the states of the switch card module active status LED.

Table 20: Fan Module Status LED States

| State | Status |
| :--- | :--- |
| Off | Fan does not have power. |


| Green | Fan module is working <br> normally. |
| :--- | :--- |
| Flashing red | Locater function is enabled <br> (Beacon). |
| Red | Fan module has failed. |

## A. 11 Power Supply Status Indicators

The power supply status LED ison the power supply modules.Figure 38: AC Power Supply (PWR-3351-AC-RED) displays the LED on the PWR-3351-AC-RED AC power supply.


Figure 38: AC Power Supply (PWR-3351-AC-RED)
1 Status LED
2 Handle
3 Release
国 Note: Handle color indicates airflow direction.
Table 21: AC Power Supply Status LED States interprets the AC power supply module LED status indicators with multiple PSU present in the system.

Table 21: AC Power Supply Status LED States

| State | Status |
| :--- | :--- |
| Off | No AC Input or 140V < AC < <br> $175 \mathrm{~V}-$ single PSU. |
| Blinking Amber ${ }^{1}$ | No AC Input or 140V < AC < <br> $175 \mathrm{~V}-$ multiple PSUs. |
| Blinking Green ${ }^{1}$ | Standby Mode. |
| Green | Normal Operation. |
| Amber | PSU module has failed. |
| Blinking Amber and Green ${ }^{2}$ | Boot Loader. |

[^2]
## Appendix

B

## Parts List

The following topics are covered in this section：
－Parts Used in All Rack Mount Configurations
－Two－Post Rack Mount Parts
－Four－Post Rack Mount Parts（Optional）
－Four－Post（Extended Depth）Rack Mount Parts（Optional）
Each switch has an accessory kit that contains parts required to install the switch．Table 22：Accessory Kits for the Modular Switches provides further details on the accessory kit for each switch．The following sections in the chapter list the installation parts provided by the accessory kit in more details．

Table 22：Accessory Kits for the Modular Switches

|  | 755 | 758 |  |
| :--- | :--- | :--- | :---: |
| Common cables and <br> accessories | Included | Included |  |
| Two－post rack mount kit（KIT－ <br> CCS－750 | Included | Included |  |
| Four－post rack mount kit（KIT－ <br> CCS－750－4P） | Optional | Optional |  |
| Four－post rack mount kit（KIT－ <br> CCS－750－4PL） | Optional | Optional |  |
| Optional |  |  |  |
| Power Cords |  |  |  |

（1）Warning：All provided power cables are for use only with Arista products．
Câbles d＇alimentation doivent être utilisés uniquement avec des produits de Arista．
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。

## B． 1 Parts Used in All Rack Mount Configurations

## B．1．1 Cables

Table 23：Cables Provided in Accessory Kit

| Quantity | Description |
| :--- | :--- |


| 1 | RJ45 To DB9 Adapter with a <br> 6-foot rolled cable. |
| :--- | :--- |
| 1 | Seven-foot RJ45 Patch panel <br> cable. |

## B.1.2 Getting-Started Booklet

One 2-page document.

## B. 2 Two-Post Rack Mount Parts

The following sections list the parts provided in the accessory kit for two-post rack mount installations.
Table 24: Two-Post Rack Mount Parts

| Quantity | Description |
| :--- | :--- |
| 1 | Cradle assembly. |
| 4 | Mounting brackets/ears <br> (flange). |
| 16 | Rack mounting screws and <br> rack nuts |
| 16 | Flat-head screws |



Figure 39: Two-Post Rack Mount Parts

1 Mounting brackets/ears

2 Cradle assembly

3 Rack mounting screws and rack nuts
\# Note: There may be extra parts after a CCS-755 installation.

## B. 3 Four-Post Rack Mount Parts (Optional)

The following sections list the parts provided in the accessory kit for four-post rack mount installations.

Table 25: Four-Post Rack Mount Parts

| Quantity | Description |
| :--- | :--- |
| 1 | Cradle assembly. |
| 4 | Mounting brackets/ears <br> (flange). |
| 20 | Rack mounting screws and <br> rack nuts |
| 16 | Flat-head screws |



Figure 40: Four-Post Rack Mount Parts
1 Mounting brackets/ears
3 Rack mounting screws and rack nuts

2 Cradle assembly

## B. 4 Four-Post (Extended Depth) Rack Mount Parts (Optional)

The following sections list the parts provided in the accessory kit for four-post rack mount installations.
Table 26: Four-Post Rack Mount Parts

| Quantity | Description |
| :--- | :--- |
| 1 | Cradle assembly. |
| 4 | Mounting brackets/ears <br> (flange). |
| 20 | Rack mounting screws and <br> rack nuts |
| 16 | Flat-head screws |



Figure 41: Four-Post Rack Mount Parts
1 Mounting brackets/ears
3 Rack mounting screws and rack nuts

2 Cradle assembly

# Appendix 

## Front Panel

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


Figure 42: CCS-755 Front Panel (Fully Populated)
1 Grounding locations
4 Supervisor modules
2 ESD attach point
3 Line cards


Figure 43: CCS-758 Front Panel (Fully Populated)
1 Grounding locations
4 Supervisor modules
2 ESD attach point
3 Line cards

## Appendix <br> D

## Rear Panel

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


Figure 44: CCS-755 Rear Panel (Fully Populated)

| 1 | Chassis ground | 6 | Fans and switchcard module 2 | 11 | ESD attachment point |
| :--- | :--- | :---: | :--- | :--- | :--- |
| 2 | PSUs (1, 3, 5-From top) | 7 | Switchcard ejector - SC2 | 12 Switchcard ejector - SC2 |  |
| 3 | Fans and switchcard module 1 | 8 | Ejector latch - SC2 | 13 | Ejector latch - SC2 |
| 4 | Switchcard ejector - SC1 | 9 | PSUs (2, 4, 6-From top) | 14 Switchcard ejector - SC1 |  |
| 5 | Ejector latch - SC1 | 10 | Chassis ground | 15 Ejector latch - SC1 |  |



Figure 45: CCS-758 Rear Panel (Fully Populated)

1 Chassis ground
2 PSUs (1, 3, 5, 7, 9 - From top)
3 Fans and switchcard module 1
4 Switchcard ejector-SC1
5 Ejector latch - SC1

6 Fans and switchcard module 2
7 Switchcard ejector - SC2
8 Ejector latch - SC2
9
10 Chassis ground
Chassis ground

11 ESD attachment point
12 Switchcard ejector - SC2
13 Ejector latch - SC2
14 Switchcard ejector - SC1
15 Ejector latch - SC1

## Linecards

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


Figure 46: CCS-750X-48ZXP

## Table 27:

1 Linecard status LED 3 Port numbers
2 Port status LED

国 Note: Ports 5 to 16, 21 to 32, and 37 to 48 are 100M-capable ports.


Figure 47: CCS-750X-48TP
1 Linecard status LED
3 Port numbers
2 Port status LED


Figure 48: CCS-750X-48ZP
1 Linecard status LED 3 Port numbers
2 Port status LED

## Maintenance and Field Replacement

The following topics are covered in this section:

- Power Supplies
- Fan Module
- Supervisor Module
- Linecards
- Switchcards

This appendix describes the process for replacing switch components. You must ensure that at least one of the secondary grounding pads located on the front panel of the chassis is connected to the data center ground. While working on the switches, use grounded, anti-static wrist straps connected to one of the attach points on the switch for grounding yourself and preventing ESD damage to the switch.

Note: Illustrations in this appendix are examples for a representative switch and component(s). Procedures must be applied to component(s) supported by the specific device. You must use component(s) and the appropriate slots for those component(s) when replacing or adding them.

## F. $1 \quad$ Power Supplies

The switches support AC Power supplies which must be ordered separately. The following steps are required for ESD protection when adding or replacing power supplies.

Note: For the exact locations of power supplies and grounding for your device, refer to the Front Panel and the Rear Panel.

1. Ensure that the switch is grounded.

Connect at least one of the chassis grounding pads located on the front and rear panels of the chassis to the data center ground as needed.
2. Ground yourself using a connected, anti-static wrist strap.

The anti-static ESD wrist strap must be connected to one of the attach points on the switch.
3. Remove the power supply to be replaced (Removing AC Power Supply) or use an empty slot.

Note: For the power supplies supported by your device, refer to Specifications. If the PSU has a cable release latch, use it for securing and removing the power cord as needed.

## F.1.1 Removing AC Power Supply

Perform the following steps to remove an AC power supply.

1. Put on a grounded, anti-static ESD strap.
2. Unplug the cable from the PSU.
3. Squeeze the latch release.
4. Remove the power supply from the switch using the power supply latch release and handle.

## F.1.2 Installing AC Power Supply

You must make space for installing the power supply by removing an existing one (Removing AC Power Supply) or use an available slot on the switch. Perform the following steps to install an AC power supply.

1. Put on a grounded, anti-static ESD strap.
2. Unpack the new power supply.
3. Insert the new power supply into the empty power supply slot.
4. After you insert the power supply, push gently on the power supply until the power supply is fully seated.
5. Connect the power cord to the power supply.
6. Connect to the power source.
7. Verify normal operation using the LED indicators for your switch PSU Status LED.

## F. 2 Fan Module

The fan modules are hot-swappable and $N+1$ redundant. They are accessible from the rear of the switch (Rear Panel). You must take into account that the module you are inserting is compatible with the switch and the module that you are replacing. Perform the following steps to remove and replace a fan module.

## F.2.1 Removing Fan Module

1. Put on a grounded, anti-static ESD strap.
2. Use the release lever to unseat the fan module.
3. Use the handle to pull out the fan module.

## F.2.2 Installing Fan Module

You must make space for installing the module by removing an existing one (Removing Fan Module) from a fan module slot available on the switch. Perform the following steps to install the module.

1. Put on a grounded, anti-static ESD strap.
2. Unpack the module to be installed.
3. Slide the fan module into the slot until it is completely seated.
4. Verify that the module is operating normally (Fan Status LED).
5. Use the show environment cooling command to further verify normal operation.

## F. 3 Supervisor Module

The supervisor modules are hot-swappable. They are accessible from the front of the switch. You must take into account that the module you are inserting is compatible with the switch and the module that you are replacing. Use the following procedure to remove and replace a supervisor module. For the supervisor module locations for your device, refer to the Front Panel.

## F.3.1 Removing Supervisor Module

Perform the following steps to remove the module.

1. Put on a grounded ESD strap.
2. Use the release handles on the Supervisor card to unseat it.
3. Slide supervisor module out of the slot.

## F.3.2 Removing Supervisor Module Blank

The supervisor module blank has plastic latches.

1. Put on a grounded, anti-static ESD strap.
2. Grip the plastic handles to release the latch and remove the blank from the supervisor module slot you are going to populate.

You may want to save the blank for future use as needed. The blank is needed for the switch to operate normally if a supervisor module slot is not populated.

## F.3.3 Installing Supervisor Module

You must make space for installing the module by removing an existing one (Removing Supervisor Module) or removing a blank (Removing Supervisor Module Blank) from a supervisor module slot available on the switch. Perform the following steps to install the module.

1. Put on a grounded, anti-static ESD strap.
2. Unpack the supervisor module to be installed.
3. Slide supervisor module into slot until it is completely seated.
4. Verify that the module is operating normally (Supervisor Status LED).

## F. 4 Linecards

The linecards are hot-swappable. They are accessible from the front of the switch. You must take into account that the linecard you are inserting is compatible with the switch and the linecard that you are replacing. Use the following procedure to remove and replace a linecard. If you are adding a new linecard, remove the blank from the linecard slot and install the new linecard. For the linecard locations on your switch, refer to the Front Panel. Figure 49: CCS-75x Linecard Install shows linecards with the seating or ejector mechanisms along with some fully seated linecards.


Figure 49: CCS-75x Linecard Install

```
1 \text { Linecard 3 Ejector lever (linecard}
    seated correctly)
2 Ejector mechanism (lever 4 Ejector lever (linecard not
and handle)
```

4 Ejector lever (linecard not seated)

## F.4.1 Removing a Linecard

Perform the following steps to remove a linecard.

1. Put on a grounded, anti-static ESD strap.
2. Move the left and right handle outwards until the ejector lever releases the linecard.
3. Slide the linecard out using care as the linecard could be heavy.

## F.4.2 Removing Linecard Blank

The linecard blank has plastic latches.

1. Put on a grounded, anti-static ESD strap.
2. Grip the plastic handles to release the latch and remove the blank from the linecard slot you are going to populate.

You may want to save the blank for future use as needed. The blank is needed for the switch to operate normally if a linecard slot is not populated.

## F.4.3 Installing a Linecard

You must make space for installing the linecard by removing an existing one (Removing Linecard) or removing a blank (Removing Linecard Blank) from a linecard slot available on the switch.

1. Put on a grounded, anti-static ESD strap.
2. Unpack the linecard to be installed.
3. Slide the linecard into the slot until the ejection lever goes inside the chassis and push gently until the linecard is seated completely.
4. Verify that the linecard is operating normally (Linecard Status LED).

Note: The ejector handle is perpendicular to the face when correctly installed.

## F. 5 Switchcards

The switchcards are hot-swappable and $1+1$ redundant. They are accessible from the rear of the switch (Rear Panel). You must take into account that the switchcard you are inserting is compatible with the switch and the switchcard that you are replacing. Use the following procedure to remove and replace a switchcard. For the switchcard locations on your switch, refer to the Rear Panel.

## F.5.1 Removing Switchcard

Perform the following steps to remove a switchcard.

1. Put on a grounded, anti-static ESD strap.
2. Use the release handles of the switchcard to unseat it.
3. Pull the switchcard out gently once released.

Note: When the switchcard and fan assembly is removed, a metal cover swings into place (Figure 50: 758 Rear View with one Switchcard Installed ).


Figure 50: 758 Rear View with one Switchcard Installed
1 SC2 cover

## F.5.2 Installing Switchcard

You must make space for installing the switchcard by removing an existing one from a switchcard slot available on the switch unless an open slot is available.

1. Put on a grounded, anti-static ESD strap.
2. Unpack the switchcard to be installed.
3. Slide the switchcard into the slot until it is completely seated.
4. Verify that the switchcard is operating normally (Switchcard Status LED).

Figure 51: 758 Switchcard Installation shows switchcard installation. The switchcard on the right is fully seated with the latch closed.


Figure 51: 758 Switchcard Installation

1 Switch Card

2 Ejector mechanism (handle and latch)

3 Ejector (switchcard not seated)
4 Ejector latch (closed)

## 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 28: Regulatory Model Numbers and Product Numbers

| Regulatory Model Number <br> (RMN) | Product Number(s) |
| :--- | :--- |
| CCS-755 | CCS-755 |
| CCS-758 | CCS-758 |

## Appendix H

## 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.


[^0]:    ${ }^{1}$ Assumes all PSUs are operating between 220-240 V.
    ${ }^{2}$ When no AC input is applied.
    Note1: Includes typical power supply conversion inefficiency. Contact your local Sales Engineer for 750 power calculator details.
    Note2: Power numbers given as Typical/Maximum or Typical/Hot/Maximum where Hot is defined as $40^{\circ} \mathrm{C}$ Sea Level.

    * Not N+N redundant power at worst case Temp/Elevation.

[^1]:    ${ }^{1}$ There is a similar mechanism on the left.

[^2]:    ${ }^{1} 1$ second ON, 1 second OFF.
    ${ }^{2} 1$ second ON, alternating.

