

DC Power Supply in an EX 8200 series Switch

The DC power supply in EX 8200 series switches is a hot-insertable and hot-removable field-replaceable unit (FRU).



NOTE: DC power supplies are not supported on EX 8208 switches currently.

You can install up to six DC power supplies in an EX 8200 series switch. Power supplies are installed at the bottom of the chassis in slots labeled PSU 0 through PSU 5 (left to right). See Slot Numbering for an EX 8216 Switch. All power supplies are accessible from the front of the chassis.



WARNING: The switch is pluggable type A equipment installed in a restricted-access location. It has a separate protective earthing terminal provided on the chassis. This separate protective earthing terminal must be permanently connected to earth ground.



NOTE: EX 8216 switches have two protective earthing terminals provided on the chassis, one on the left side of the chassis and the other on the rear of the chassis. Only one of these protective earthing terminals needs to be permanently connected to earth ground. See Chassis Physical Specifications of an EX 8216 Switch for location of the protective earthing terminals.

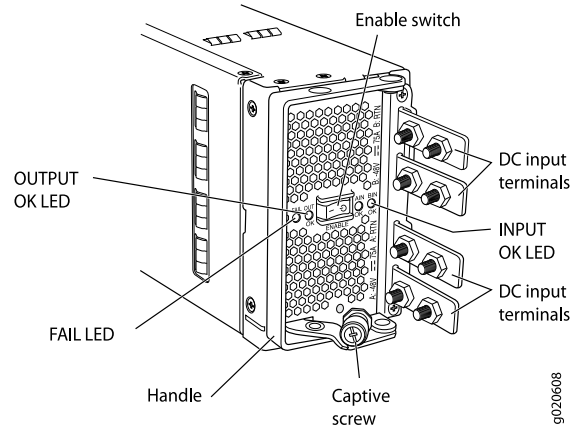


NOTE: DC power supplies are only shipped in the redundant configuration of EX 8200 series switches.

See EX 8216 Switch Configurations for details about different EX 8216 switch configurations.

Each DC power supply weighs approximately 7 lb (3.2 kg) and has two independent pairs of DC input lugs (A: -48V A: RTN and B: - 48V B: RTN) on the front of the power supply. Each power supply also has an **Enable** switch, a fan, and four LEDs on the faceplate that indicate the status of the power supply. See Figure 1.

Figure 1: DC Power Supply



NOTE: A DC power supply requires a dedicated 100 A circuit breaker for each input DC feed.

Each DC power supply connects to the midplane in an EX 8216 switch. The midplane distributes the output power produced by the power supplies to different switch components. Each DC power supply provides power to all the components in the switch.

The output of each DC power supply is 52 VDC. The output power is 3000 W.

A DC power supply works with only one input DC feed connected. It is able to deliver the full 3000 W of output power to all chassis components with only one DC feed connected.

An N + 1 power configuration is required for EX 8200 series switches. In an N + 1 power configuration, if one power supply fails or is removed, the remaining power supplies continue to supply power for the system without interruption.

The configuration type of the switch and the input voltage determine the number of power supplies needed (N) for an EX 8200 series switch. You must install an additional power supply to meet the N + 1 power redundancy configuration required for all EX 8200 series switches. The DC power supplies each provide independent A and B power feeds, so dual power feed redundancy is available even in an N + 1 configuration. See EX 8216 Switch Configurations for details about different EX 8216 switch configurations.

Table 1 lists the N + 1 power requirements of the redundant EX 8216 switch configuration (DC version).

Table 1: N+1 Power Redundancy Configurations for the EX 8216 Switch

Switch Configuration	Input Voltage	Power Supplies Needed (N)	Power Supplies Required for N+1 Power Redundancy
Redundant	■ -48 VDC through -54 VDC	■ 4	■ 5

Each DC power supply has its own fan and is cooled by its own internal cooling system. The airflow is from the front of the power supply to the back. Hot air exhausts from the rear of the chassis.

- Related Topics**
- DC Power Specifications for EX 8200 series Switches
 - DC Power Supply LEDs in an EX 8200 series Switch
 - Calculating Power Requirements for an EX 8216 Switch
 - Installing a DC Power Supply in an EX 8200 series Switch
 - Removing a DC Power Supply from an EX 8200 series Switch

