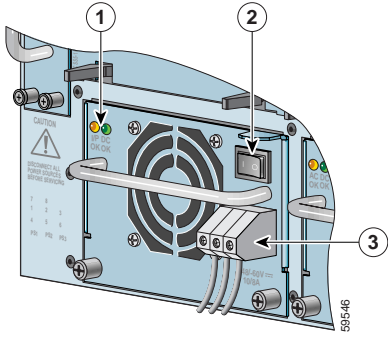


CSS 11506 DC Power Supply Reference

The CSS 11506 enables you to install up to three power supplies to ensure maximum uptime. The CSS design requires two power supplies for operation. Installing a third power supply provides redundancy. A redundant power supply is active upon installation and power up, and provides load-sharing capabilities. You may install or remove and replace a redundant power supply in the chassis without powering down the CSS. If you are removing and replacing one of two power supplies, you must power down the CSS.

Figure 1 shows a CSS 11506 DC power supply (CSS506-PWR-DC=).

Figure 1 DC Power Supply LEDs, Power Switch, and Connector



| | |
|---|-------------------------------------|
| 1 | Power supply LEDs: I/P OK and DC OK |
| 2 | Power switch |
| 3 | Terminal block: -, +, and \oplus |


Warning

If you do not power down the CSS, an electrical energy hazard is present within the chassis. Prior to installing or removing components, remove all metallic objects from hands and wrists to prevent bridging of live contact points.


Warning

Before working on equipment that is connected to power lines, remove jewelry (including rings, necklaces, and watches). Metal objects will heat up when connected to power and ground and can cause serious burns or weld the metal object to the terminals.


Warning

This product requires short-circuit (overcurrent) protection to be provided as part of the building installation. Install only in accordance with national and local wiring regulations.



Warning

Only a DC power source that is isolated from AC mains with reinforced insulation, and that complies with the other safety extra-low voltage (SELV) requirements in UL950, CSA 950 3rd Edition, EN 60950, and IEC950, can be connected to a Cisco 11500 system. This requirement assures that in a catastrophic power source fault condition, hazardous voltages are not present on power terminals and connectors.



Warning

Use copper conductors only.



Warning

Never install an AC power module and a DC power module in the same chassis.

Removing a Power Supply

To remove a power supply:

1. If necessary, power down the CSS (if two power supplies are installed in the CSS).
2. Verify that the power switch on the power supply is in the **0** (off) position (refer to Figure 1 for the location of the power switch).
3. Ensure that power is removed from the DC circuit. To ensure that all power is off, locate the circuit breaker that services the DC circuit and switch it off.
4. At the terminal block of the power supply that you turned off, use a voltmeter to verify that there is no power present.



Warning

Do not allow the test probes of the voltmeter to touch each other while they are touching the power terminals. This is an **ENERGY HAZARD** to you, to the voltmeter, and to the wires connecting the CSS to its power source.



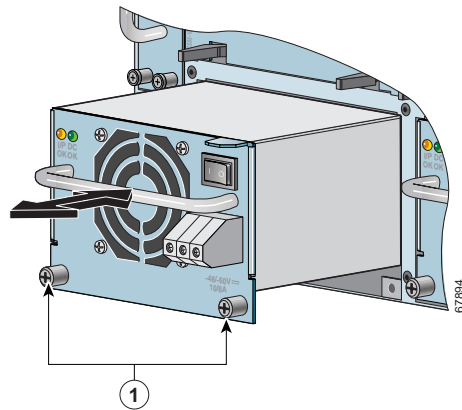
Warning

When you install or replace the unit, the ground connection must always be made first and disconnected last.

5. Remove the wires from the terminal block. When disconnecting the wires, always disconnect the ground wire last.

- Loosen the spring-loaded screws on the power supply front panel (refer to Figure 2).

Figure 2 Removing or Replacing a DC Power Supply



| | |
|---|----------------------------------|
| 1 | Spring-loaded screws (total two) |
|---|----------------------------------|

- Grasp the power supply handle and carefully pull the power supply out of the chassis.

Installing a Power Supply



Warning

Never connect power to the power supply before installing it into the chassis.

To install a power supply:

- If necessary, remove the blank panel from the power supply bay.
- Verify that the power switch on the power supply is in the **0** (off) position.
- Align the power supply in the slot and slide it carefully into the chassis (refer to Figure 2).
- Use a Phillips screwdriver to tighten the two spring-loaded screws that secure the power supply to the chassis.
- Using a flat-head screwdriver, loosen the captive screws on the three DC connectors (labeled from left to right, -, +, and \oplus), respectively) of the terminal block. (Refer to Figure 1).



Warning

The proper wiring sequence is ground to ground, positive to positive, and negative to negative. The ground wire should always be connected first and disconnected last.



Warning

The DC power supply cord requires 12 AWG wire. The CSS 11506 draws a maximum of 9 amps.

- Install the wires into the appropriate connector. Make sure that the uninsulated part of each wire is 9mm (0.35 in.) in length. When installing the wires, always connect the ground wire first.
- Tighten the captive screws to 5 to 7 inch-pounds (0.6 to 0.8 Nm) of torque to secure the wires in the connectors. Ensure the wires are held firmly in place.

8. Install the three sets of wires to the DC power source and switch on the circuit breaker that services the DC circuit.
9. Switch on the power on the power supply. If necessary, power up the other power supplies in the CSS.

The CSS automatically brings the power supply into service. The I/P OK and DC OK LEDs on the power supply illuminate to indicate that the power supply is receiving power from its source and is functioning properly.

- If both LEDs are off, there is no power to the power supply. Check the power source and connections.
- If the I/P OK LED is lit and the DC OK LED is off, the power supply has failed.