

Remove and Replace Field-Replaceable Units

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Removing and Replacing a Fan Module

The fan module can be removed and replaced only on a CGP-OLT-8T.

Installation Guidelines

Observe these guidelines when removing or installing a fan module:

- Do not force the fan module into the slot. This can damage the pins on the device if they are not aligned with the module.
- A fan module that is only partially connected to the device can disrupt the system operation.
- The device supports hot swapping of the fan module. You can remove and replace the module without interrupting normal device operation.



Warning

Only trained and qualified personnel should be allowed to install, replace, or service this equipment. **Statement 1030**

Removing the Fan Module

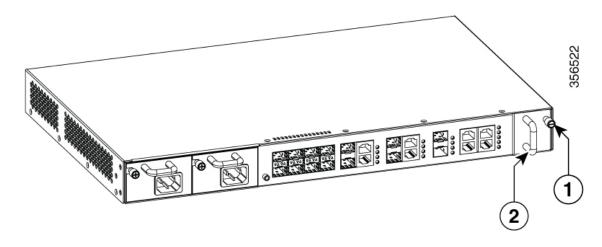
Before you begin

- See Installation Guidelines.
- Ensure that you have the following tools and accessories available:
 - Phillips head screwdriver
 - · Antistatic mat

Procedure

Step 1 Use the Phillips head screwdriver and loosen the captive installation screw on the fan module of the OLT.

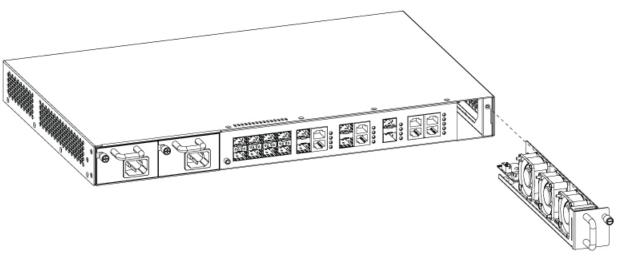
Figure 1: Detaching the Fan Module from the CGP-OLT-8T



1	Captive installation screw on the front of	2	Fan module handle on the front of the fan
	the fan module		module

- **Step 2** Grasp the fan module handle and slide the fan module half-way out of the bay. Gently move it from side to side, if necessary, to unseat it from the OLT.
- **Step 3** Place your other hand underneath to support the bottom of the fan module and then remove the fan module completely.

Figure 2: Removing the Fan Module from the CGP-0LT-8T $\,$



What to do next

Set the removed fan module aside and proceed with the task of installing the replacement or spare fan module.

Installing a Fan Module

Before you begin

See Removing the Fan Module.

Procedure

- **Step 1** Remove the replacement fan module from the shipping packaging.
- Step 2 Install the fan module in the fan slot by firmly pushing it into the slot and applying pressure to the end of the module and not the extraction handles.

Warning Do not reach into a vacant slot when installing or removing a module. Exposed circuitry is an energy hazard. **Statement 206**

Step 3 Insert the captive installation screw on the front panel of the fan module. Use the Phillips head screwdriver and tighten the captive installation screw on the fan module.

Removing and Replacing the Power Supply Module

The location of the power supply module depends on the type of the Cisco Catalyst PON OLT:

- Front panel of CGP-OLT-8T
- Rear panel of CGP-OLT-16T

Installation Guidelines

- The device must be installed in a cabinet or rack that is secured to the data center.
- The power supply module must be removed from its shipping container, along with packaging, if any.
- The following additional tools and equipment are required:
 - Nut driver attachment for number 1 Phillips head screwdriver or ratchet wrench with torque capability (used only for DC-input power supplies).
 - Grounding wire: Size this wire to meet local and national installation requirements. For U.S. installations, you must use an 8-AWG to 14-AWG copper conductor for AC power supply systems. For installations outside the U.S., consult your local and national electrical codes. The length of the grounding wire depends on the proximity of the switch to the grounding facilities.
- The device must be connected to an earth ground.

- The receptacles for the power sources must be within reach of the power supply cables.
- If you are connecting to a DC power, check that you are using power cables to connect to the power supply. The wire size applies to the negative (-), and positive (+) cables that connect to negative and positive apertures on the connector. You have to procure the power cable.
- If you are installing more than one DC-input power supply, each must be protected by a dedicated circuit breaker or a fuse that is sized according to the power supply input rating and the local or national electrical code requirements.
- The power sources are rated as follows:
 - For North American AC-input installations: 16A with 110V circuits.
 - For North American DC-input installations: (–48 VDC nominal at 37 A in North America (operating range: –40.5 upto –56 VDC).
 - For international installations: Size the circuits by local and national standards.
- The power supply must be already inserted into the device.



Caution

Ensure that the power source is off. As an added precaution, place the appropriate safety flag and lockout devices at the source power circuit breaker, or place a piece of adhesive tape over the circuit breaker handle to prevent accidental power restoration while you are working on the circuit.



Warning

Before performing any of the following procedures, ensure that power is removed from the DC circuit. **Statement 1003**

Removing and Installing Power Supply Blank Cover

If a power supply bay in an OLT is unused, you must cover the bay with a power supply blank cover to maintain proper airflow through the device.

Removing a Power Supply Blank Cover

Procedure

- **Step 1** Use the Phillips head screwdriver and loosen the installation screws on the power supply module blank cover.
- **Step 2** Use both hands to remove the power supply module blank cover.
- **Step 3** Store the power supply module blank cover in a safe location for future use.

Installing a Power Supply Blank Cover

Procedure

- Step 1 Use one hand to hold the power supply module blank cover to the required bay and insert the screws with the other hand.
- **Step 2** Use the Phillips head screwdriver to tighten the power supply module blank cover to the bay.

Removing a Power Supply Module from an OLT

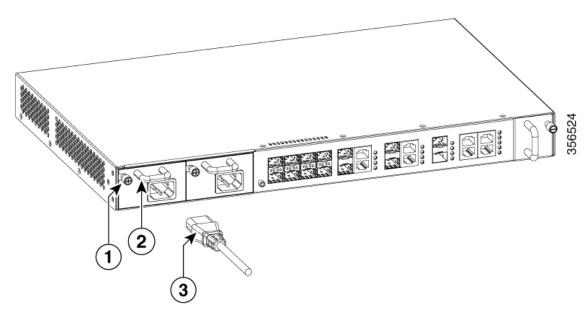
Before you begin

Ensure that the power is turned off at the power source by turning off the power for that circuit.

Procedure

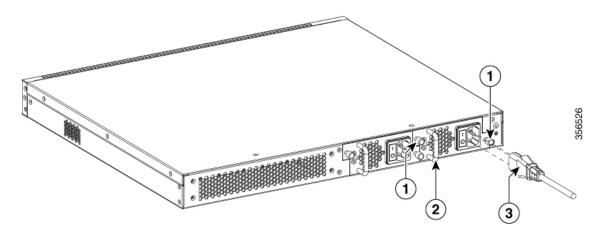
- **Step 1** Detach the power and ground cables from the power source, as follows:
 - For the AC-input power supply, unplug the power cables that are attached to the power supply and the power source.
 - For the DC-input power supply, remove the power cables from the power supply and the power source.
- **Step 2** Remove the power cables from the OLT, as follows:
 - For the AC-input power supply, unplug the power cable that is attached to the power connector to the power supply module.
 - For the DC-input power supply, loosen and unscrew the two nuts that connect the positive (+) DC power cable lug to the RTN terminal, and the negative (-) DC power cable lug to the NEG terminal. Remove the power cables from the power supply module.

Figure 3: Removing the AC Power Cable from CGP-OLT-8T



1	Captive installation screw on the power supply module	3	Power cable
2	Power supply module handle on the power supply module		

Figure 4: Removing the AC Power Cable from CGP-OLT-16T



1	Captive installation screw on the power supply module	3	Power cable
2	Power supply module handle on the power supply module		

- **Step 3** Detach the power supply module as follows:
 - On the front of CGP-OLT-8T, use the Phillips head screwdriver and loosen the captive installation screw on the power supply module.
 - On the rear of CGP-OLT-16T, use the Phillips head screwdriver and loosen the two captive installation screws on the power supply module.
- **Step 4** Grasp the power supply module handle and slide the power supply module half out of the bay. Gently move it from side to side, if necessary, to unseat it from the OLT.
- **Step 5** Place your other hand underneath to support the bottom of the power supply module and then remove the module completely.

Figure 5: Removing the Power Supply Module from CGP-0LT-8T

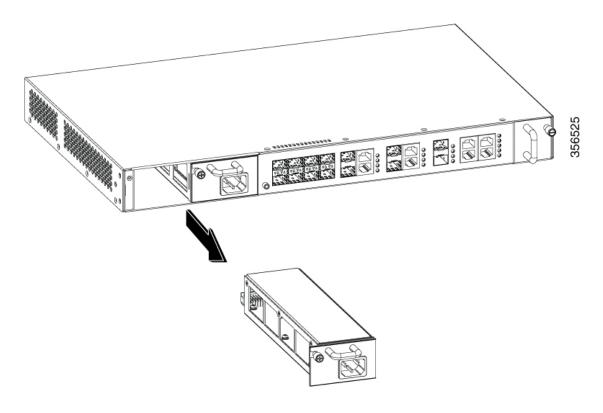
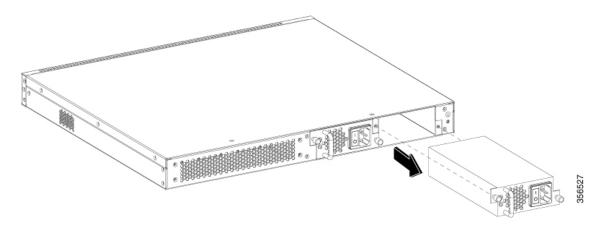


Figure 6: Removing the Power Supply Module from CGP-OLT-16T



Caution If you intend to operate the Cisco Catalyst PON Series OLT without installing another power supply in the empty slot, you must reinstall the blank cover over the empty power supply slot to ensure proper airflow in the system and for safety reasons.

What to do next

Set the removed power supply module aside and proceed with either one of the following actions:

- Install the replacement or spare power supply module.
- Install the blank cover.

Inserting the Power Supply Module in an OLT

To insert the power supply module into the OLT, follow these steps:

Before you begin

- If you are installing a spare power supply module, see Removing a Power Supply Blank Cover.
- If you are installing a replacement power supply module, see Removing a Power Supply Module from an OLT.
- Verify that the power supply is not connected to any power sources.

Procedure

- **Step 1** Hold the handle on the power supply module with one hand and position the power supply with its back end at the open power supply bay.
- **Step 2** Slide the unit all the way into the power supply bay until the power supply module is firmly in place.

Note Ensure that the text on the power supply module is facing up while inserting the power supply module. The antireverse structure of the power supply module prevents you from inserting it in the reverse direction.

Step 3 Secure the power supply module as follows:

- On the front of CGP-OLT-8T, use the Phillips head screwdriver and tighten the captive installation screws on the power supply module to the power supply bay.
- On the rear of CGP-OLT-16T, use the Phillips head screwdriver and tighten the two captive installation screws on the power supply module to the power supply bay.

What to do next

You can proceed with either of the following actions:

- Connect an AC power source, see Connecting to an AC Power Source.
- Connect a DC power source, see Connecting to a DC Power Source.

Inserting the Power Supply Module in an OLT