



# Replace power supply

## StorageGRID Appliances

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# Replace power supply

## Replace one or both power supplies in the SGF6112 or SG6100-CN

The SGF6112 appliance and SG6100-CN compute node have two power supplies for redundancy. If one of the power supplies fails, you must replace it as soon as possible to ensure that the appliance has redundant power. Both power supplies operating in the appliance must be of the same model and wattage.

### Before you begin

- You have [physically located the appliance](#) with the power supply to be replaced.
- You have [determined the location of the power supply to replace](#).
- If you are replacing only one power supply:
  - You have unpacked the replacement power supply unit and ensured that it is the same model and wattage as the power supply unit you are replacing.
  - You have confirmed that the other power supply is installed and running.
- If you are replacing both power supplies at the same time:
  - You have unpacked the replacement power supply units and ensured they are the same model and wattage.

### About this task

The figure shows the two power supply units for the SGF6112 appliance or SG6100-CN compute node. The power supplies are accessible from the back of the appliance.



### Steps

1. If you are replacing only one power supply, you don't need to shut down the appliance. Go to the [Unplug the power cord](#) step. If you are replacing both power supplies at the same time, do the following before unplugging the power cords:
  - a. [Shut down the appliance](#).

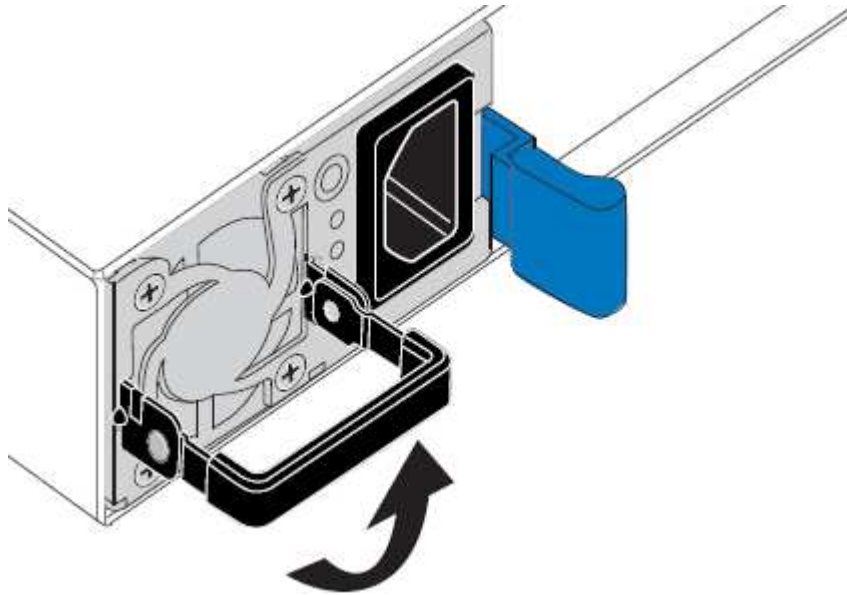


If you have ever used an ILM rule that creates only one copy of an object and you are replacing both power supplies at the same time, you must replace the power supplies during a scheduled maintenance window because you might temporarily lose access to those objects during this procedure. See information about [why you should not use single-copy replication](#).

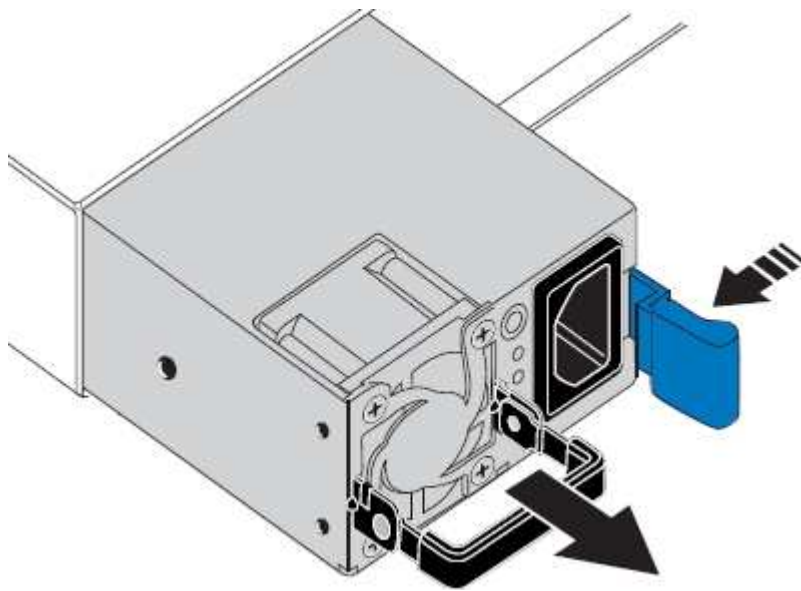
2. Unplug the power cord from each power supply to be replaced.

When viewed from the rear of the appliance, power supply A (PSU0) is on the right and power supply B (PSU1) is on the left.

3. Lift the handle on the first supply to be replaced.



4. Press the blue latch and pull the power supply out.



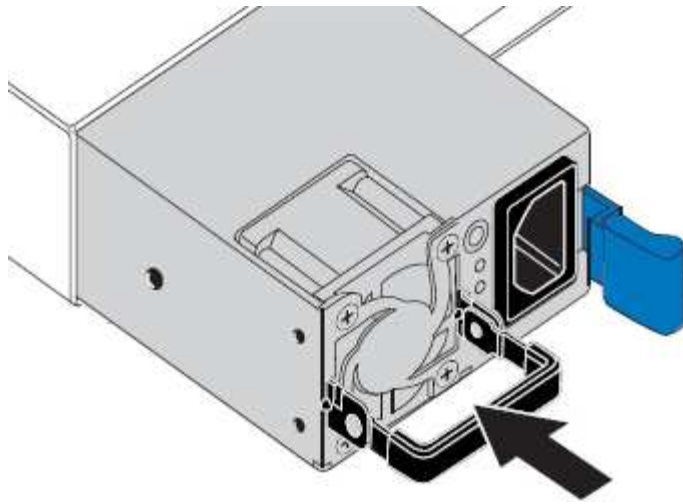
5. With the blue latch on the right, slide the replacement power supply into the chassis.



Both installed power supplies must be the same model and wattage.

Ensure that the blue latch is on the right side when you slide the replacement unit in.

You will feel a click when the power supply is locked into place.



6. Push the handle back down against the body of the PSU.
7. If you are replacing both power supplies, repeat steps 2 through 6 to replace the second power supply.
8. [Connect the power cords to the replaced units and apply power.](#)

After replacing the part, return the failed part to NetApp, as described in the RMA instructions shipped with the kit. See the [Part Return & Replacements](#) page for further information.

## Replace power canister in storage controller shelf or expansion shelf (SG6160)

You can replace a power canister in an SG6160 storage controller shelf or expansion shelf (DE460C).

### About this task

Each 60-drive controller shelf or drive shelf includes two power canisters for power redundancy. If a power canister fails, you must replace it as soon as possible to ensure that the shelf has a redundant power source.

You can replace a power canister while your storage array is powered on and performing host I/O operations, as long as the second power canister in the shelf has an Optimal status and the **OK to remove** field in the Details area of the Recovery Guru in SANtricity System Manager displays **Yes**.

While you perform this task, the other power canister supplies power to both fans to ensure that the equipment does not overheat.

### Before you begin

- Navigate to the SANtricity System Manager tab of the Nodes page for the node(s) listed in the alert that notified you of the PSU failure. Using the SANtricity UI presented on this tab, review the details in the Recovery Guru to confirm that there is an issue with the power canister and select **Recheck** from the Recovery Guru to ensure no other items must be addressed first.
- Check that the amber Attention LED on the power canister is on, indicating that the canister has a fault. Contact technical support for assistance if both power canisters in the shelf have their amber Attention LEDs on.
- Make sure you have the following:
  - A replacement power canister that is supported for your controller shelf or drive shelf model.

- An ESD wristband, or you have taken other antistatic precautions.


## Step 1: Prepare to replace power canister

Prepare to replace a power canister in a 60-drive controller shelf or drive shelf.

### Steps

1. Collect support data for your storage array using SANtricity System Manager.
  - a. Select **Support > Support Center > Diagnostics**.
  - b. Select **Collect Support Data**.
  - c. Click **Collect**.

The file is saved in the Downloads folder for your browser with the name, **support-data.7z**.

2. From SANtricity System Manager, determine which power canister has failed.
  - a. Select **Hardware**.
  - b. Look at the power  icon to the right of the **Shelf** drop-down lists to determine which shelf has the failed power canister.

If a component has failed, this icon is red.

- c. When you find the shelf with a red icon, select **Show back of shelf**.
- d. Select either power canister or the red power icon.
- e. On the **Power Supplies** tab, look at the statuses of the power canisters to determine which power canister must be replaced.

A component with a **Failed** status must be replaced.



If the second power canister in the shelf does not have **Optimal** status, do not attempt to hot-swap the failed power canister. Instead, contact technical support for assistance.



You can also find information about the failed power canister in the Details area of the Recovery Guru, or you can review the information displayed for the shelf, or you can review the Event Log under Support and filter by Component Type.

3. From the back of the storage array, look at the Attention LEDs to locate the power canister you need to remove.

You must replace the power canister that has its Attention LED on.

## Step 2: Remove failed power canister

Remove a failed power canister so you can replace it with a new one.

### Steps

1. Put on antistatic protection.
2. Unpack the new power canister, and set it on a level surface near the shelf.

Save all packing materials for use when returning the failed power canister.

3. Turn off the power switch on the power canister that you need to remove.
4. Open the power cord retainer of the power canister that you need to remove, and then unplug the power cord from the power canister.
5. Press the orange latch on the power canister cam handle, and then open the cam handle to fully release the power canister from the mid plane.
6. Use the cam handle to slide the power canister out of the shelf.



When removing a power canister, always use two hands to support its weight.

### Step 3: Install new power canister

Install a new power canister to replace the failed one.

#### Steps

1. Make sure the on/off switch of the new power canister is in the Off position.
2. Using both hands, support and align the edges of the power canister with the opening in the system chassis, and then gently push the power canister into the chassis using the cam handle until it locks into place.



Do not use excessive force when sliding the power canister into the system; you can damage the connector.

3. Close the cam handle so that the latch clicks into the locked position and the power canister is fully seated.
4. Reconnect the power cord to the power canister, and secure the power cord to the power canister using the power cord retainer.
5. Turn on the power to the new power canister.

### Step 4: Complete power canister replacement

Confirm that the new power canister is working correctly, gather support data, and resume normal operations.

#### Steps

1. On the new power canister, check that the green Power LED is on and the amber Attention LED is OFF.
2. From the Recovery Guru in SANtricity System Manager, select **Recheck** to ensure the problem has been resolved.
3. If a failed power canister is still being reported, repeat the steps in [Step 2: Remove failed power canister](#) and in [Step 3: Install new power canister](#). If the problem continues to persist, contact technical support.
4. Remove the antistatic protection.
5. Collect support data for your storage array using SANtricity System Manager.
  - a. Select **Support** > **Support Center** > **Diagnostics**.
  - b. Select **Collect Support Data**.
  - c. Click **Collect**.

The file is saved in the Downloads folder for your browser with the name, **support-data.7z**.

6. Return the failed part to NetApp, as described in the RMA instructions shipped with the kit.

**What's next?**

Your power canister replacement is complete. You can resume normal operations.



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