

# PS Series Storage Arrays

## PS5000 Hardware Installation



### Before You Begin

#### Environment

Be sure the site meets the array power and cooling requirements described in the PS5000 *QuickStart*.

#### Networking

Standard Ethernet and TCP/IP networking rules apply to a PS Series SAN.

Gigabit Ethernet is recommended for optimal performance. If using multiple switches, they must have inter-switch links.

#### Hardware Requirements

In addition to the hardware described in Step 1, you need:

- Standard 19" two or four-pole rack.
- One to six network cables. Copper-based networks require Cat 5E or Cat 6 cables with RJ45 connectors.

### 1. Unpack the PS Series shipping box.

Be sure you have all the necessary hardware, including the network cables and rack, which are not included in the box.

A PS5000 supports Type 4 control modules (gray faceplate) for use with SAS disks (black disk release button), and Type 5 control modules (olive faceplate, as shown in this poster) for use with SATA disks (gray disk release button).

**The array is heavy!** Do not attempt to lift it without assistance.

**Protect sensitive hardware.** When handling the chassis, disks, and control modules, be sure to use an electrostatic wrist strap.

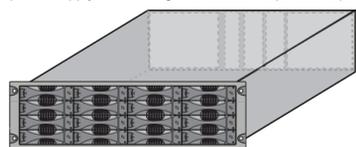
#### Shipping Box Contents

##### Storage Array Chassis

Rear of chassis (Type 4 or Type 5 control modules, power supply and cooling modules, and operations panel)

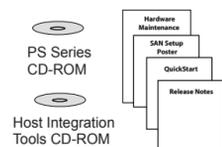
##### Power Cables

Power cables for various electrical configurations may be provided. Use these cables only with this product.



Front of chassis (16 SAS or SATA disks or blanks)

##### Documentation



##### Serial Null Modem Cable

Used for non-Windows installations and when there is no network access to the array or group.



##### Electrostatic Wrist Strap



##### Assembly Kit for Four-Pole Rack



##### Assembly Kit for Two-Pole Rack



Instructions for assembly installation and racking are included in each kit.

### 2. Install the array in a rack.

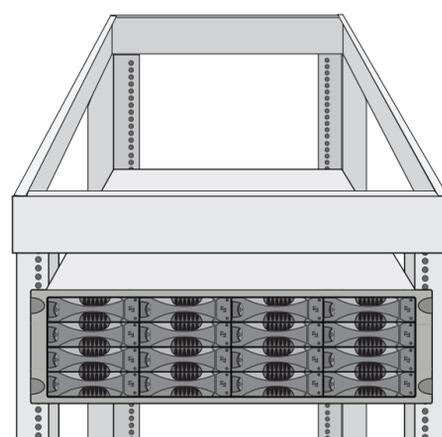
Mount the array in a two-pole or four-pole 19" rack. Instructions for rack assembly and mounting an array are included with each assembly kit in the array shipping box.

**Air flow and ventilation.** Be sure there is sufficient space for air flow in front of and behind the array. The location of the array must be properly vented.

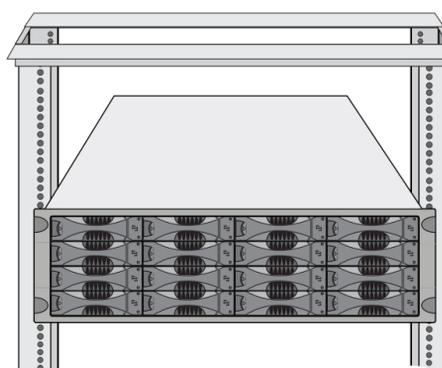
**Stabilize rack.** It is recommended that you attach the rack to the floor for added stability.

**Support array.** Be sure to support the array until it is completely mounted in the rack.

#### Four-Pole Rack Installation



#### Two-Pole, Mid-Mount Rack Installation



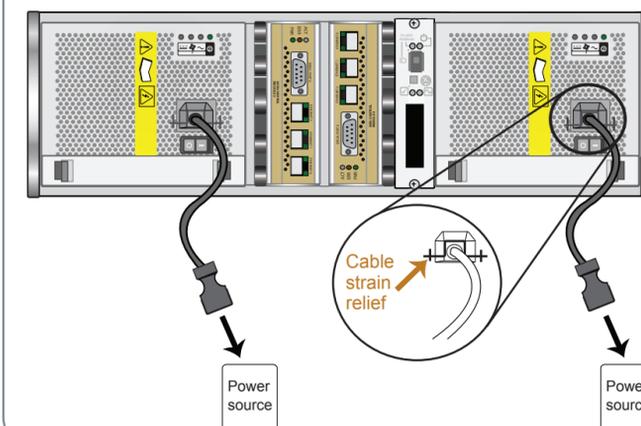
### 3. Connect the array power cables.

At this point, power cables are only for grounding purposes. Be sure to use the cable strain relief to secure each power cable to the array.

**High availability.** Connect each power supply to its own circuit.

**Wait!** Do not turn on power to the array at this time.

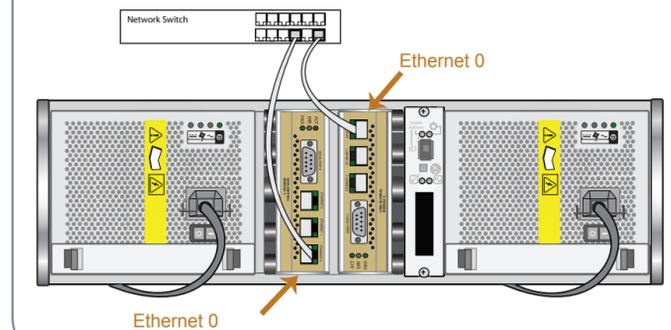
#### Power Cables



### 4. Connect the array to the network.

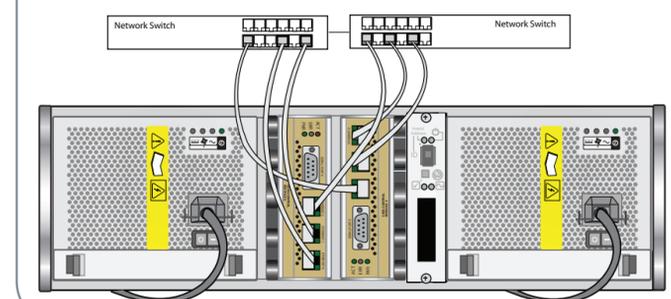
Connect a network cable to Ethernet 0 on each control module and to a network switch.

#### Minimum Network Configuration



**High performance and availability.** Connect cables to all network interfaces and distribute the connections across multiple network switches.

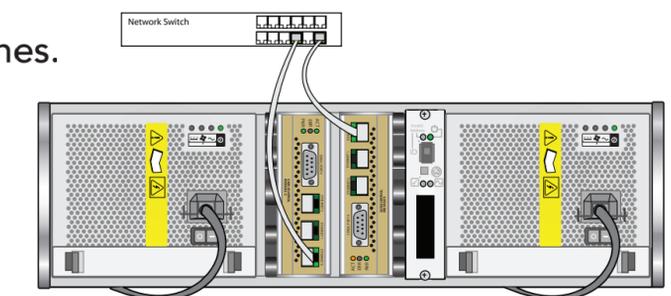
#### High-Bandwidth, High-Availability Network Configuration



### 5. Turn on power to the array and switches.

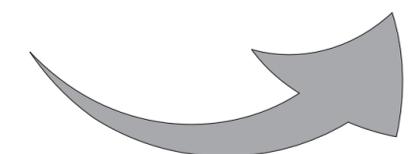
Press  on the rocker switch on *both* power supplies. When all the components are fully initialized, the power LED will be green on both control modules, both power supply and cooling modules, and the operations panel.

**Stop!** If an LED remains red, contact your PS Series support provider.



### Hardware installation is complete.

After installing the hardware for all the PS Series arrays, turn the page for SAN configuration instructions.



**Non-Windows installation.** If you will not be configuring the SAN from a Microsoft® Windows® system, you must connect the serial cable (shipped with the array) to a console terminal and run the **setup** utility to configure the SAN. See the PS Series *QuickStart* for details.