

NetShelter®

Four-Post Rack

**Installation and
Quick-Start Manual**

APC®
www.apc.com

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Product Overview

The American Power Conversion (APC®) NetShelter® Four-Post Rack is a high-quality rack for storage of industry-standard (EIA-310), 19-inch rack-mount hardware, which includes servers, voice, data, networking, internetworking, and APC power-protection equipment.

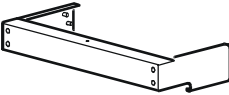
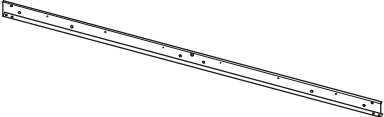
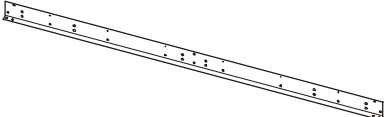


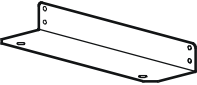





NetShelter Four-Post Rack models

Model	Vertical Rackmount Space	Rackmount Width	Rackmount Depth	Mounting Holes
AR203	43 U [†]	19" EIA	737mm	Square 9.5mm
AR204	43 U	19" EIA	737mm	Tapped Hole (#12-24 THD)

[†] One U = 1.75 in. (4.44 cm)

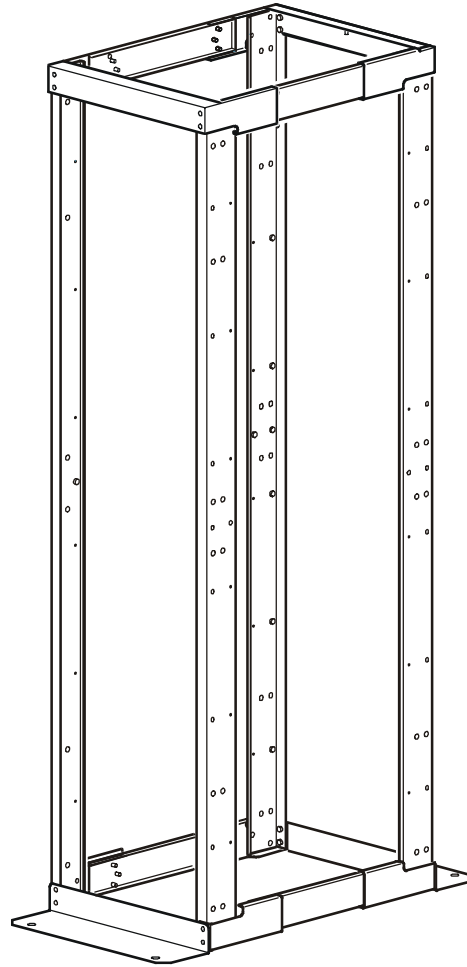
Product Inventory

Inventory

Qty	Description	Item
2	Upper frame	
2	Left corner post	
2	Right corner post	
2	Left corner bracket	
2	Right corner bracket	
2	Stabilizer plate	
4	Side channel	
18 [†]	Hex-head bolts	
42 [†]	Hex nuts	
60 [†]	Star washers	
1	Open-ended wrench (13 mm/14 mm)	

[†] Extra hardware included.

Features of the Four-Post Rack



Features of the Rack	
Frame	• 43U (75.25 in) of storage height for 19-inch rack-mount equipment
	• Integrated frame posts with U space markings
	• Ground studs on top and base
Base	• Bolts to floor with attached stabilizer plate • Stabilizer plate can be mounted on the interior or the exterior

Hardware

Equipment Mounting hardware	Qty	
Item	AR203	AR204
12-24 × 1/2-in Phillips/slotted screws	—	60
M6 × 16-mm Phillips/slotted screws	60	—
M6 caged nuts	60	—
Caged nut installation tool	1	—
Plastic cup washers	60	—

Before Installation



Before you begin to unpack the rack, read and follow these warnings to prevent injury and damage:

- Use at least two people to unpack and assemble the rack.
- Stabilize the rack before installing the components—failure to do so may cause the rack to tip over.
- Do not extend more than one component from the rack at one time to prevent the rack from becoming dangerously unstable.
- Load the heaviest components first and place them toward the bottom of the rack to prevent the rack from becoming top-heavy.

Tools required

The following tool(s) (not included) will be necessary to unpack and adjust the rack:

- Shears/utility knife



The shipping materials are recyclable. Please save them for later use, or dispose of them appropriately.

Disclaimer

APC is not responsible for damage sustained during reshipment of this product.

Taking inventory

After unpacking the rack, verify that all required components and hardware have been shipped with the rack. See the product inventory section for a list of components.



If any items are missing, contact APC Customer Support using the appropriate number or Web address listed on the back cover of this manual.

Installing the Four-Post Rack

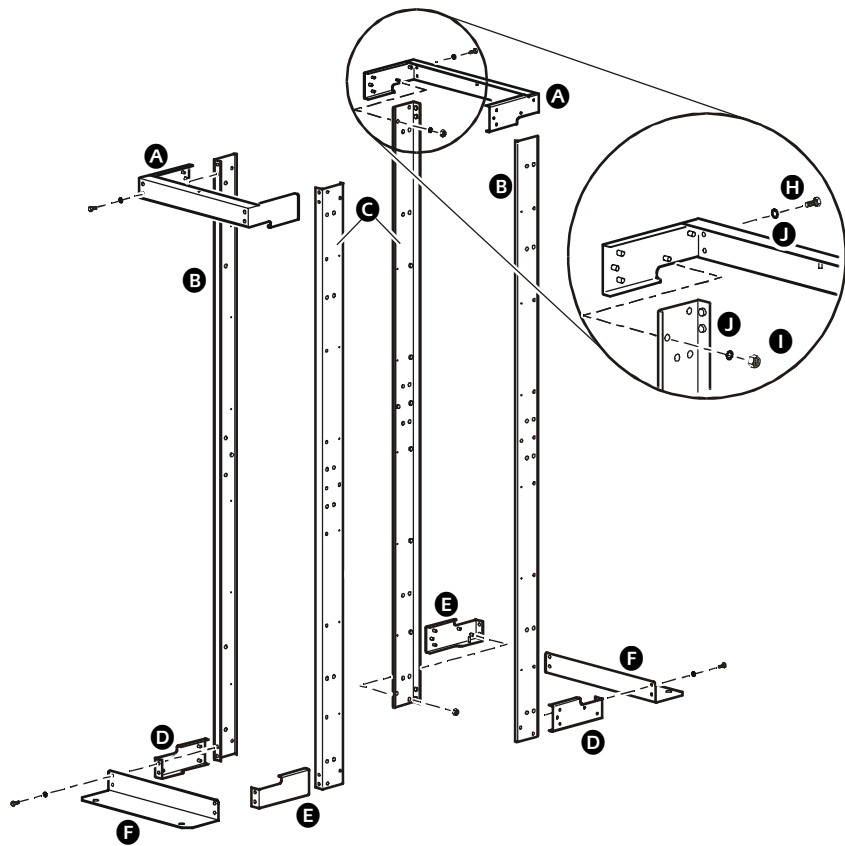
Assembling the rack



Installation of star washers with all hardware is required to maintain safety ground path.

Warning

1. Connect the front left corner post **B** and right corner post **C** to the upper frame **A** using the provided hardware **H I J**.
2. Attach the stabilizer plate **F**, the left corner bracket **D** and the right corner bracket **E** to the bottom of the corner posts using the provided hardware **H I J**.

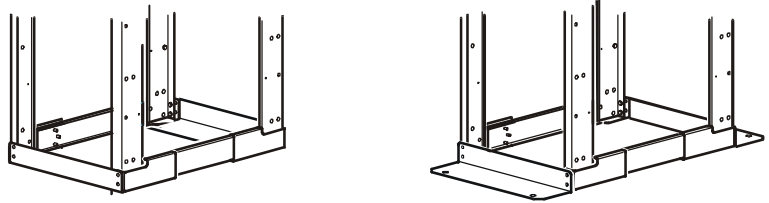


3. Repeat steps 1 and 2 using the rear corner posts.

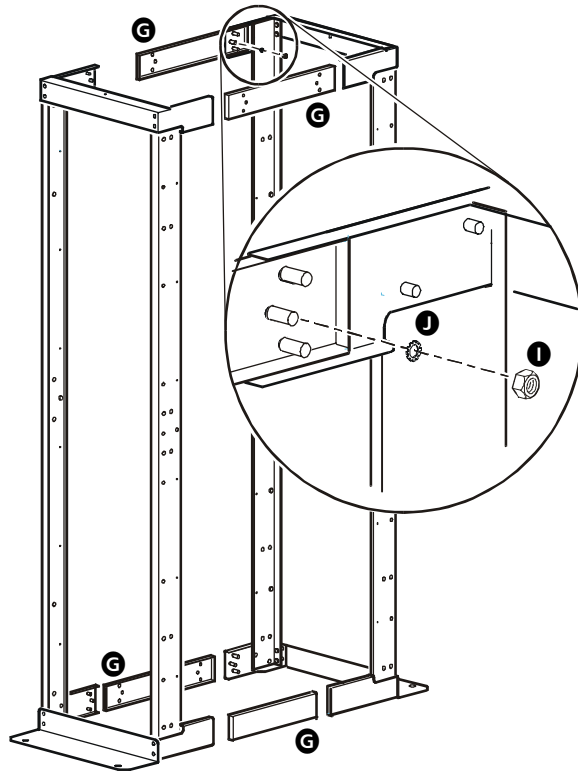


Note

The stabilizer plate can be attached on the exterior or on the interior of the rack to save floor space.



4. Connect the front and rear frames at the top and bottom to the side channels **G** with the provided washers and nuts **I** **J**.
5. Bolt rack to the floor for stabilization.

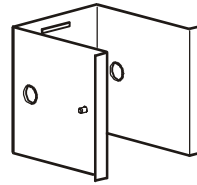


Warning

Stabilize the rack by bolting it to the floor before installing the components— failure to do so could may result in the rack tipping over.

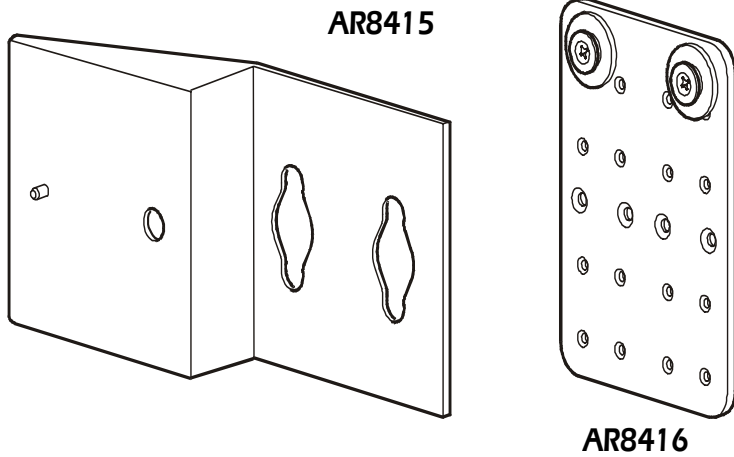
Baying kits

Racks can be joined together using optional baying kits AR8410 (24" spacing) or AR8411 (600mm spacing).



PDU Mounting

APC's Power Distribution Units can be added to your installation with the optional PDU mounting brackets (AR8415) and the optional PDU Adapter Plate (AR8416).



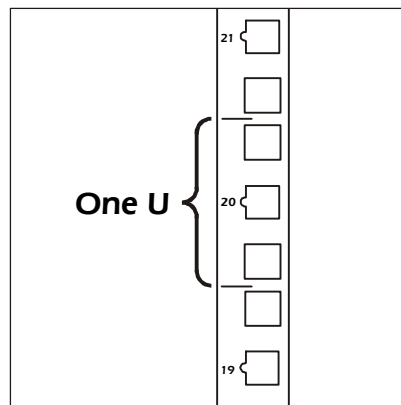
Installing Equipment

This section gives general information on installing rack-mount equipment in the rack. See also the instructions provided with the equipment to be installed.

The AR203 has square holes in the frame post for use with caged nuts. The AR204 has tapped holes in the frame post for use with #12-24 screws.

Identifying one U-space on the frame post

When installing equipment, you will need to locate the top and bottom of a U-space on the mounting rails. Every third hole on the mounting rails of a NetShelter rack is notched and numbered to indicate the middle of a U-space. A U-space consists of one of these numbered holes and one hole immediately above and below it, as shown.



Installing and removing caged nuts

During installation of equipment in your rack, you may need to install or remove caged nuts.

To install:



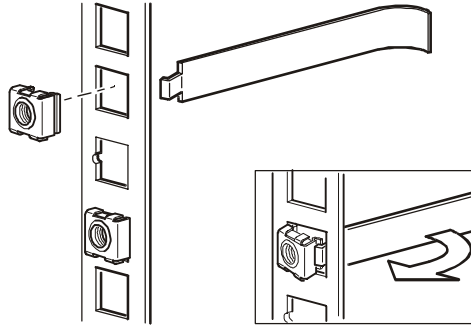
Install caged nuts horizontally, with the ears engaging the sides of the square hole. Do NOT install caged nuts vertically with the ears engaging the top and bottom of the square hole.

1. Insert the caged nut into the square hole by hooking one ear of the caged nut assembly through the far side of the hole.



Install the caged nuts on the interior of the mounting rails.

2. Place the caged nut tool (included) on the other ear of the caged nut and pull to snap it into position.



To remove: Remove any attached screw and reverse the action in step 2. Grasp the caged nut before releasing the tool.



Grounding studs

There are four grounding studs on the Four-Post Rack.

# of studs	Location
2	Base
2	Upper frame

Cable Management

Cable Management Options

Product	SKU	Description	Figure
<p>3-in Vertical Cable Organizer</p> <p>6-in Vertical Cable Organizer</p>	<p>AR8440A</p> <p>AR8441A</p>	<p>Used to route, fasten, and contain cables between posts of racks.</p>	
<p>Side Channel Cable Trough</p>	<p>AR8008BLK</p>	<p>Routes cables from front to rear of the rack.</p>	

Warranty and Service

Limited warranty

APC warrants the Four-Post Rack to be free from defects in materials and workmanship for a period of five years from the date of purchase. Its obligation under this warranty is limited to repairing or replacing, at its own sole option, any such defective products. This warranty does not apply to equipment that has been damaged by accident, negligence, or misapplication or has been altered or modified in any way. This warranty applies only to the original purchaser.

Warranty limitations

Except as provided herein, APC makes no warranties, express or implied, including warranties of merchantability and fitness for a particular purpose. Some jurisdictions do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

Except as provided above, in no event will APC be liable for direct, indirect, special, incidental, or consequential damages arising out of the use of this product, even if advised of the possibility of such damage.

Specifically, APC is not liable for any costs, such as lost profits or revenue, loss of equipment, loss of use of equipment, loss of software, loss of data, costs of substitutes, claims by third parties, or otherwise. This warranty gives you specific legal rights and you may also have other rights, which vary according to jurisdiction.

Obtaining service

To obtain support for problems with your Four-Post Rack:

1. Note the date of purchase.
2. Contact Customer Support at a phone number on the back cover of this document. A technician will try to help you solve the problem by phone.
3. If you must return the product, the technician will give you a return material authorization (RMA) number. If the warranty expired, you will be charged for repair or replacement.
4. Pack the unit carefully. The warranty does not cover damage sustained in transit. Enclose a letter with your name, address, RMA number and daytime phone number; a copy of the sales receipt; and a check as payment, if applicable.
5. Mark the RMA number clearly on the outside of the shipping carton.
6. Ship by insured, prepaid carrier to the address provided by the Customer Support technician.

Specifications

Item	Measurement	
	AR203	AR204
Exterior Height	80.9 in (205.4 cm)	80.9 in (205.4 cm)
Exterior Width	20.6 in (52.2 cm)	20.6 in (52.2 cm)
Exterior Depth	29 in (73.66 cm)	29 in (73.66 cm)
Net weight	84 lb (38 kg)	86 lb (39 kg)
Weight Capacity	1000 lb (455 kg)	1000 lb (455 kg)

APC Worldwide Customer Support

Customer support for this or any other APC product is available at no charge in any of the following ways:

- Visit the APC Web site to find answers to frequently asked questions (FAQs), to access documents in the APC Knowledge Base, and to submit customer support requests.
 - **www.apc.com** (Corporate Headquarters)
Connect to localized APC Web sites for specific countries, each of which provides customer support information.
 - **www.apc.com/support/**
Global support with FAQs, knowledge base, and e-support.
- Contact an APC Customer Support center by telephone or e-mail.
 - Regional centers:

APC headquarters U.S., Canada	(1)(800)800-4272 (toll free)
Latin America	(1)(401)789-5735 (USA)
Europe, Middle East, Africa	(353)(91)702020 (Ireland)
Japan	(03)5434-2021 Guidance 3

- Local, country-specific centers: go to **www.apc.com/support/contact** for contact information.

Contact the APC representative or other distributor from whom you purchased your APC product for information on how to obtain local customer support.

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