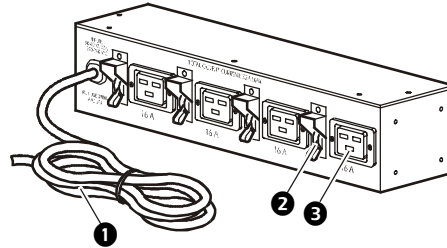


## Rack Power Distribution Unit

### Description

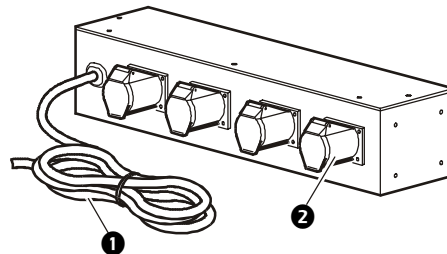
AP7585 and AP7586 are 32 A Basic Rack Power Distribution Units (PDUs) that provide 230-volt power to rack-mounted equipment.

### AP7585



- ❶ 8.5-meter (28-foot) adaptable power cord (without plug)
- ❷ Four 16 A circuit breakers
- ❸ Four IEC 320 C19 outlets

### AP7586



- ❶ 8.5-meter (28-foot) adaptable power cord (without plug)
- ❷ Four IEC 309, 230 V, 1~, 32 A outlets

# Safety and Grounding

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Read the following information before installing or operating your APC Rack Power Distribution Unit (Rack PDU):

- The Rack PDU is intended only for use with three-wire grounded connections on APC Uninterruptible Power Supplies (UPSs). Do not plug the PDU into an electrical outlet or other device.
- This Rack PDU is intended for indoor use only.
- Do not install this Rack PDU where excessive moisture or heat is present.
- Never install any wiring, equipment, or Rack PDUs during a lightning storm.
- Do not use extension cords or adapters with this Rack PDU.
- Do not work alone under hazardous conditions.
- Install the Rack PDU so that there is an even mechanical load.
- Follow the nameplate ratings when connecting equipment to the supply circuit. Do not overload the circuits. An overload condition could put your over-current protection at risk or cause problems with your supply wiring.



Risk of electrical shock. Use only the supplied hardware to attach the mounting brackets.



The Rack PDUs are to be used only with InfraStruXure Type A systems.

# How to Install the Rack PDU

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## Mounting options

Install the Rack PDU in the bottom 2U of a NetShelter<sup>®</sup> or any standard 19-inch EIA-310 rack or enclosure, using the mounting brackets (provided).



**Note**

The Rack PDU can be installed in one of two ways, with the outlets facing out of the rack or toward the roof of the rack.



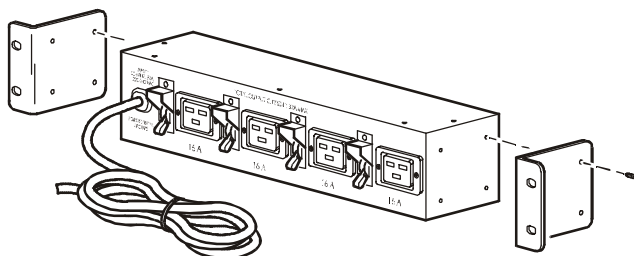
**Note**

The Rack PDU is intended only for use with an APC UPS. Do not plug it into an electrical outlet or another device.

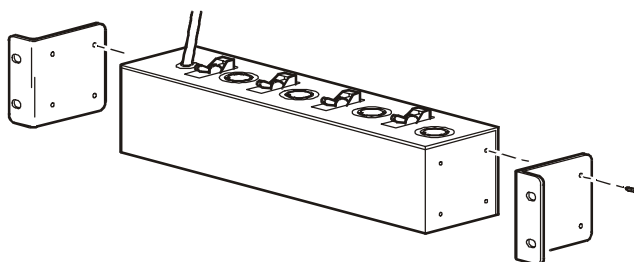
## Bracket-mounting

1. Attach the mounting brackets to the Rack PDU, using four flat-head screws per bracket (provided).

- To mount the Rack PDU with the outlets facing out of the rack:



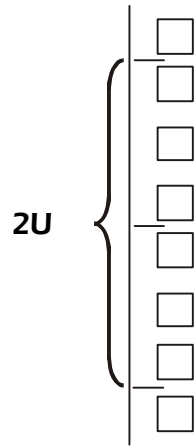
- To mount the Rack PDU with the outlets facing the top of the rack:



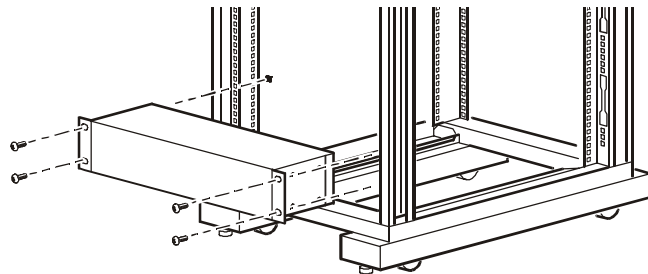
2. Choose a location for the Rack PDU.



The Rack PDU occupies two U-spaces (if mounted with the outlets facing the front of the rack). The numbers on the enclosure's vertical rail denote the middle of a U-space.



- a. Insert a caged nut (provided with the enclosure) above and below a notched hole on each vertical mounting rail in your chosen location.
- b. Align the mounting holes of the brackets with the installed caged nuts. Insert and tighten the screws.



# Connect the Rack PDU to an APC UPS

To connect the Rack PDU to an APC UPS, you must hardwire the Rack PDU's power cord to the UPS distribution panel, as described in the following procedure:

1. Route the power cord through one of the slots on the roof of the enclosure. (To shorten the power cord, see the steps on page 7.)
2. If necessary, route the Rack PDU power cord across a ladder from the enclosure to an APC UPS.

**Only a licensed electrician should perform the wiring.**

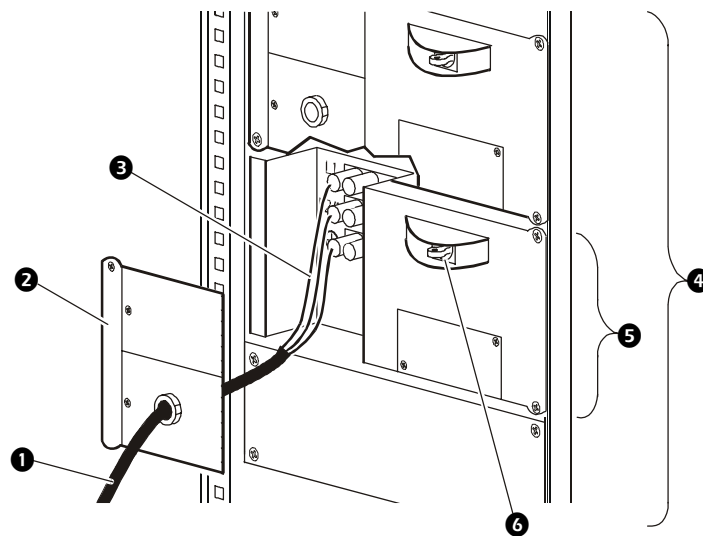
**Verify that the circuit breaker for the utility source being used to supply power the UPS is in the OFF position.**



**Verify that the input circuit breaker on the UPS and the UPS system enable switch are in the OFF position.**

**Verify that the UPS distribution panel's circuit breakers are OFF before installing cables or making connections to the UPS.**

**All wiring must comply with local and national electrical codes.**



① Rack PDU power cord

② Cable strain relief panel

③ Rack PDU power cord wires

④ UPS


⑤ UPS distribution panel

⑥ UPS distribution panel circuit breaker



Before hardwiring the Rack PDU, refer to the UPS manual for detailed safety and hardwiring instructions.

**See also**

3. Verify that the circuit breaker for the utility source being used to supply power to the UPS is in the OFF position.
4. Verify that the input circuit breaker on the UPS is in the OFF position.
5. Verify that the UPS distribution panel's circuit breakers (ⓐ) are in the OFF position.
6. Remove the wiring access panel and cable strain relief panel on the UPS distribution panel.
7. On the UPS distribution panel, measure the voltage across L1 to L2/N, ground to L1, then ground to L2/N to ensure that no voltage is present.
8. Choose and install the correct strain relief required by national and local codes.
9. Connect the wires to the terminal block:
  - Brown wire to **L1**
  - Blue wire to **L2/N**
  - Green/yellow wire to **protective earthing** 

10. Inspect the cable connections to ensure proper installation.
11. Turn ON the circuit breaker on the UPS distribution panel. If the value does not match your branch voltage (220/230/230), check your wiring for proper connection.



Check the voltages on the UPS distribution panel after turning on the circuit breaker.

**Note**

12. Turn OFF the circuit breaker on the UPS distribution panel and complete the UPS installation by re-installing the wiring access panel and cable strain relief panel. Secure them with the provided hardware.



Turn ON any circuit breakers that you turned off during the hardwiring procedure.

**Note**

# How to Shorten the Power Cord

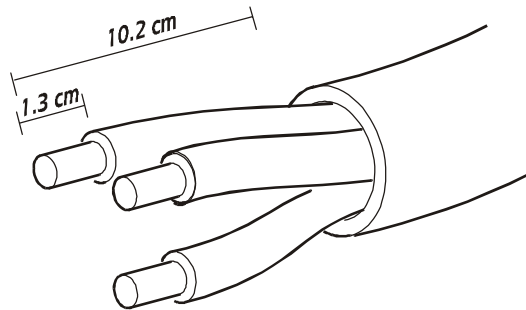
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## Cut the cord



Only certified electricians can perform the following procedure.

1. Cut the outer cord sleeve to the desired length. Be careful not to cut through the three wire bundles. The cord must remain at least 1.5 meters (4.9 feet) long from unit to end. Remove the cut sleeve from the wire bundles.
2. Cut each wire bundle, making sure each is approximately 10.2 centimeters (4 inches) from the end of the cord sleeve.
3. Strip approximately 1.3 centimeters (0.5 inches) of insulation from each wire bundle.



# Specifications

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## AP7585/AP7586

### Electrical

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Nominal input voltage	230 V
Input frequency	50 or 60 Hz
Cord length	8.5 m (28 ft)
Output connectors	<b>AP7585:</b> Four IEC 320 C19 outlets <b>AP7586:</b> Four IEC 309, 230V, 1~, 32 A outlets
Maximum total current draw	32 A

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### Physical

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Size (H × W × D)	<b>AP7585:</b> 8.89×43.69×8.89 cm (3.50×17.20×3.50 in) <b>AP7586:</b> 8.89×43.69×15.24 cm (3.50×17.20×6.0 in)
Shipping dimensions (H × W × D)	15.2×52.1×52.1 cm (6.0×20.5×20.5 in)
Weight	4.1 kg (9.0 lb)
Shipping weight	5.0 kg (11.0 lb)

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### Environmental

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Elevation (above MSL)	
Operating:	0–3000 m (0–10 000 ft)
Storage:	0–15 000 m (0–50 000 ft)
Temperature	
Operating:	0 to 45° C (32 to 115° F)
Storage:	–25 to 65° C (–13 to 149° F)
Humidity	
Operating:	0–95% RH, Non-condensing
Storage:	0–95% RH, Non-condensing

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### Compliance

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Safety verification	VDE, CE
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# Warranty and Service

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## Limited warranty

APC warrants the Rack PDU to be free from defects in materials and workmanship for a period of two 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 Rack PDU:

1. Note the serial number and date of purchase. The serial number is located on the bottom of the PDU.
2. Contact Customer Support at a phone number located on the back cover. 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.

# Life-Support Policy

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## General policy

American Power Conversion (APC) does not recommend the use of any of its products in the following situations:

- In life-support applications where failure or malfunction of the APC product can be reasonably expected to cause failure of the life-support device or to affect significantly its safety or effectiveness.
- In direct patient care.

APC will not knowingly sell its products for use in such applications unless it receives in writing assurances satisfactory to APC that (a) the risks of injury or damage have been minimized, (b) the customer assumes all such risks, and (c) the liability of American Power Conversion is adequately protected under the circumstances.

## Examples of life-support devices

The term *life-support device* includes but is not limited to neonatal oxygen analyzers, nerve stimulators (whether used for anesthesia, pain relief, or other purposes), autotransfusion devices, blood pumps, defibrillators, arrhythmia detectors and alarms, pacemakers, hemodialysis systems, peritoneal dialysis systems, neonatal ventilator incubators, ventilators (for adults and infants), anesthesia ventilators, infusion pumps, and any other devices designated as “critical” by the U.S. FDA.

Hospital-grade wiring devices and leakage current protection may be ordered as options on many APC UPS systems. APC does not claim that units with these modifications are certified or listed as hospital-grade by APC or any other organization. Therefore these units do not meet the requirements for use in direct patient care.

# APC Worldwide Customer Support

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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:

Direct InfraStruXure Customer Support Line	(1)(877)537-0607 (toll free)
APC headquarters U.S., Canada	(1)(800)800-4272 (toll free)
Latin America	(1)(401)789-5735 (USA)
Europe, Middle East, Africa	(353)(91)702000 (Ireland)
Japan	(0) 3 5434-2021
Australia, New Zealand, South Pacific area	(61) (2) 9955 9366 (Australia)

- 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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