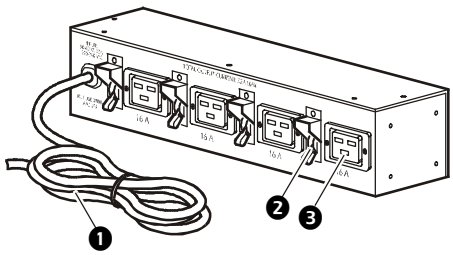
Synergy Global Technology Inc
www. RackmountMart.com

Rack Power Distribution Unit

Description

RA5204-C19-32A is 32 A Basic Rack Power Distribution Units (PDUs) that provide 230-volt power to rack-mounted equipment.

RA5204-C19-32A



1. 8.5-meter (28-foot) adaptable power cord (without plug)
2. Four 16 A circuit breakers
3. Four IEC 320 C19 outlets

Safety and Grounding

Read the following information before installing or operating your 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

Mounting options

Install the Rack PDU in the bottom 2U of a NetShelter® 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.

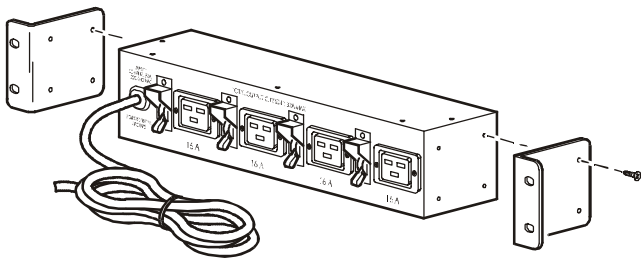
Note

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

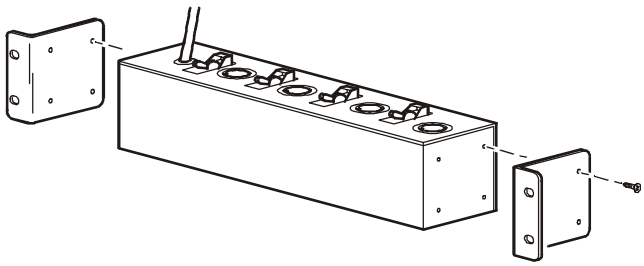
Bracket-mounting

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:

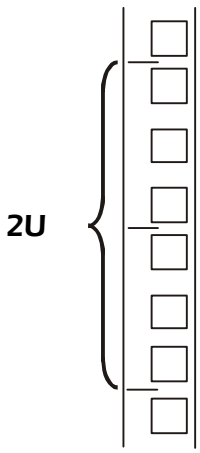


   - To mount the Rack PDU with the outlets facing the top of the rack:



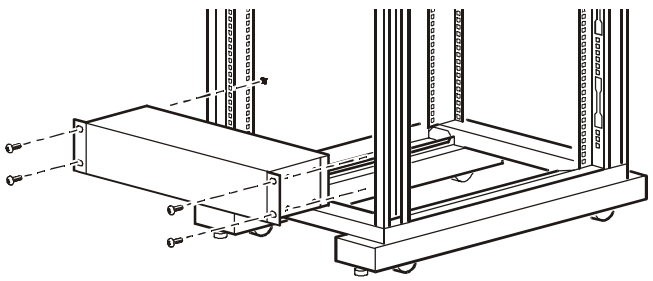
2. Choose a location for the Rack PDU.

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 UPS

To connect the Rack PDU to an 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 UPS.

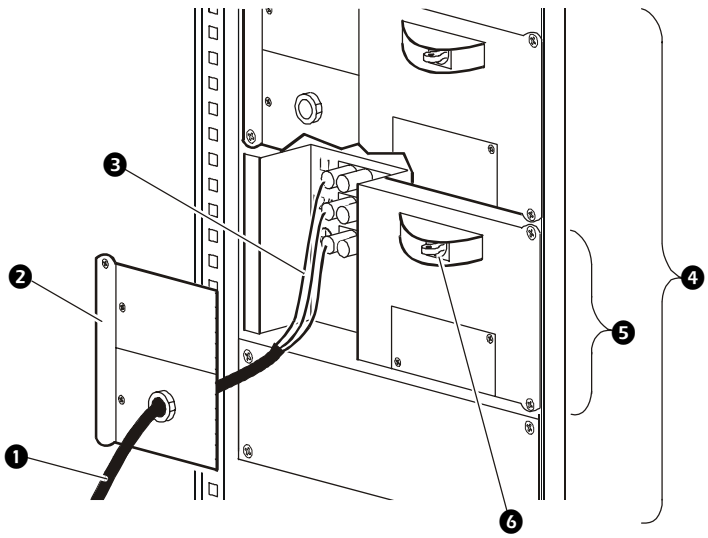
Only a licensed electrician should perform the wiring.

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.



❶	Rack PDU power cord
❷	Cable strain relief panel
❸	Rack PDU power cord wires
❹	UPS
❺	UPS distribution panel
❻	UPS distribution panel circuit breaker

See also

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

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 (❻) 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.

Note

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

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.

Note

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

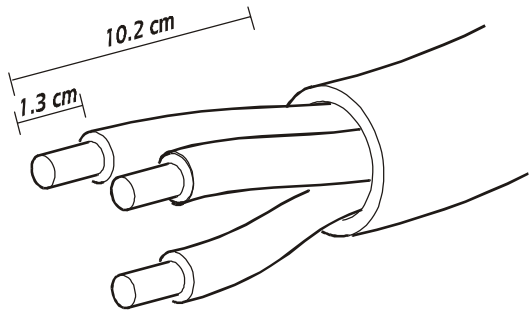
How to Shorten the Power Cord

Cut the cord

Warning

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

RA5204-C19-32A

Electrical

Nominal input voltage	230 V
Input frequency	50 or 60 Hz
Cord length	8.5 m (28 ft)
Output connectors	: Four IEC 320 C19 outlets
Maximum total current draw	32 A

Physical

Size (H × W × D)	: 8.89×43.69×8.89 cm (3.50 × 17.20 × 3.50 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)

Environmental

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

Compliance

Safety verification	VDE, CE