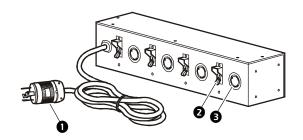


Rack Power Distribution Unit

RA5204-L520-30A-L143

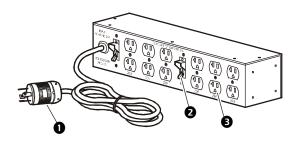
RA5204-L620-30A-L143



- **1** 28-foot NEMA L14-30 power cord
- 2 Four 20-amp circuit breakers
- **3** AP7580: Four NEMA L5-20 outlets

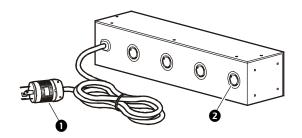
AP7581: Four NEMA L6-20 outlets

RA5212-520-30A-L143



- **1** 28-foot NEMA L14-30 power cord
- **2** Two 20-amp circuit breakers
- 3 Twelve NEMA 5-20 outlets

RA5204-L530-30A-L143 RA5204-L630-30A-L143



1 28-foot NEMA L14-30 power cord

2 AP7583: Four NEMA L5-30 outlets

AP7584: Four NEMA L6-30 outlets

Safety and Grounding

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

- The PDU is intended only for use with four-wire grounded connections on APC Uninterruptible Power Supplies (UPSs). Do not plug the PDU into an electrical outlet or other device.
- This PDU is intended for indoor use only.
- Do not install this PDU where excessive moisture or heat is present.
- Never install any wiring, equipment, or PDUs during a lightning storm.
- Do not use extension cords or adapters with this PDU.
- Do not work alone under hazardous conditions.
- Check that the power cord, plug, and socket are in good condition.
- Disconnect the PDU from the power outlet before you install or connect equipment to reduce the risk of electric shock when you cannot verify grounding. Reconnect the PDU to the power outlet only after you make all connections.
- Install the PDU so that the power plug may be disconnected for service
- Install the PDU so that there is not an uneven 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.



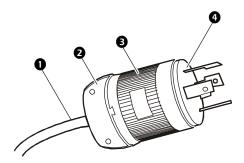
The Rack PDUs are to be used only with InfraStruXure Type A systems.

How to Shorten the Power Cord



Only certified electricians can perform the following procedure.

Plug layout



- Cord sleeve
- 2 Strain relief
- 3 Plug case
- Plug face

Remove the plug

- 1. Loosen, but do not remove, the four captive screws from the plug face until it is detatched from the plug.
- 2. Loosen, but do not remove, the four screws from the sides of the plug until the cord easily slides in and out.
- 3. Slide the plug case down the cord to your desired length.

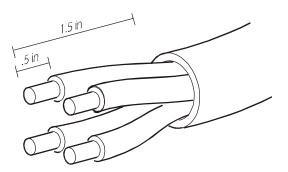


The cord must remain at least 4.9 feet (58.8 inches) long.

4. Loosen, but do not remove, all four terminal screws until you can remove all four wires from the plug. Set the plug face aside for later use.

Cut the cord

- 1. Cut the outer cord sleeve to the desired length. Be careful not to cut through the four wire bundles. The cord must remain at least 4.9 feet (58.8 inches) long from unit to end. Remove the cut sleeve from the wire bundles.
- 2. Cut each wire bundle, making sure each is approximately 1.5 inches from the end of the cord sleeve.
- 3. Strip approximately 0.5 inches of insulation from each wire bundle.



Reassemble the plug

- 1. Twist together any loose wires.
- 2. Fully insert each wire into its coordinating terminal on the plug face before you tighten the terminal screw.



Insert only the bare copper wires into the terminals. Do not tin the wires that hold the strands together.

| Wire color | Terminal |
|------------|---------------------------------|
| Red | Terminal marked "Y" |
| Black | Terminal marked "X" |
| Green | Ground pin, has a green screw |
| White | No markings, has a silver prong |

- 3. Tighten the terminal screws to a minimum torque of 18 inchpounds.
- 4. Slide the plastic plug case back around the face of the plug. Align the tab on the case with the corresponding opening on the plug face. Secure the case by tightening two of the screws in the side of the case to a minimum torque of 10 inch-pounds.
- 5. Reattach the strain relief to the plug, using the remaining two screws. Tighten the screws to a torque of 16 to 20 inch-pounds.

Test the plug for

RA5204-L520-30A-L143 RA5204-L530-30A-L143



For RA5204-L520-30A-L143

verify that all circuit breakers are in the ON position.

Use a multimeter and the following graphics to verify continuity between the test points .

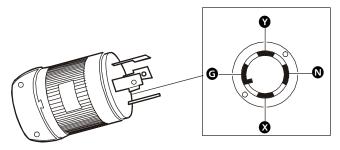
Continuity is achieved with a measurement of less than or equal to 1 Ohm.

Use the probes of the multimeter to verify continuity between the following points on the plug prongs and the slots on the outlets:

- Ground (**G**) on the plug and Ground (**G**) on the outlet
- Neutral (**0**) on the plug and Neutral (**0**) on the outlet
- X () on the plug and X () on the outlet
- $Y(\mathbf{O})$ on the plug and $Y(\mathbf{O})$ on the outlet

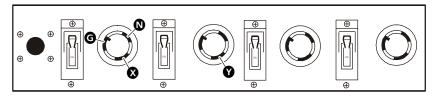
Verify that there is no continuity among any of the four prongs on the plug.

View of the plug face:



- **G** Ground terminal
- Y terminal
- Neutral terminal (Silver)
- X terminal

View of the outlets:



- **G** Ground connection
- Neutral connection
- X connection
- Y connection

Test the plug for RA5204-L620-30A-L143 RA5204-L630-30A-L143



For RA5204-L620-30A-L143

verify that all circuit breakers are in the ON position.

Use a multimeter and the following graphics to verify continuity between the test points.

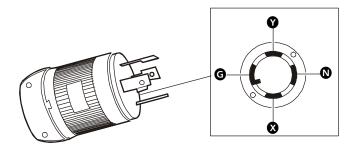
Continuity is achieved with a measurement of less than or equal to 1 Ohm.

Use the probes of the multimeter to verify continuity between the following points on the plug prongs and the slots on the outlets:

- $X(\mathbf{S})$ on the plug and $X(\mathbf{S})$ on the outlet
- Y (**②**) on the plug and Y (**②**) on the outlet
- Ground (**G**) on the plug and Ground (**G**) on the outlet

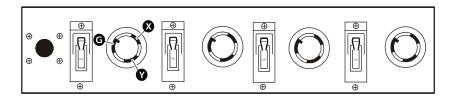
Verify that there is no continuity among any of the four prongs on the plug.

View of the plug face:



- **G** Ground terminal
- Y terminal
- Neutral terminal (Silver)
- X terminal

View of the outlets:



- **G** Ground connection
- Y connection
- X connection

Test the plug for RA5212-520-30A-L143



Verify that all circuit breakers are in the ON position.

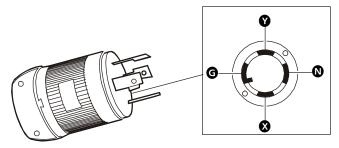
Use a multimeter and the following graphics to verify continuity between the test points. Continuity is achieved with a measurement of less than or equal to 1 Ohm.

Use the probes of the multimeter to verify continuity between the following points on the plug prongs and the slots on the outlets:

- Ground (**G**) on the plug and Ground (**G**) on the outlet
- Neutral (**3**) on the plug and Neutral (**3**) on the outlet
- X () on the plug and X () on the outlet
- $Y(\mathbf{O})$ on the plug and $Y(\mathbf{O})$ on the outlet

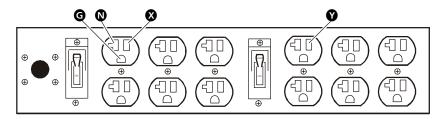
Verify that there is no continuity among any of the four prongs on the plug.

View of the plug face:



- **G** Ground terminal
- Y terminal
- Neutral terminal (Silver)
- X terminal

View of the outlets:



- **G** Ground connection
- Neutral connection
- X connection
- Y connection

How to Install the PDU

Mounting options

Install the PDU in the bottom 2U of a NetShelter[®] or any standard 19-inch EIA-310-D rack or enclosure, using the mounting brackets (provided).



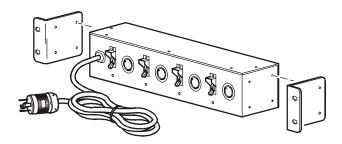
The PDU can be installed in one of two ways, with the outlets facing out of the rack or toward the roof of the rack.



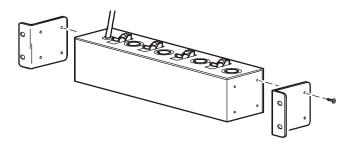
The PDU is intended only for use with an APC UPS. Do not plug it into an electrical outlet or another device.

Bracket-mounting

- 1. Attach the mounting brackets to the PDU, using four flat-head screws per bracket (provided).
 - To mount the PDU with the outlets facing out of the rack:



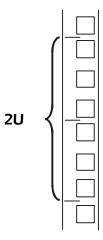
- To mount the PDU with the outlets facing the top of the rack:



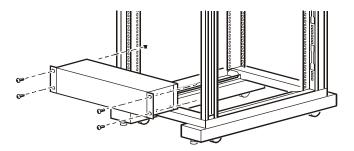
2. Choose a location for the PDU.



The PDU occupies two U-spaces. 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 to an APC UPS

- 1. Route the power cord through one of the slots on the roof of the enclosure.
- 2. If necessary, route the PDU cord across a ladder connected to the enclosure to connect to an UPS.
- 3. Plug the PDU into the L14 outlet on the rear of the UPS.

Specifications

Electrical

| NT 11 11 11 | 120 200 17 | |
|---|--|--|
| Nominal input voltage | 120 or 208 V | |
| Input frequency | 50 or 60 Hz | |
| Input connectors | NEMA L14-30 plug | |
| Output connectors | RA5204-L520-30A-L143: Four NEMA RA5204-L620-30A-L143: Four NEMA RA5212-520-30A-L143: Twelve NEMA RA5204-L530-30A-L143: Four NEMA RA5204-L630-30A-L143: Four NEMA | L6-20 outlets A 5-20 outlets L5-30 outlets |
| Maximum total current draw | 24 A | |
| Physical | | |
| Size $(H \times W \times D)$ | 3.50×17.20×3.50 in (8.89×43.69×8.89 cm) | |
| Weight | 14.0 lb (6.4 kg) | |
| Environmental | | |
| Elevation (above MSL) Operating Storage | 0-10,000 ft (0-3000 m) 0-50,000 ft (0-15 000 m) | |
| Temperature Operating Storage | 0 to 45° C (32 to 115° F) -25 to 65° C (-13 to 149° F) | |
| Humidity Operating Storage | 0-95% RH Non-condensing 0-95% RH Non-condensing | |
| Compliance | | |
| Safety verification | UL, cUL | |
| | | |