

CyberPower®

User's Manual

Power Distribution Unit

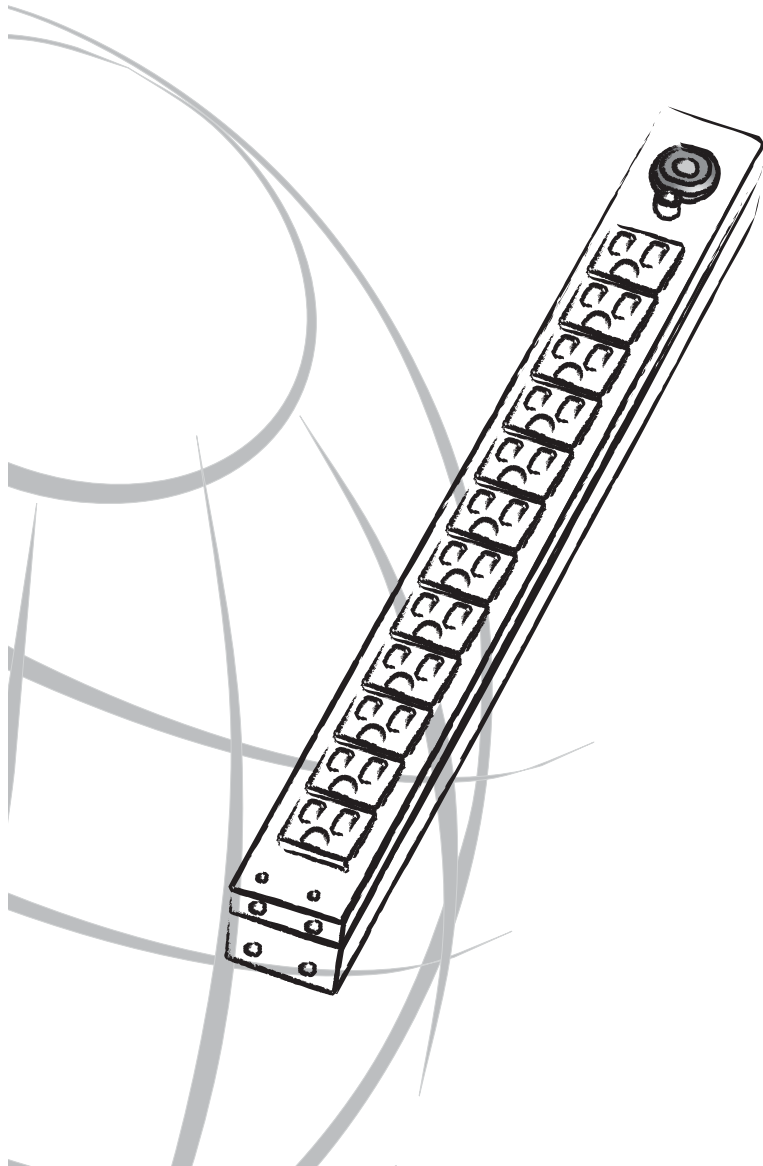


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Basic Series:

PDU20BHVIEC8R
 PDU20BHVIEC10R
 PDU20BHVIEC12R
 PDU20BHVIEC12Ra

Metered Series:(0U)

PDU20MVHVIEC24F
 PDU20MVHVIEC30F
 PDU20MVHVIEC38F

Basic Series:(0U)

PDU10BVHVIEC16F
 PDU10BVHVIEC20F

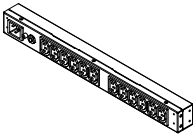
PDU20BVHVIEC16F
 PDU20BVHVIEC20F
 PDU20BVHVIEC24F
 PDU20BVHVIEC32F
 PDU20BVHVIEC38F

PDU Naming Convention:

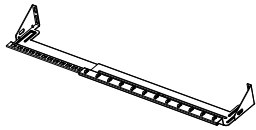
PDU	XX	M	V	HV	IEC	F	R
	1	2	3	4	5	6	7

- | | |
|-------------------------|--|
| 1. Amperage: | Amperage – 15A, 20A, 30A |
| 2. Series: | B: =Basic M: =Metered
SW: = Switched |
| 3. Rack Space: | NULL: =Horizontal V:= Vertical |
| 4. Input Voltage: | HV:= High Voltage – 200V to 240V |
| 5. Plug Type: | IEC:= (IEC 320 C14/C20) |
| 6. Outlet Number Front: | Number of Outlets followed by F – Example 8F |
| 7. Outlet Number Rear: | Number of Outlets followed by R – Example 8R |

Package Contents



PDU (1)



Cord Retention Tray
(1/2/3/4 pcs - varies by models)

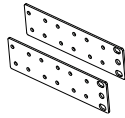
Mounting Brackets



Horizontal Installation
Used (1 set)



Vertical Installation
Used (1 set)



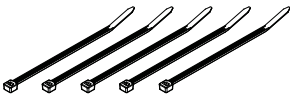
Vertical Mounting Brackets
(1 set)(for 0U models only)



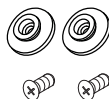
Bracket Mounting
Screws M4 X 6 (4pcs)



Cord Retention Tray
Mounting Screws
M3 X 6 (4/8/12/16 pcs -
varies by models)



Cable Tie
(12/ 15/ 21/ 24/ 30/ 36/ 45/
48/ 57 pcs - varies by models)
for Cord Retention Tray



Keyhole Mounting Pegs (2pcs)
with Screws M4 X 6 (2pcs)
(for 0U models only)



Ground Screw M5 X 6 (1 pcs)

Documentation:



User's Manual



Check

Before using, please check to ensure the package contains all the items shown above. If there are any missing parts, please contact CyberPower technical support at www.cyberpower.com

Safety Precautions

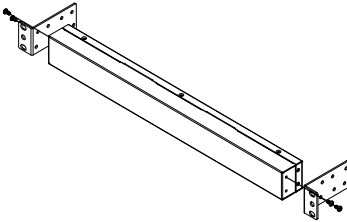
Read the following before installing or operating the Power Distribution Unit (PDU):

1. **CAUTION!** Use ONLY the supplied hardware (including screws, pegs and cord retainer clips) to attach the mounting brackets. Using different hardware or improper installations may cause damage that is NOT covered by this warranty.
2. The PDU must only be plugged into a three-wire, grounded outlet on a circuit protected by a fuse or circuit breaker. Connection to any other type of power outlet may result in a shock hazard.
3. Do not use extension cords or adapters with this PDU.
4. Never install a PDU or associated wiring or equipment during a lightning storm.
5. Check that the power cord, plug, and socket are in good condition.
6. The socket-outlet shall be installed near the equipment and shall be easily accessible.
7. **CAUTION!** To prevent the risk of fire or electric shock, this PDU should be installed in a temperature and humidity controlled indoor area free of conductive contaminants. Do not install this PDU where excessive moisture or heat is present.

Installation

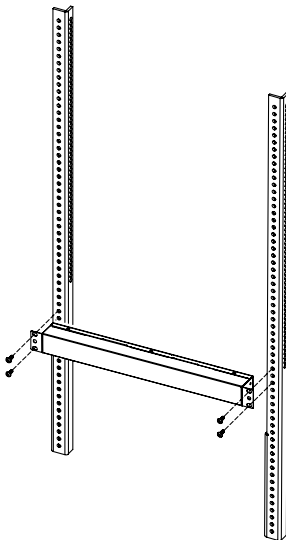
Horizontal Installation (1U models only)

Step 1 – Mounting bracket installation



Install the screws (M4 X 6) in holes diagonally from each other.

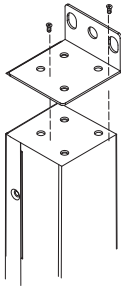
Step 2 – PDU Mounting



Install the PDU using fasteners compatible with the rack.

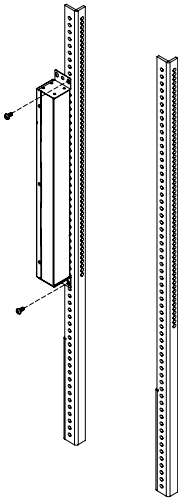
Vertical Installation with Brackets

Step 1 – Mounting bracket installation



Install the screws (M4 X 6) in holes diagonally from each other.

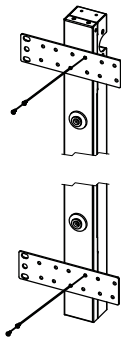
Step 2 – PDU Mounting



Install the PDU using fasteners compatible with the rack.

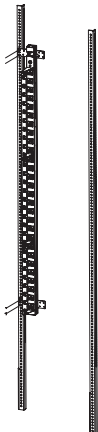
Vertical Installation with Brackets (OU models only)

Step 1 – Mounting bracket installation



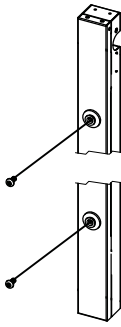
Attach the Vertical Mounting Brackets to the PDU with the 4 supplied Bracket Mounting Screws (M4 X 6).

Step 2 – PDU Mounting



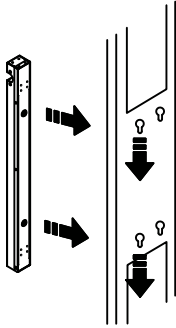
Install the PDU using fasteners compatible with the rack.

Step 1 – Keyhole Mount installation



Attach the Keyhole Mounting Pegs to the PDU with the 2 supplied Bracket Mounting Screws (M4 X 6).

Step 2 – PDU Mounting

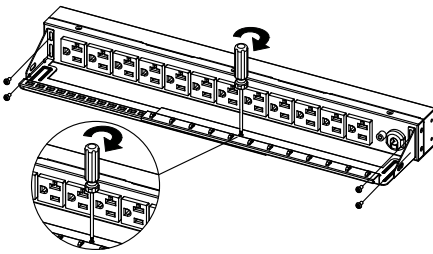


Align the the Keyhole Mounts to the Keyhole Slots on the rack. Insert and slide down to lock firmly into place.

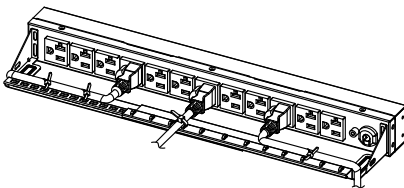
Cord Retention Tray installation

(Optional for both horizontal and vertical installations)

Adjust the length of the Cord Retention Tray till the screw hole on the Tray and PDU are aligned.



Attach the Cord Retention Tray to the PDU with the 4 supplied Cord Retention Tray Mounting Screws (M3 X 6). Tighten the Cord Retention Tray with the screw on it.

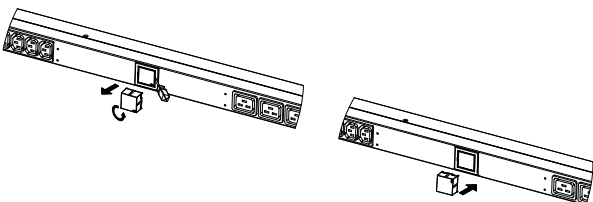


Use the Cable Ties provided to fasten each power cord to the Cord Retention Tray.

Meter Configuration



Depending on installation method (vertical or horizontal), the LED Meter may need to be rotated, before installation, for proper orientation.



Use a screw driver to gently remove the LED Meter. Rotate the LED Meter 90 degrees, and insert back into the PDU.

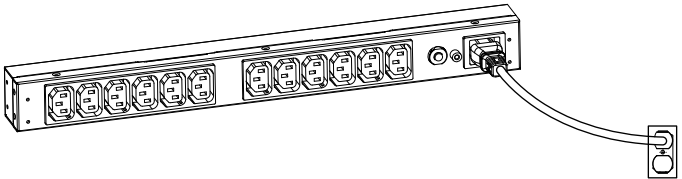
Step 1 – Receptacle evaluation

Ensure that the plug type of your PDU unit (e.g. NEMA 5-15P, NEMA 5-20P, NEMA L5-30P) matches the wall receptacle type that you are using.



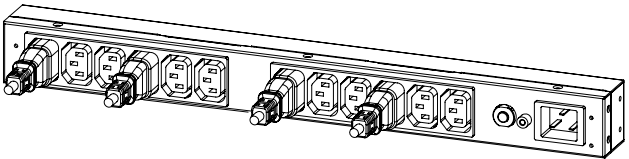
PDU must be plugged into a three-wire, grounded wall receptacle only. The wall receptacle must also be connected to an appropriate branch circuit/main with fuse or circuit breaker protection. Connection to any other type of wall receptacle may result in a shock hazard.

Step 2 – Plug the PDU into the wall receptacle



Step 3 – Attach equipment

Before attaching equipment, it is important to calculate the total load that will be placing on the PDU. It is extremely important not to exceed the PDU's maximum current load (as outlined in the Specifications section). In order to determine the total load, simply add up the amperage of your devices and ensure that it does not exceed the unit's capacity.

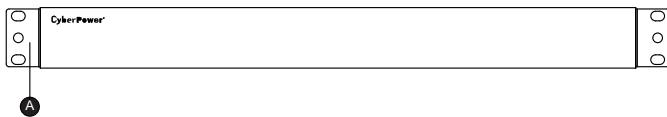


Troubleshooting

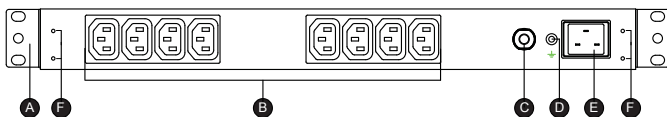
Problem	Possible Cause	Solution
PDU outlets do not provide power to connected equipment	<ol style="list-style-type: none">1. Open breaker2. Loose power cord	Reset breaker, check if plug is completely connected. If the problem remains, contact tech support.
Amperage displayed on Amperage Meter exceeds the unit's capability (Metered type only)	<ol style="list-style-type: none">1. Overload2. Amperage meter is damaged	The meter will flash when overloaded. Reduce the load on the PDU until the overload is gone. If the problem remains, contact tech support.
Circuit breaker has tripped	<ol style="list-style-type: none">1. Sustained overload2. Excessive ambient or internal temperatures.3. Faulty breaker	Reset breaker. If the problem remains, contact tech support.

Product Features

Front View



Back View



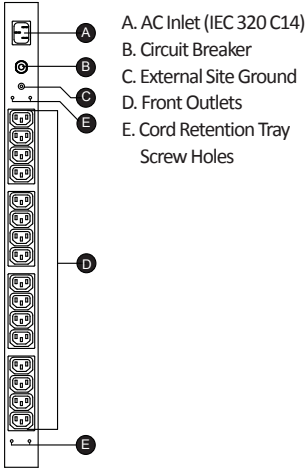
- A. Mounting Bracket
- B. Rear Outlets (IEC 320 C13)
- C. Circuit Breaker
- D. External Site Ground
- E. AC Inlet (IEC 320 C20)
- F. Cord Retention Tray Screw Holes

Technical Specifications

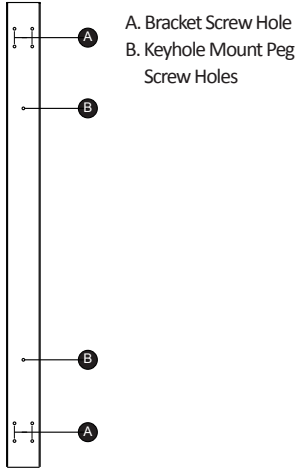
Model Name	PDU20BHVIEC8R PDU20BHVIEC10R PDU20BHVIEC12R PDU20BHVIEC12Ra
Input	
Voltage	200~240V
Max Current	20 A
Regulatory Derated Input Current	16 A
Circuit Breaker	16 A
Plug Type	IEC 320 C20
Power Cord Length	10 ft /3.05m
Output	
Voltage	200~240V
Max Current	20 A
Outlet Type(Quantity)	IEC 320 C13(8) IEC 320 C13(10) IEC 320 C13(12) IEC 320 C19(2)/C13(10)
Indicators	
LED Indicators	N/A
Meter Readout	N/A
Physical	
Dimension (WxDxH)	17.5" x 1.5" x 1.75" / 44.45 x 3.81 x 4.45 cm
Environmental	
Humidity	Operating 0 to 95% Non-condensing Non-Operating 0 to 95% Non-condensing
Altitude	Operating 0ft to 10,000ft/3048m Non-Operating 0ft to 50,000ft/15240m
Temperature	Operating 32F/0°C to 95F/35°C Non-Operating 5F/-15°C to 113F/45°C
Safety Approvals	
Certifications	UL60950_1 , CSA C22.2, CE, RoHS Compliant

Product Features

Front View



Back View

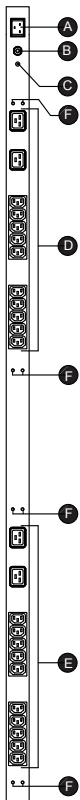


Technical Specifications

Model Name	PDU10BVHVIEC16F PDU10BVHVIEC20F
Input	
Voltage	200~240V
Max Current	10 A
Regulatory Derated Input Current	10 A
Circuit Breaker	10A
Plug Type	IEC 320 C14
Power Cord Length	10 ft /3.05m
Output	
Voltage	200~240V
Max Current	10 A
Outlet Type(Quantity)	IEC 320 C13(16) IEC 320 C19(4)/C13(16)
Indicators	
LED Indicators	N/A
Meter Readout	N/A
Physical	
Dimension (WxDxH)	1.75"x1.5"x24" / 4.45x3.81x60.96 cm 1.75"x1.5"x36" / 4.45x3.81x91.44 cm
Environmental	
Humidity	Operating 0 to 95% Non-condensing Non-Operating 0 to 95% Non-condensing
Altitude	Operating 0ft to 10,000ft/3048m Non-Operating 0ft to 50,000ft/15240m
Temperature	Operating 32F/0°C to 95F/35°C Non-Operating 5F/-15°C to 113F/45°C
Safety Approvals	
Certifications	UL60950_1 , CSA C22.2, CE, RoHS Compliant

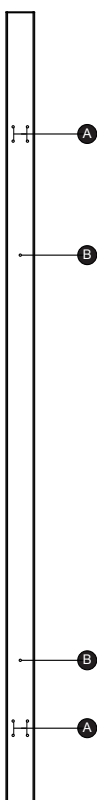
Product Features

Front View



High Voltage Type:
 A. AC Inlet (IEC 320 C20)
 B. Circuit Breaker
 C. External Site Ground
 D. Front Outlets
 E. Front Outlets
 F. Cord Retention Tray Screw Holes

Back View



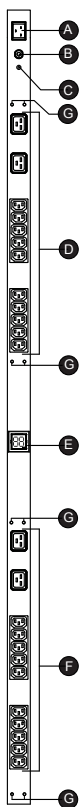
A. Bracket Screw Hole
 B. Keyhole Mount Peg Screw Holes

Technical Specifications

Model Name	PDU20BVHVI EC16F PDU20BVHVI EC20F PDU20BVHVI EC24F PDU20BVHVI EC32F PDU20BVHVI EC38F
Input	
Voltage	200~240V
Max Current	20 A
Regulatory Derated Input Current	16 A
Circuit Breaker	16 A
Plug Type	IEC 320 C20
Power Cord Length	10 ft /3.05m
Output	
Voltage	200~240V
Max Current	20 A
Outlet Type(Quantity)	IEC 320 C13(16) IEC 320 C19(4)/C13(16) IEC 320 C19(4)/C13(20) IEC 320 C19(4)/C13(24) IEC 320 C19(4)/C13(30)
Indicators	
LED Indicators	N/A
Meter Readout	N/A
Physical	
Dimension (WxDxH)	1.75" x 1.5" x 24" / 4.45 x 3.81 x 60.96 cm 1.75" x 1.5" x 36" / 4.45 x 3.81 x 91.44 cm 1.75" x 1.5" x 48" / 4.45 x 3.81 x 121.92cm 1.75" x 1.5" x 60" / 4.45 x 3.81 x 152.40 cm 1.75" x 1.5" x 70" / 4.45 x 3.81 x 177.80 cm
Environmental	
Humidity	Operating 0 to 95% Non-condensing Non-Operating 0 to 95% Non-condensing
Altitude	Operating 0ft to 10,000ft/3048m Non-Operating 0ft to 50,000ft/15240m
Temperature	Operating 32F/0°C to 95F/35°C Non-Operating 5F/-15°C to 113F/45°C
Safety Approvals	
Certifications	UL60950_1 , CSA C22.2, CE, RoHS Compliant

Product Features

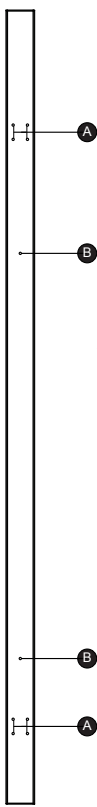
Front View



High Voltage Type:

- A. AC Inlet (IEC 320 C20)
- B. Circuit Breaker
- C. External Site Ground
- D. Front Outlets
- E. Meter Readout
- F. Front Outlets
- G. Cord Retention Tray Screw Holes

Back View



- A. Bracket Screw Hole
- B. Keyhole Mount Peg Screw Holes

Technical Specifications

Model Name	PDU20MVHVIEC24F PDU20MVHVIEC30F PDU20MVHVIEC38F
Input	
Voltage	200~240V
Max Current	20 A
Regulatory Derated Input Current	16 A
Circuit Breaker	16 A
Plug Type	IEC 320 C20
Power Cord Length	10 ft /3.05m
Output	
Voltage	200~240V
Max Current	20 A
Outlet Type(Quantity)	IEC 320 C19(4)/C13(20) IEC 320 C19(6)/C13(24) IEC 320 C19(8)/C13(30)
Indicators	
LED Indicators	N/A
Meter Readout	Amperage
Physical	
Dimension (WxDxH)	1.75" x 1.5" x 48" / 4.45 x 3.81 x 121.92 cm 1.75" x 1.5" x 60" / 4.45 x 3.81 x 152.40 cm 1.75" x 1.5" x 70" / 4.45 x 3.81 x 177.80 cm
Environmental	
Humidity	Operating 0 to 95% Non-condensing Non-Operating 0 to 95% Non-condensing
Altitude	Operating 0ft to 10,000ft/3048m Non-Operating 0ft to 50,000ft/15240m
Temperature	Operating 32F/0°C to 95F/35°C Non-Operating 5F/-15°C to 113F/45°C
Safety Approvals	
Certifications	UL60950_1 , CSA C22.2, CE, RoHS Compliant



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