

User Manual

Power Distribution Unit



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Model List

Basic Series:

PDU20BHVIFC8R PDU20BHVIEC10R PDU20BHVIEC12R PDU20BHVIEC12Ra

Metered Series:(0U)

PDU20MVHVIFC24F PDU20MVHVIEC30F PDU20MVHVIEC38F

Basic Series:(0U)

PDU10BVHVIEC16F PDU10BVHVIEC20F

PDU20BVHVIEC16F PDU20BVHVIEC20F PDU20BVHVIEC24F PDU20BVHVIEC32F PDU20BVHVIEC38F

PDU Naming Convention:

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

IEC:= (IEC 320 C14/C20) 5. Plug Type:

6. Outlet Number Front: Number of Outlets followed by

F - Example 8F

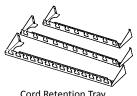
7. Outlet Number Rear: Number of Outlets followed by

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)

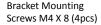


Vertical Installation Used (1 set)



Vertical Mounting Brackets (1 set)(for OU models only)







Cord Retainer Clips (8/10/12/14/16/20/24/30/ 32/38 pcs - varies by models) for Cord Retention Tray





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



Keyhole Mounting Pegs (2pcs) with Screws M4 X 8 (2pcs) (for 0U models only)



Ground Screw M5 X 6 (1 pcs)

Documentation:



User Manual



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.CPSww.com

Safety Precautions

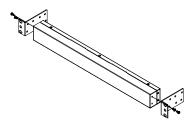
Read the following before installing or operating the Power Distribution Unit (PDU):

- 1. Use only the supplied hardware to attach the mounting brackets.
- 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.
- 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

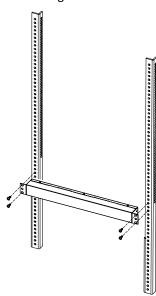
Horizontal Installation (1U models only)

Step 1 - Mounting bracket installation



Install the screws (M4 X 8) in holes diagonally from each other.

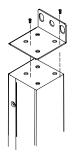
Step 2 - PDU Mounting



Install the PDU using fasteners compatible with the rack.

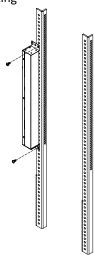
Vertical Installation with Brackets

Step 1 - Mounting bracket installation



Install the screws (M4 X 8) in holes diagonally from each other.

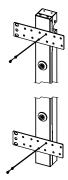
Step 2 - PDU Mounting



Install the PDU using fasteners compatible with the rack.

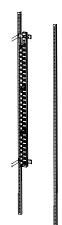
Vertical Installation with Brackets (OU models only)

Step 1 – Mounting bracket installation



Attach the Vertical Mounting Brackets to the PDU with the 4 supplied Bracket Mounting Screws (M4 X 8).

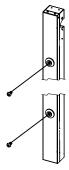
Step 2 - PDU Mounting



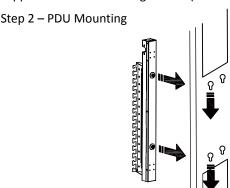
Install the PDU using fasteners compatible with the rack.

Vertical Installation with Keyhole Mounts (0U Models)

Step 1 - Keyhole Mount installation

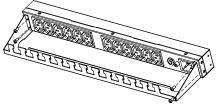


Attach the Keyhole Mounting Pegs to the PDU with the 2 supplied Bracket Mounting Screws (M4 X 8).

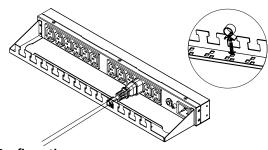


Align the the Keyhole Mounts to the Keyhole Slots on the rack. Insert and slide down to lock firmly into place.

Cord Retention Tray installation (Optional for both horizontal and vertical installations)



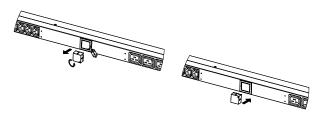
Attach the Cord Retention Tray to the PDU with the 4 supplied Cord Retention Tray Mounting Screws (M3 X 6).



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.

Electrical Installation

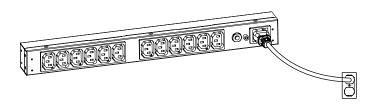
Step 1 - Receptacle evaluation

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.



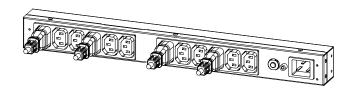
PDU must be plugged into a three-wire, grounded wall receptacle only. The wall receptacle must also be connected to an appropriate branch circuit/main with fuse or circuit breaker protection. Connection to any other type of wall receptacle may result in a shock hazard.

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.



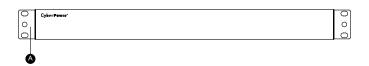
Troubleshooting

Problem	Possible Cause	Solution
PDU outlets do not provide power to connected equipment	Open breaker 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)	Overload 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	Sustained overload Excessive ambient or internal temperatures. Faulty breaker	Reset breaker. If the problem remains, contact tech support.

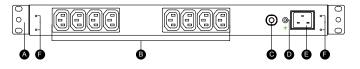
Basic Series (1U 20A)

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

PDI 120RHVIEC8R

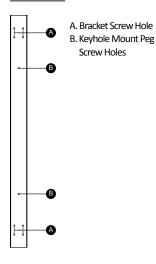
Model Name	PDU20BHVIEC8R PDU20BHVIEC10R PDU20BHVIEC12R
	PDU20BHVIEC12R PDU20BHVIEC12Ra
Input	
Voltage	200~240V
Max Current	20 A
Regulatory Derated Input Current	16 A
Circuit Breaker	16 A
Plug Type	IEC 320 C20
Power Cord Length	10 ft /3.05m
Output	
Voltage	200~240V
Max Current	20 A
Outlet Type(Quantity)	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

A. AC Inlet (IEC 320 C14) B. Circuit Breaker C. External Site Ground D. Front Outlets E. Cord Retention Tray Screw Holes

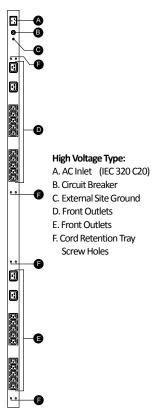
Back View



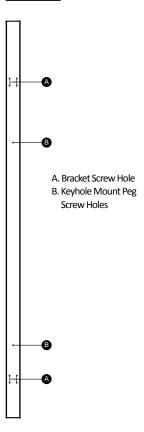
Model Name	PDU10BVHVIEC16F PDU10BVHVIEC20F		
Input			
Voltage	200~240V		
Max Current	10 A		
Regulatory Derated Input Current	10 A		
Circuit Breaker	10A		
Plug Type	IEC 320 C14		
Power Cord Length	10 ft /3.05m		
Output			
Voltage	200~240V		
Max Current	10 A		
Outlet Type(Quantity)	IEC 320 C13(16) IEC 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



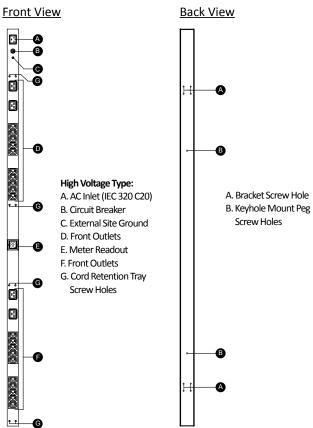
Back View



Input	Model Name	PDU20BVHVIEC16F PDU20BVHVIEC20F PDU20BVHVIEC24F PDU20BVHVIEC32F PDU20BVHVIEC38F
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 200~240V Max Current 20 A IEC 320 C13(16) IEC 320 C19(4)/C13(16) Outlet Type(Quantity) IEC 320 C19(4)/C13(20) IEC 320 C19(4)/C13(24) IEC 320 C19(4)/C13(30) Indicators N/A LED Indicators N/A Meter Readout N/A Physical 1.75" x 1.5" x 24" / 4.45 x 3.81 x 60.96 cm 1.75" x 1.5" x 48" / 4.45 x 3.81 x 121.92cm 1.75" x 1.5" x 48" / 4.45 x 3.81 x 122.92cm 1.75" x 1.5" x 60" / 4.45 x 3.81 x 152.40 cm	Input	
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 IEC 320 C13(16) IEC 320 C19(4)/C13(16) Outlet Type(Quantity) 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 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 Dimension (WxDxH) 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	Voltage	200~240V
Input Current	Max Current	20 A
Plug Type IEC 320 C20 Power Cord Length 10 ft /3.05m Output Voltage 200~240V Max Current 20 A IEC 320 C13(16) IEC 320 C19(4)/C13(16) Outlet Type(Quantity) 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 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 121.92cm 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	,	16 A
Power Cord Length 10 ft /3.05m Output Voltage 200~240V Max Current 20 A IEC 320 C13(16) IEC 320 C19(4)/C13(16) Outlet Type(Quantity) 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 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 125.40 cm	Circuit Breaker	16 A
Output 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 N/A LED Indicators N/A Meter Readout N/A Physical 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 122.92cm	Plug Type	IEC 320 C20
Voltage 200~240V Max Current 20 A Outlet Type(Quantity) 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 N/A Meter Readout N/A Physical 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 Dimension (WxDxH) 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	Power Cord Length	10 ft /3.05m
Max Current 20 A	Output	
IEC 320 C13(16) IEC 320 C19(4)/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) I	Voltage	200~240V
IEC 320 C19(4)/C13(16) Outlet Type(Quantity) IEC 320 C19(4)/C13(20) IEC 320 C19(4)/C13(24) IEC 320 C19(4)/C13(30) Indicators N/A Meter Readout N/A Physical 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	Max Current	20 A
Outlet Type(Quantity) 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 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		IEC 320 C13(16)
IEC 320 C19(4)/C13(24) IEC 320 C19(4)/C13(30) Indicators		IEC 320 C19(4)/C13(16)
IEC 320 C19(4)/C13(30) Indicators	Outlet Type(Quantity)	IEC 320 C19(4)/C13(20)
Indicators		` " ` '
LED Indicators N/A Meter Readout N/A Physical 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 Dimension (WxDxH) 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		IEC 320 C19(4)/C13(30)
Meter Readout N/A Physical 1.75" x 1.5" x 24" / 4.45 x 3.81 x 60.96 cm Dimension (WxDxH) 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	Indicators	
Physical 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	LED Indicators	
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	Meter Readout	N/A
1.75" x 1.5" x 36" / 4.45 x 3.81 x 91.44 cm Dimension (WxDxH) 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	Physical	
Dimension (WxDxH) 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	Dimension (WxDxH)	1
1.75" x 1.5" x 60" / 4.45 x 3.81 x 152.40 cm		1
I '		
1.75" x 1.5" x 70" / 4.45 x 3.81 x 177.80 cm		· · · · · · · · · · · · · · · · · · ·
		1.75" x 1.5" x 70" / 4.45 x 3.81 x 177.80 cm
Environmental	Environmental	
Humidity Operating 0 to 95% Non-condensing Non-Operating 0 to 95% Non-condensing	Humidity	
Altitude Operating 0ft to 10,000ft/3048m Non-Operating 0ft to 50,000ft/15240m	Altitude	
Temperature Operating 32F/0°C to 95F/35°C Non-Operating 5F/-15°C to 113F/45°C	Temperature	Operating 32F/0°C to 95F/35°C
Safety Approvals	Safety Approvals	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Certifications UL60950 1, CSA C22.2, CE, RoHS Compliant		UL60950 1, CSA C22.2. CE. RoHS Compliant

Meter Series (0U 20A)

Product Features



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	



CyberPower Systems, Inc. www.CPSww.com

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