**hp** modular power distribution units (PDUs)





# unique design combats rack-space crunch and cable clutter

When it comes to your power distribution system fulfilling one requirement often compromises another. You need more outlets, but less cords. More power distribution in less space. Why compromise when you can customize? Introducing a new line of Modular Power Distribution Units (PDUs) from HP. HP has done it again with unique modular architecture that allows you to virtually custom-configure your own rack power distribution system based on your dense data center's singular needs. Now, you can maximize power distribution and management while minimizing cable clutter, confusion, and rack U-space.

## unique modular design for unparalleled flexibility

Designed for dense data center environments, HP Modular PDUs consist of two building blocks: the control unit and extension bars. The control unit houses the main power switch, circuit breakers, load groups and power-on light. It is 0U or 1U mountable, and can even be mounted in 1/2U. Plus, extension bars plug into the control unit extending the outlet receptacles along the length of the rack. Extension bars eliminate long power cords and confusing clutter. And, the extension bars fit easily into the frame of the rack without using rack U-space.

This easy-to-deploy modular concept allows you to quickly mount your units in different locations within the rack without sacrificing valuable rack space. Compatible with the HP Rack 9000 and 10000 series<sup>1</sup>, the Modular PDU design also gives you more outlet receptacles, easier accessibility, superior cable management, and improved power distribution.

## increased receptacles and easier access

You can plug up to 32 power cords into one HP Modular PDU. Mount two Modular PDU sets and you get up to 64 total outlets. Modular PDUs support up to 42 1U servers (ensuring the total current does not exceed the maximum allowable current draw of the PDU). And the extension bars mounted directly to the rack frame, provide easy accessibility to numerous outlets, allowing users to easily plug-in/plug-out devices.

#### reduce cable clutter and confusion

Multiple long cables cause confusion in the rack, and make cable management complex. Now with the Modular PDU, due to its unique design, you can mount the extension bars closer to your servers. When you mount extension bars closer to your servers, you use shorter cables and reduce cabling, and improve space and rack cooling. Shorter IEC-C13 to IEC -C14 power cords (4.5ft) are available as an option kit: PN: 142257-006 (quantity=1) or PN: 142257-007 (quantity=15).



# key benefits

- wide range from 16A 40A
- 0U/1U flexible mounting options
- up to 32 outlets
- · easy accessibility
- improved cable management

## backed by a three-year warranty

HP backs all its PDU products and Modular PDUs with a limited three-year warranty. When used in the HP 9000 and 10000 series racks, HP PDUs assume the warranty of the rack in which they're installed. HP CarePak services purchased for HP racks also cover the Modular PDUs used inside HP racks. Call your HP Computer Support Center for details.

HP Modular Power Distribution Units mean you can now customize without compromise. PDU's add up to more efficient power distribution, less rack U-space usage...more devices, fewer cords...increased accessibility, and fewer headaches.

## model specification comparisons

	low voltage 24A	high voltage 16A	high voltage 24A	high voltage 32A	high voltage 40A
part number	252663-D71	252663-B24	252663-D72	252663-B31	252663-B21
input connection (single input)	attached input cord NEMA L5-30P	Detachable input power cord with a IEC 320-C20 inlet	Attached input cord NEMA L6-30P	Attached input cord IEC 309-32A	Field wired terminal <sup>5</sup>
output connections	(32) NEMA 5-15R <sup>2</sup>	(16) IEC 320 C-13 <sup>3</sup>	(32) IEC 320 C-13	(32) IEC 320 C-13	(24) IEC 320 C-13 (4) IEC 320 C-19
additional cables shipped with the unit (Refer to quick specs for more information)		(2) 10A, 4.5ft jumper cords IEC 320 C13-C14 (1) 16A, 8.2ft power cord IEC 320 C19- C20	(2) 10A, 4.5ff jumper cords IEC 320 C13-C14	(2) 10A, 4.5ff jumper cords IEC 320 C13-C14	(2) 10A, 4.5ft jumper cords IEC 320 C13-C14
applications	Connects to low voltage models of the UPS R3000 XR (PN 192186-001, 291) Also connects directly into the facility input	Connects to the high voltage models of the UPS R3000 XR and R6000 (PN 192186-002 <sup>4</sup> , -B31, -B32, -B33, -AR1; PN 347207-001, B31, -291) Also connects directly into the facility input	Designed to connect directly into the facility input	Designed to connect directly into the facility input	May be hardwired directly into the facility input Can also be hardwired to a high voltage UPS R12000 XR

Note: All Units ship with 1U/OU mounting brackets, required to mount the mPDUs in the HP 9000 and 10000 series racks.

## hp modular PDU specifications

mechanical dimensions (WxHxD):	17.5 x 1.62 x 5.6 in/444.5 x 41.2 x 142.2 mm			
unit weight:	18 lbs/8.16 kg			
shipping dimensions (WxHxD):	21.5 x 12.25 x 13.0 in/546.1 x 311.2 x 330.2 mm			
shipping weight:	20.2 lbs/9.16 kg			
operating temperature:	10 - 50° C/50 - 122° F			
operating relative humidity (%):	10 - 90%			
operating elevation:	0 - 10,000 ft/0 - 3048 m			
storage temperature:	-20 to + 60° C/-4 to +140° F			
storage relative humidity (%):	5 - 95%			
storage elevation:	0 - 30, 000 ft/0 - 9144 m			
output circuit breaker:	up to 4 x 15A			
indicator lights:	Indicator light on each of the extension bars; and a main AC pilot light on the Control Unit			
overload protection:	yes			
conformance standards	UL, CUL, CE, NOM, D - 16A and 40A models UL, CUL, NOM - 24A High and Low voltage models CE, D - 32A model			
kit contents	Modular PDU (x 1 control unit + up to 4 extension bars) 0U/1U mounting brackets/hardware for control unit mounting brackets for extension bars install card cord retention bracket for the control unit; tie wraps high volt models ship default with x2 IEC-320 10A jumper cables (4.5ft /1.37m)			

<sup>&</sup>lt;sup>1</sup> Modular PDUs may be installed in most third-party racks in a 1U configuration (no zero-U mounting). To mount the Extension Bars in a rack other than the HP 9000 and 10000 series racks, an optional kit PN 310777-B21 is offered. This kit allows mounting the Extension Bars in most third party racks, which use a standard EIA19 vertical rail.

more outlets, less cordage

### for more information

For more information visit www.hp.com/products/ups

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<sup>&</sup>lt;sup>2</sup> The low volt Extension Bars w/5-15 outlets should be used ONLY with the low volt Control Unit that is shipped with the low volt Modular PDU unit.

<sup>&</sup>lt;sup>3</sup> The 16A model ships with 2 Extension Bars.All other 24-40A models ship with 4 Extension Bars

<sup>&</sup>lt;sup>4</sup> Except for the UPS R3000 XR North America high volt model, where an additional cable option kit, PN 340653-001 (IEC320-C19 to L6-20P), is needed to connect a 16A mPDU to the NA high voltage model of the UPS R3000 XR.

Note: a certified on-site electrician must install hardwiring.