

Family data sheet



HP Remote Monitoring Power Distribution Units

Highly accurate power monitoring with built-in remote capabilities





HP Remote Monitoring Power Distribution Units provide rack-level power monitoring over the network. With billing-grade accuracy, these are an excellent choice for data centers wanting to make the most of circuit capacity, or for co-location facilities needing to precisely track power usage for billing purposes.

Reduce complexity in the data center

The demands of running an enterprise data center or co-location facility are complex enough. In addition to keeping a tight watch over energy consumption and managing space constraints, today's business requirements call for highly accurate billing capabilities so the line of business or co-location service provider can maintain an accurate account of resource usage.

It's hard to believe something as simple as a power distribution unit (PDU) could answer enterprise-level data center challenges. Yet HP Remote Monitoring PDUs are just one more example of how HP makes every aspect of the data center work for you—answering your challenges with simple yet effective solutions that are easy to use and make a real impact on your bottom line.

HP Remote Monitoring PDUs feature billing-grade accuracy along with built-in remote capabilities that simplify and allow for remote power monitoring and management from anywhere on the network. They come in a new slim profile design with multiple outlet and power configurations to meet a variety of needs. And all are backed by HP's limited three-year warranty. Other benefits include:

Enterprise class features



- Billing-grade accuracy of 99 percent for precisely allocating data center expenses
- Local and Lightweight Directory Access Protocol (LDAP) authentication provide security whether installed in a single rack or throughout an entire enterprise data center
- Optional environmental sensor monitors temperature and humidity at the rack to help balance cooling and improve efficiency

Ease of use



- Built-in remote monitoring capabilities
- Easy to use Web interface
- Settable thresholds provide customization of alerts to match specific data center policies
- Advanced LCD pixel display simplifies local setup and troubleshooting
- Color coding simplifies phase balancing and branch circuit breaker identification
- Local and LDAP authentication provide for faster, simpler maintenance
- New slim profile design simplifies and prevents interference with maintenance activities in the rear of the rack
- Slim design and multiple mounting options allow for mounting on both sides of the rack or mounting multiple PDUs on one side

Lower cost of ownership



- High operating temperature of 60°C/140°F reduces data center cooling costs
- Accurate power monitoring improves circuit utilization and reduces stranded power
- Monitoring provides information that can help balance power throughout the data center to maximize cooling efficiency
- Ability to daisy-chain two units from one IP address reduces network connection costs
- Built-in cable retention feature eliminates the need for special order cables that increase unit cost

HP Remote Monitoring Power Distribution Units technical specifications

	HP 2.8k VA 120 volt 12 outlet NA/JP D9N43A	3.6k VA 200–240 volt 12 outlet WW D9N46A	4.9k VA 208 volt 12 outlet NA/JP D9N44A	3.6k VA 200–240 volt 16 outlet WW D9N45A
Electrical input connection	(Attached) NEMA L5-30P	(Detachable) IEC 60320 C20	(Attached) NEMA L6-30P	(Detachable) IEC 60320 C20
Electrical output connection	(12) NEMA 5-20R	(12) IEC 60320 C13	(12) IEC 60320 C13	(16) IEC 60320 C13
Input circuit	30 A, 100–120 V	16 A or 20 A, 200–240 V	30 A, 200–208 V	16 A or 20 A, 200–240 V
Current (max)	24 A	16 A	24 A	16 A
Power capacity	2.8k VA	3.6k VA	4.9k VA	3.6k VA
What's in the box	PDU, mounting hardware, six-foot CAT5 cable, six-foot RJ45-DB9 cable, 15 cable retention tie wraps, read me first card, and warranty card			PDU, mounting buttons, CTO shipping bracket, six-foot CAT5 cable, six-foot RJ45-DB9 cable, 20 cable retention tie wraps, read me first card, and warranty card

	4.9k VA 208 volt 24 outlet NA/JP D9N47A	7.3k VA 230 volt 24 outlet INTL D9N48A	5.7k VA 208 volt three-phase 21 Outlet NA/JP dual-voltage D9N52A
Electrical input connection	(Attached) NEMA L6-30P	(Attached) IEC 60309 332P6	(Attached) NEMA L21-20P
Electrical output connection	(20) IEC 60320 C13 (4) IEC 60320 C19	(20) IEC 60320 C13 (4) IEC 60320 C19	(18) IEC 60320 C13 (3) NEMA 5-20R
Input circuit	30 A, 200–208 V	32 A, 220–240 V	20 A, 200–208 V three-phase Wye
Current (max)	24 A	32 A	27.7 A
Power capacity	4.9k VA	7.3k VA	5.7k VA
What's in the box	PDU, mounting buttons, CTO shipping bracket, six-foot CAT5 cable, six-foot RJ45-DB9 cable, 30 cable retention tie wraps, read me first card, and warranty card		

HP Remote Monitoring Power Distribution Units technical specifications (continued)

	8.6k VA 208 volt three-phase 24 outlet NA/JP dual-voltage D9N53A	8.6k VA 208 volt three-phase 21 outlet NA/JP D9N51A	11k VA 400 volt three-phase 21 outlet INTL D9N55A
Electrical input connection	(Attached) NEMA L21-30P	(Attached) NEMA L15-30P	(Attached) IEC 60309 516P6
Electrical output connection	(18) IEC 60320 C13 (3) IEC 60320 C19 (3) NEMA 5-20R	(18) IEC 60320 C13 (3) IEC 60320 C19	(18) IEC 60320 C13 (3) IEC 60320 C19
Input circuit	30 A, 200–208 V three-phase Wye	30 A, 200–208 V three-phase Delta	16 A, 380–415 V three-phase Wye
Current (max)	41.5 A	41.5 A	16 A/phase
Power capacity	8.6k VA	8.6k VA	11k VA
What's in the box	PDU, mounting buttons, CTO shipping bracket, six-foot CAT5 cable, six-foot RJ45-DB9 cable, 30 cable retention tie wraps, read me first card, and warranty card		

	7.3k VA 230 volt 36 outlet INTL D9N50A	8.3k VA 208 volt 33 outlet NA D9N49A	11k VA 400 volt three-phase 33 outlet INTL D9N57A	14.4k VA 208 volt three-phase 24 outlet NA D9N58A	16.6k VA 400 volt three-phase 24 outlet NA D9N62A
Electrical input connection	(Attached) IEC 60309 332P6	(Attached) Hubbell Locking CS8265C	(Attached) IEC 60309 516P6	(Attached) Hubbell Locking CS8365C	(Attached) IEC 60309 532P6
Electrical output connection	(32) IEC 60320 C13 (4) IEC 60320 C19	(30) IEC 60320 C13 (3) IEC 60320 C19	(30) IEC 60320 C13 (3) IEC 60320 C19	(12) IEC 60320 C13 (12) IEC 60320 C19	(12) IEC 60320 C13 (12) IEC 60320 C19
Input circuit	32 A, 220–240 V	50 A, 200–208 V	16 A, 380–415 V three-phase Wye	50 A, 200–208 V three-phase Delta	30 A, 380–415 V three-phase Wye
Current (max)	32 A	40 A	16 A/phase	69.2 A	24 A/phase
Power capacity	7.3k VA	8.3k VA	11k VA	14.4k VA	16.6k VA
What's in the box	PDU, mounting buttons, CTO shipping bracket, six-foot CAT5 cable, six-foot RJ45-DB9 cable, 45 cable retention tie wraps, read me first card, and warranty card				

HP Remote Monitoring Power Distribution Units technical specifications (continued)

	16.6k VA 400 volt three-phase 33 outlet NA D9N61A	17.3k VA 208 volt three-phase 24 outlet NA/JP D9N59A	17.3k VA 208 volt three-phase 27 outlet NA/JP D9N54A
Electrical input connection	(Attached) IEC 60309 532P6	(Attached) IEC 60309 460P9	(Attached) IEC 60309 460P9
Electrical output connection	(30) IEC 60320 C13 (3) IEC 60320 C19	(12) IEC 60320 C13 (12) IEC 60320 C19	(24) IEC 60320 C13 (3) IEC 60320 C19
Input circuit	30 A, 380–415 V three-phase Wye	60 A, 200–208 V three-phase Delta	60 A, 200–208 V three-phase Delta
Current (max)	24 A/phase	83 A	83 A
Power capacity	16.6k VA	17.3k VA	17.3k VA
What's in the box	PDU, mounting buttons, CTO shipping bracket, six-foot CAT5 cable, six-foot RJ45-DB9 cable, 45 cable retention tie wraps, read me first card, and warranty card		

	19.9k VA 480 volt three-phase 30 outlet NA D9N63A	22k VA 400 volt three-phase 24 outlet INTL D9N60A	22k VA 400 volt three-phase 33 outlet INTL D9N56A
Electrical input connection	(Attached) NEMA L22-30	(Attached) IEC 60309 532P6	(Attached) IEC 60309 532P6
Electrical output connection	(30) RF-203P-HP (LS-26)	(12) IEC 60320 C13 (12) IEC 60320 C14	(30) IEC 60320 C13 (3) IEC 60320 C19
Input circuit	30 A, 480 V three-phase Wye	32 A, 380–415 V three-phase Wye	32 A, 380–415 V three-phase Wye
Current (max)	24 A/phase	32 A/phase	32 A/phase
Power capacity	19.9k VA	22k VA	22k VA
What's in the box	PDU, mounting buttons, CTO shipping bracket, six-foot CAT5 cable, six-foot RJ45-DB9 cable, 45 cable retention tie wraps, read me first card, and warranty card		

Available in a flexible variety of options

HP Remote Monitored PDUs are available in 1U and vertical form factors in single- and three-phase models. The low profile single-piece design on these PDUs provides multiple mounting options. All HP Remote Monitored PDUs can be mounted to stay completely out of the critical rear maintenance path needed to service IT equipment in the rack. All vertical models use industry standard button and keyhole mounting for simple drop-in installation in HP 11000 G2 and Intelligent Series racks, as well as in many third-party racks.

1U PDUs

- HP Remote Monitoring PDUs with 1U form factors mount in 1U of space in any EIA standard rack

Vertical PDUs

- Available in a variety of sizes to meet the needs of many environments
- Mount vertically on either side in the rear of the rack using industry standard button and keyhole mounting
- Standard mounting faces the outlet toward the rear of the rack; this configuration fully prevents interference in the maintenance zone between rear RETMA rails

Using the optional configuration of facing the outlets into the rack, multiple HP Remote Monitoring PDUs can be mounted on one side of the rack for higher power density (Note: Facing the outlets into the rack will interfere with the lower few rack U spaces of the rear maintenance zone due to breakers on the PDUs.).



Resources






For more information on HP Services offerings, visit hp.com/hps.

For additional information, visit [Worldwide limited warranty and technical support](#).

Bring it all together with HP services

All HP PDUs automatically inherit the HP Care Pack service level of HP ProLiant servers installed in the same rack. Additional HP Care Pack services provide a range of lifecycle support options that let you choose the service levels that meet your business requirements, from basic to mission-critical.

A full range of HP Care Pack hardware and software services are available including:

	Installation and start up
	Education courses
	Extended onsite hardware coverage hours from same business day 13-hours, five-day to 24-hours, seven-days call window with options including four-hour response, or six-hour call-to-repair
	Comprehensive range of software technical support for Microsoft®, Linux, HP ProLiant Essentials, and VMware-based IT solutions helping to deliver a high level of application availability; response times range from 30 minutes for critical problems to two hours
	System management, performance services, and mission-critical support solution

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