# MPH2™ MANAGED RACK PDU

Advanced Monitoring And Control Support



### **MPH2 BENEFITS**

- Monitors electrical and environmental parameters with user-configurable threshold and alarm tools
- Controls and manages individual receptacles and/or groups of loads and devices
- Allows you to predict failing conditions before they occur and proactively manage connected equipment for maximum uptime
- Energy and power metering to optimize the data center power and cooling infrastructure
- Lowest power consumption of all switched rack PDU designs ensures lower operating costs for datacenter
- Up to four MPH2 rack PDUs may be interconnected as a Rack PDU Array™, consolidating user IP connections and device monitoring.

### Designed for Critical Environments

- Industry leading operating temperature— up to 60°C / 140°F to support hot Internal rack environments
- Bi-stable relays ensure basic power distribution in the event that intelligence is compromised
- Accurate power metering of +/-1% voltage & current for assured oversight
- Energy and power metering down to the individual receptacle
- Comprehensive alarming including notification of overloaded branch circuits
- Environmental sensing with threshold and alarm set-points
- Notification on the loss or removal of individual rack equipment loads

MPH2 is the most intelligent, high-availability line of managed rack PDUs. It offers remote monitoring and control capabilities as well as environmental input options, with multiple power input selections, output configurations, and form factors.

Models in OU, 1U, and 2U form factors are available in the following versions:

- Outlet Level Metered and Switched
- Outlet Level Metered
- Rack PDU Metered and Outlet Switched
- Rack PDU Metered

## MPH2 Savings for a Typical Data Center

	TYPICAL 24 OUTLET RACK PDU	MPH2
Rack PDU power consumption (Watts)	23	7.5
Rack PDU annual energy consumption (kWh) —24x7x365	202	66
Overall contribution to datacenter energy consumption (kWh)*	383	125
Cost of energy consumption (based on average cost of 10¢/kWh)	\$38	\$13
Annual savings per pdu with MPH2		\$26
Annual savings per rack with MPH2	\$52	
Annual savings within the datacenter with MPH2	\$5,160	

Based on a a comparison of switched rack PDU models for a typical 100 rack data center with a PUE of 1.9.
\* per Energy Logic calculations



Also available in 1U and 2U models

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# MPH2™ Specifications

Mounting	Preinstalled Toolless brackets; Universal Mounting bracket; Ability to ship rack PDU preinstalled in Vertiv™ Racks
Input Power Options North America	100 - 120V 1-ph 20A/30A; 200 - 240V 1-ph 20/30A; 200 - 240V 3-ph 20/30/50/60A; 208/120V 3-ph 20/30A; 415V/240V 3-ph 20A/30A
Input Power Options International	230V 1-ph 16A/32A; 230/400V 3-ph 16A/32A/63A
Input Wiring Options	10 ft. pluggable power cord or Hardwired
Max. Capacity North America	17.2 kW
Max. Capacity International	22.2 kW
<b>Outlet Options</b>	NEMA 5-20; IEC 320 C13; IEC 320 C19; Locking capability on all outlets
Maximum Outlets	Strip Metered: 42 Outlet Metered and / or Switched: 24
Maximum Operating Temp. Range	0°C to 60°C (32°F to 140°F)
Storage Temperature Range	-25°C to 85°C (-13°F to 185°F)
Relative Humidity	5% to 95%
Overcurrent Protection	Software Electronic Overcurrent Protection; 100% Rated 20A Branch Overcurrent Protection - Hydraulic Magnetic Circuit Breakers
Idle Power Consumption	3W - 5W
OU Units Width x Depth	0U Low profile: 56mm x 5mm(2.2in x 1.96in) 0U Standard: 56mm x 70mm(2.2in x 2.7in)
OU units Length	916 mm / 1004 mm / 1737 mm/ 1827 mm; (36 in) / (39.5 in) / (68.4 in) / (72 in)
1U/2U Units Width x Height x Depth	1U: 482.6mm x 44mm x 250mm (19in x 1.73in x 9.84in) 2U: 482.6mm x 88mm x 250mm (19in x 3.46in x 9.84in)

Standard Warranty	2 years; Extended Warranties Available
Agency Approvals	UL, CSA, CE, RoHS, REACH, FCC Class A, CB, WEEE, ISTA
Metering Levels	Aggregate, Branch, Phase, Outlet
Parameters Measured	Volts, Current, kW, KVA, kWh, Power Factor, Crest Factor, Frequency
Metering Accuracy	+/-1%
Switching Capability	On, Off, Recycle, Lock, Unlock, Outlet Grouping Capability
Modularity	RPC2 communications module
Local Management	Onboard Display, Optional Local Display
Management Remote	Display  Onboard Web Interface; CLI;  SNMP; SSH; Telnet Integration with Avocent® ACS, Avocent Universal Management Gateway & Avocent MergePoint™ Unity Integration with DSView®, Rack Power Manager, Nform™ and the
Management Remote Management SNMP version	Display  Onboard Web Interface; CLI; SNMP; SSH; Telnet Integration with Avocent® ACS, Avocent Universal Management Gateway & Avocent MergePoint™ Unity Integration with DSView®, Rack Power Manager, Nform™ and the Trellis™ platform

# Locking outlets and locking power cord BDM™ local Communications Module (RPC2™) display module **SN Sensors** Onboard display Flexible power cord entry Slim profile breakers Corded and hardwired options

# **Seamless DCIM Manageability and Integration**

### DCIM

- Avocent® Universal Management Gateway
- Trellis™ Platform

### **Critical Equipment Monitoring Solutions**

- Liebert<sup>®</sup> Nform™
- Liebert SiteScan®
- 3rd party apps (SNMP)

#### **Out of Band Access and Control Solutions**

- Avocent Advanced Console Server
- Avocent MergePoint® Unity
- Avocent DS View 4™

#### **Centralized PDU** Management

- Rack Power Manager



















RPC2™ Communications Module



Command Line Interface



Web User Interface

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