MPH2™ MANAGED RACK PDU

Advanced Monitoring And Control Support

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 0U, 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

<table>
<thead>
<tr>
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<th>TYPICAL 24 OUTLET RACK PDU</th>
<th>MPH2</th>
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</thead>
<tbody>
<tr>
<td>Rack PDU power consumption (Watts)</td>
<td>23</td>
<td>75</td>
</tr>
<tr>
<td>Rack PDU annual energy consumption (kWh) —24x7x365</td>
<td>202</td>
<td>66</td>
</tr>
<tr>
<td>Overall contribution to datacenter energy consumption (kWh)*</td>
<td>383</td>
<td>125</td>
</tr>
<tr>
<td>Cost of energy consumption (based on average cost of 10c/kWh)</td>
<td>$38</td>
<td>$13</td>
</tr>
<tr>
<td>Annual savings per pdu with MPH2</td>
<td></td>
<td>$26</td>
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<tr>
<td>Annual savings within the datacenter with MPH2</td>
<td></td>
<td>$52</td>
</tr>
<tr>
<td>Annual savings within the datacenter with MPH2</td>
<td></td>
<td>$5,160</td>
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</tbody>
</table>

Based on a comparison of switched rack PDU models for a typical 100 rack data center with a PUE of 1.9.

* per Energy Logic calculations

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

Also available in 1U and 2U models
**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; 240V 3-ph 20/30/50/60A; 208/120V 3-ph 20A/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
- **International**: 22.2 kW

**Outlet Options**
- 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

**0U 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)

**0U units Length**
- 916 mm / 1004 mm / 1737 mm; (36 in) / (39.5 in) / (68.4 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

**Remote Management**
- 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

**SNMP version support**
- v1, v2 and v3

**Authentication**
- Local Remote: Active Directory, LDAP, TACACS, Radius, Kerberos

**Encryption**
- MD5, AES, DES

**Seamless DCIM Manageability and Integration**

- **DCIM**
  - Avocent® Universal Management Gateway
  - Trellis™ Platform

- **Critical Equipment Monitoring Solutions**
  - Liebert® 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

**Slim profile breakers**

**Locking outlets and locking power cord**

**BDM™ local display module**

**Onboard display**

**Flexible power cord entry**

**Corded and hardwired options**

**Communications Module (RPC2™)**

**SN Sensors**

**RPC2™ Communications Module**

**Command Line Interface**

**Web User Interface**