

■ AC Power  
For *Business-Critical Continuity™*

## *Emerson Network Power Rack PDU Solutions*

Rack Power Distribution For Critical IT Equipment



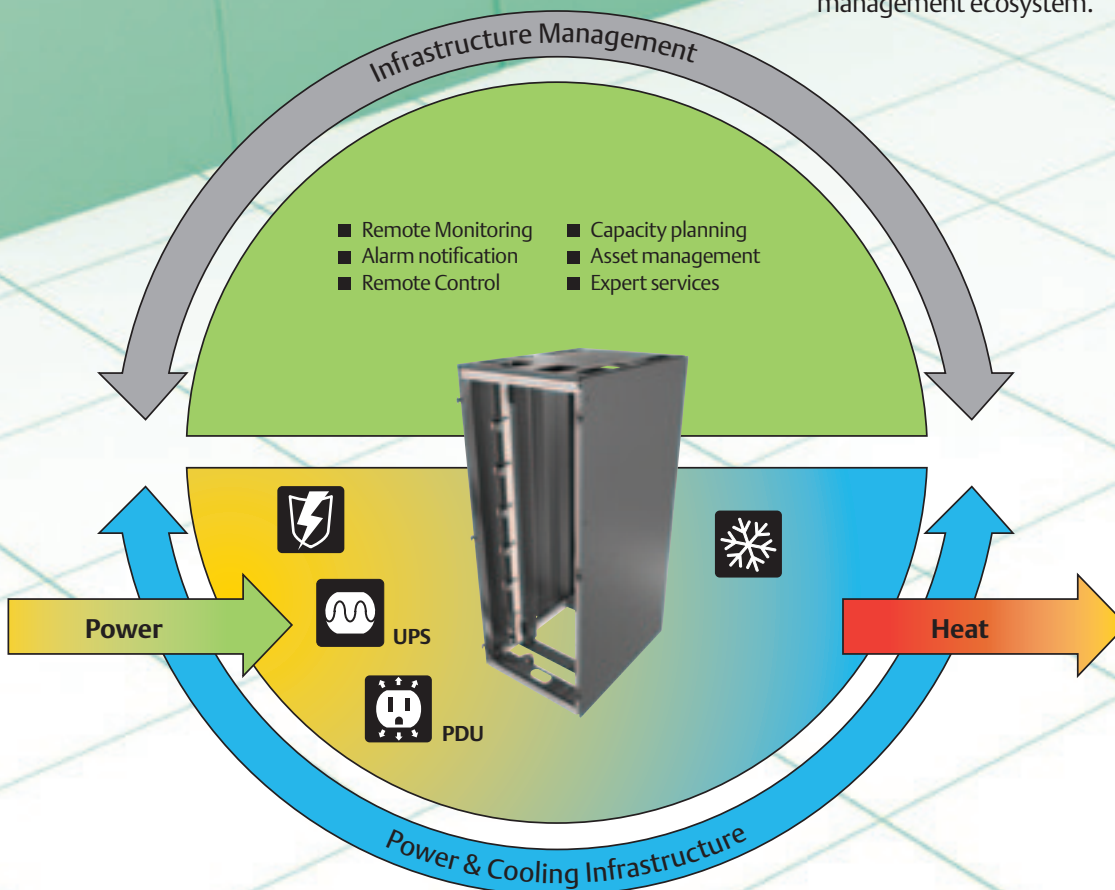
## Enhanced Performance And Management Of Dynamic IT Spaces

### IT space is a dynamic environment.

Today's successful businesses depend on adaptable technologies to help them respond quickly to market demands. Your data center must be built on a support infrastructure designed to match the power and cooling needs of rapidly changing IT initiatives such as virtualization and consolidation. Each IT change, move or addition will affect the entire support infrastructure—you need products and support that ensure your IT systems will operate reliably in these environments.

Emerson Network Power's portfolio of products from brands such as Liebert, Knurr, Alber, Aperture, and ASCO provide innovative, flexible solutions that ensure reliability and efficiency. With the help of monitoring and management tools from Emerson Network Power, the result is an infrastructure that will enable you to proactively manage your critical IT spaces.

The Rack PDU family of products is the connectivity point of IT systems into your power and cooling infrastructure and the critical interface to an efficient and effective infrastructure management ecosystem.



# Liebert MPH—Managed Rack PDU: Advanced Monitoring And Control Support

## Rack PDU Card (Liebert RPC)

Provides upgradable network communications, sensor and local display interface

Liebert MPH is a flexible Rack PDU solution with remote monitoring and control capabilities as well as environmental input options. It offers multiple power input selections and output configurations in both vertical zero-U and rackmount form factors. Up to four Liebert MPH PDUs may be interconnected as a Rack PDU Array™, consolidating user IP connections and device monitoring.

## Liebert MPH Monitoring And Control Support

Monitored electrical parameters include: voltage, current, real and apparent power, power factor, and accumulated energy or consumption. Capacity based current thresholds provide comprehensive alarm notifications from the Rack PDU and branch.

## Liebert MPH Can Benefit Your Data Center

- **Monitors electrical and environmental parameters** with set threshold and alarm tools
- **Controls access** of receptacle power
- **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

## Liebert MPH Benefits:

### Flexibility

- Local displays are easily located to suit a crowded and changing rack environment
- Supports mounting in 19" EIA, 42U rack environments—Offered in vertical, zero U and rackmount form factors
- Provides a compatible monitoring platform for Liebert MPH and Liebert MPX, offering seamless common operation if deployed together
- User positioned input power cord interface

### Higher Availability

- Controls and manages individual receptacles
- Predicts overcurrent conditions before they become critical
- Shuts down non-essential equipment during power outages to maximize availability and back-up power
- Expanded branch overload protection minimizes threat of cascading PDU overload
- Industry leading operating temperature—up to 55 °C / 131 °F to support hot Internal rack environments

### Lowest Total Cost Of Ownership

- Provides full featured monitoring and control in a cost effective package
- A Rack PDU Array shares a single IP address for up to four Rack PDUs, making deployment faster and easier
- Energy and power metering provides users the information to maximize the data center power and cooling infrastructure
- Employs energy efficient receptacle control technology

## Branch Overload Protection

## Flexible Power Cord Mount

User adjustable for horizontal or vertical orientations

## Liebert MPH

### INPUT POWER

- 20 to 60A amp (NA); 16 to 32 amp (EU); single and three phase

### OUTPUT DISTRIBUTION

- Single phase NEMA 5-20R, IEC-C13 & IEC-C19; Combination systems

### MODULARITY

- Modular card-based communications and display
- Add connectivity with basic rack PDU expansion unit

### METERING

- Branch and aggregate Rack PDU
- Environmental sensors – Temperature & humidity

### REMOTE RECEPTACLE CONTROL

- Receptacle level

### LOCAL MONITORING

- User located display

### REMOTE MONITORING

- Secure Web/SNMP Interfaces
- Liebert Nform
- Liebert SiteScan Web

### OVERLOAD PROTECTION

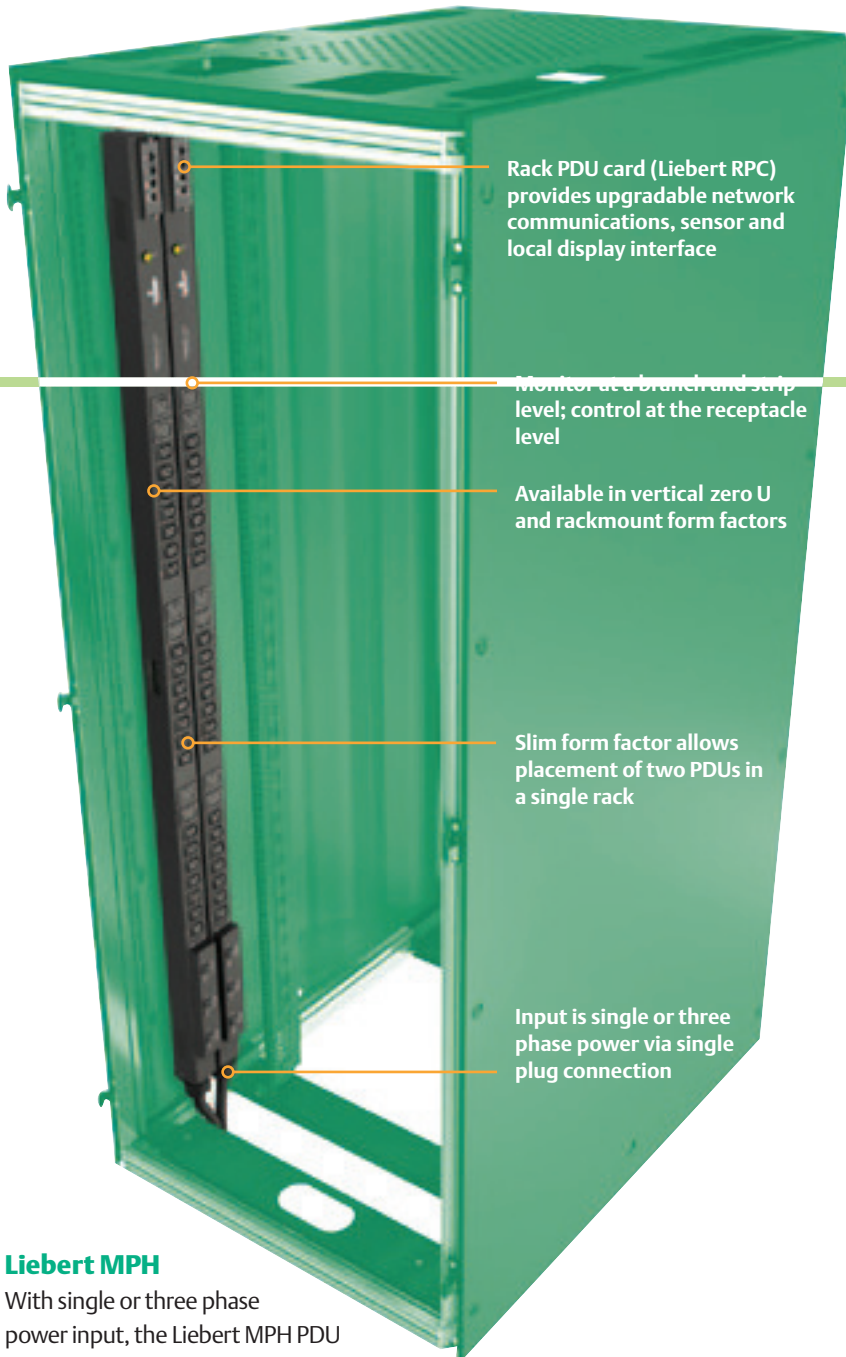
- Breaker per branch as required
- Hydraulic-Magnetic breaker

### Rack PDU Array

- Single IP for up to 4 Rack PDU's
- Liebert MPX and Liebert MPH on same private network

### FORM FACTOR

- Vertical mount (Zero U)
- Rackmount



### Liebert MPH

With single or three phase power input, the Liebert MPH PDU provides output as single phase power and is offered in vertical, Zero U and rack mount form factors to support mounting in 19" EIA 42U rack environments.



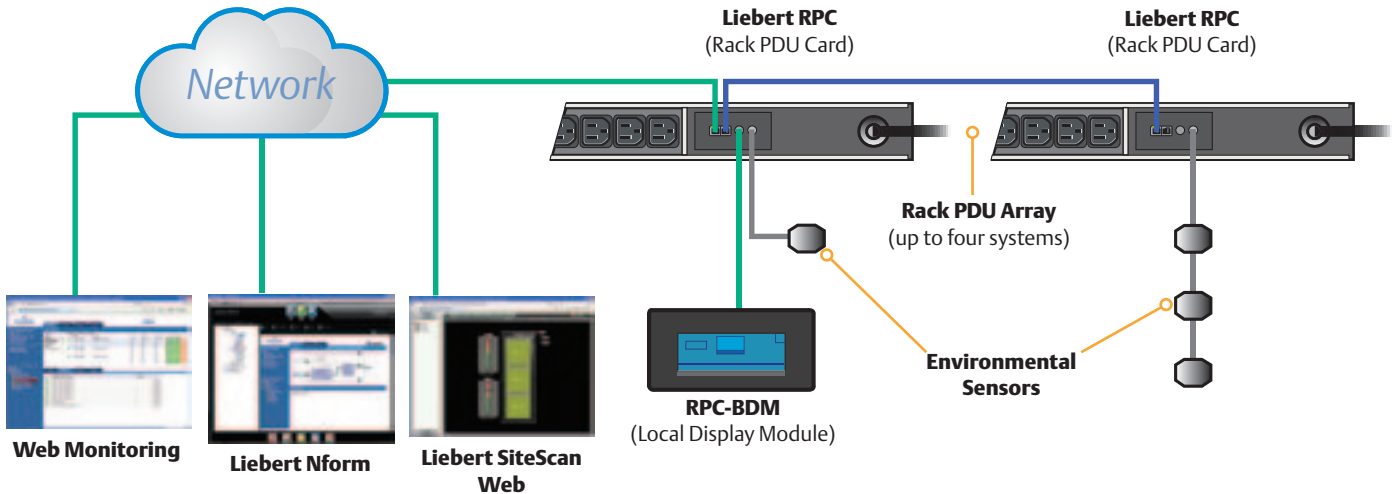
### Status Display (RPC-BDM)

provides users optimal local display positioning by allowing mounting on rack doors or wherever best suited for a changing rack environment.

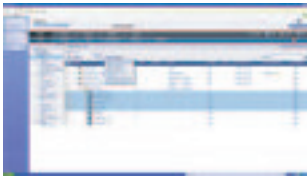


Liebert MPH may be remotely monitored through a variety of convenient interfaces.

# Rack PDU Power Management And Monitoring Interfaces



## Infrastructure Management



### Avocent Rack Power Manager software

- Centralized configuration, event logging and management of all Rack PDU's
- Centralized permissioning and remote authentication leveraging Active Directory, LDAP, Radius, Kerberos etc.
- Grouping capabilities for power control or for power consumption reports
- Canned and custom power consumption reports with scheduling option



### Secure Web/SNMP Interfaces

- User configured alarm thresholds
- High alarm and warning; low alarm
- Receptacle state and sequencing configuration
- Electrical metering, volts, amps, kW & kW/hr
- Rack PDU Array—Device consolidation
- PDU Explorer—Intuitive hierarchical interface
- View PDU status by strip or receptacle
- Device Explorer—Browsing by user defined device name



### Liebert Nform IT Based Centralized Monitoring Software

- Trending of power data
- Receptacle group control

### Liebert SiteScan Web

- Centralized monitoring software
- Provides real-time monitoring and control

## Optional Hardware



### RPC-BDM Local Display Module

- Electrical and environmental parameters
- One RPC-BDM supports up to 4 PDU's on array
- PDU explorer
- Device Explorer



### Liebert SN Family Of Rack Sensors

- Modular and integrated systems
- Temperature, humidity and contact probes
- Auto-config – no set-up required

# Rack PDU Connectivity And Rack PDU Arrays

