

# Eaton Switched ePDU



## Intelligent Power Distribution

### Maximise and Manage your rack power

Two key trends have emerged in the data centre: the demand from today's IT equipment for more power, and the increasing cost of that power. Couple these with the worldwide growth in demand for data centres and IT servers, and it is clear that data centre managers are facing growing pressure to manage and optimise their available power for growth, at the same time as managing the increasing associated costs.

To help them achieve this, they need an accurate view of the power and energy being consumed in the data centre – from row to rack, and right down to the individual server level. Only then can they truly understand the power usage and optimise the available power.

### Key technology features

Eaton's Managed ePDUs offer state-of-the-art monitoring and management capabilities, including:

- Branch Level Monitoring
- Outlet Level Power Switching (On/Off/Reboot)
- High Accuracy Monitoring
- Advanced LCD Display
- Flexible Mounting
- Colour-coded Section Labelling



### Power Usage Effectiveness:

Power usage effectiveness (PUE) is a metric used to determine the energy efficiency of a data center and is determined by dividing the amount of power entering a data center by the power used to run the computer infrastructure within it. These ePDUs provide outlet level power consumption for Level 3 PUE calculations.

#### PUE Levels

- Level 1: Basic, uses UPS readings
- Level 2: Intermediate, uses PDU readings
- Level 3: Advanced, uses server/outlet readings

PUE has been defined by the Green Grid  
[www.thegreengrid.org](http://www.thegreengrid.org)



Powering Business Worldwide



# Intelligent Power for the Data Centre

Designed for the needs of the modern data centre, these ePDU® configurations are flexible and available with different input configurations and ratings. All versions feature output to C13 and C19 outlets.

## Maximum availability

Eaton ePDUs are designed and built specifically for the data centre environment – where reliability is the primary concern – with very high quality components and state-of-the-art technology and circuitry.

With a rugged aluminium or steel chassis, they fit any industry standard IT rack and include Eaton's patented mounting system, for complete flexibility in fitting. Optional cable retention is also available for complete security.

Switched ePDUs offer data centre managers maximum functionality and flexibility, with complete understanding and control of data centre power distribution.



## Monitoring

Highly accurate individual outlet, branch circuit, and full ePDU monitoring for V, W, A and kWhrs (1% accuracy above 2A). Also temperature and humidity monitoring in the rack via optional sensors. Monitor remotely over Ethernet or via Advanced LCD screen on the unit. Communication protocols include HTTP/HTTPS, DHCP, SNMP v1 and v3, SNMP, SMTP, Telnet, IPv4 and IPv6.

## Switching

Individual outlet, sequencing of outlets with delays or cycling, enables remote reboot of equipment.

## Control

Monitor and control remotely over Ethernet or via Advanced LCD screen on the unit. Communication protocols include HTTP/HTTPS, DHCP, SNMP v1 and v3, SNMP, SMTP, Telnet, IPv4 and IPv6.

## Advanced LCD Display

This new advanced LCD display provides outlet and section current information, voltage and kilowatt-hour readings, all at a single glance. The display is accompanied with a three-button interface that allows you to navigate through the user-friendly menu structure. Dual-color display blinks when a system alarm is detected, providing local notification.

## Environmental monitoring

You can utilize the Environmental Monitoring Probe to track internal and external temperatures, humidity and contact closure. This information allows you to operate the ePDU up to 50°C, in turn reducing cooling costs. (Part number EMP001).



### Receptacles

These units feature C13 and C19 receptacles.



LEDs represent each outlet



Outlet number identifications are color coded to match the outlet section to the appropriate circuit breaker.

# Power Management

Eaton provides software management capabilities for every application. Out-of-the-box Web browser management is built into the ePDU and SNMP allows integration to third party network management. This also allows you to connect to Eaton's management software options: Intelligent Power® Manager or Power Xpert®.

Monitoring/Management Software	Quantity of Racks Supported	Type of Software	Application
Web Browser / Email	1 – 25	Includes required web browser	Data Closet, Small network, Standalone
SNMP	1 – 1,000	Integrates to 3rd party software	Small to large enterprise
IPM	1 – 200	Eaton software (free for up to 10 nodes)	Small to medium enterprise
Power Xpert	1 – 1,000	Eaton enterprise software	Facility or large enterprise

## Web Browser/E-mail alerts

Every network-connected ePDU comes standard with built-in web server and e-mail capability, allowing you to connect to any ePDU using a standard web browser.

## SNMP

Every network-connected ePDU supports SNMP alerts and has a standard MIB available for third party software integration.

### What's in the box:

- ePDU
- Mounting Screws
- Clip-Foot Mounting Brackets
- Quick Setup Guide
- Keyhole Buttons
- Quick Start Guide

## Intelligent Power Manager

Eaton's Intelligent Power Manager provides you with monitoring and management capabilities across your network. Ideal for virtualized environments, IPM is fully integrated with VMware's vCenter Server™ and Microsoft SCVMM™. [www.eaton.com/intelligentpower](http://www.eaton.com/intelligentpower)

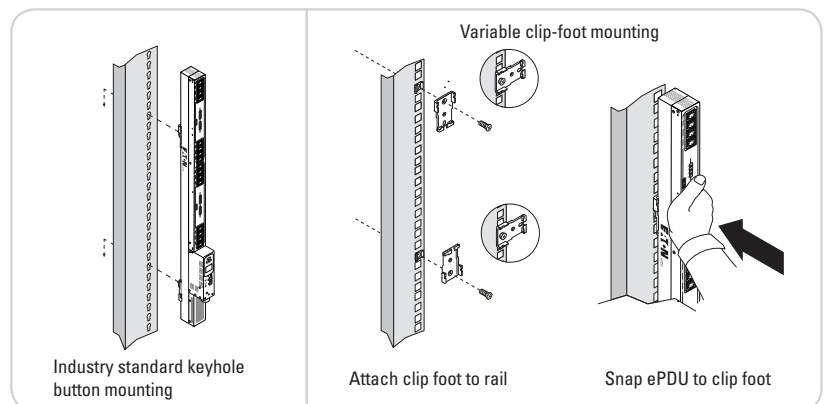
## Power Xpert

Ideal for a facility enterprise solution, Power Xpert supports all of Eaton's products and offers support for third-party products as well providing alarms, current readings and environmental sensors. This software also allows for customisation under certain conditions. [www.eaton.com/powerxpert](http://www.eaton.com/powerxpert)

Part Number	Form Factor	Rating	Input Type	Outlet Type	Breakers	Dimensions (WxDxH mm)	Weight (kg)
eSWA01	0U	10A	C14	C13, 16		55 x 1092 x 65	7.2
eSWA02	0U	16A	IEC309 16A	C13, 20 : C19, 4		55 x 1727 x 65	6.64
eSWA03	0U	16A	C20	C13, 20 : C19, 4		55 x 1524 x 65	6.54
eSWA04	0U	32A	IEC309 32A	C13, 20 : C19, 4	2	55 x 1524 x 65	8.17
eSWA05	0U	16A 3ph	IEC309 16A 3ph	C13, 21 : C19, 3		55 x 1524 x 65	7.01

Accessories	Part Number
Environmental Monitoring Probe	EMP001
Plug Restraint Cable Tray	KBLT01

Space-saving mounting options — all hardware included



### Cisco EnergyWise compliant\*

These ePDUs have been tested and approved and are Energywise compliant.

\* with firmware build 12 or higher

## Switch ON to Eaton.



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### Eaton Australia

1300 UPS UPS (1300 877 877)  
AustraliaSales@eaton.com  
[www.eaton.com/powerquality](http://www.eaton.com/powerquality)

### Eaton New Zealand

0508 EATON NZ (0508 328 6669)  
[www.powerquality.eaton.com](http://www.powerquality.eaton.com)  
NZSales@eaton.com



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