Power distribution for IT equipment

ePDU
G3 Platform

Powering Business Worldwide

www.eaton.com/ePDUG3/SEA

Eaton's 3rd generation power distribution technology

The ePDU G3 platform is designed to provide reliable, cost effective power distribution together with highly accurate monitoring and control for IT equipment in the datacentre.

This Industry-leading platform enables you to:

- Reliably distribute power to your IT equipment
- Accurately meter and control power consumption
- See where you have available power and are most efficient
- Choose the level of metering to provide the level of information that you require
- Choose equipment switching to allow remote data centre control

Simplify load balancing

Colour coding and laser engraved chassis easily link breakers to outlet groups

How do I reduce cooling costs by taking advantage of modern hot-air containment solutions and the newest IT technologies to get higher rack operating temperatures?

60˚ Operating Temperature: ePDU G3 can be used in very hot environments. Take full advantage of ASHRAE guidelines

- ePDU G3 operates in extreme environments and containment solutions
- Allows for: containment solutions, free cooling scenarios and operating IT equipment with high temperature thresholds
- Plus optional environmental monitoring with dry contacts with configurable alarms for additional sensors

How can I learn what my IT equipment is consuming so I can optimize my Data Centre, control my costs and utilize all my available power?

Equipment Metering: Meter Individual outlets or group outlets to meter equipment with multiple inputs, over multiple ePDUs for A and B feed. Clearly see capacity exactly what your equipment is consuming.

How do I ensure that costs can be appropriately attributed or billed for department billing and colocation data centers?

IEC +/-1% Billing Grade Accuracy: Meter your energy consumption (kWh) plus V, W and A extremely accurately. Choose your level of Metering: from ePDU to branch circuit to individual pieces of equipment, including metering kWh for IT equipment over A and B feeds.

How do I simply control and configure my ePDU, and easily see where I have any problems?

Easy Configuration: includes central advanced LCD display with menu system. Change settings incl. IP address, configure via USB stick copy / paste configuration file or configure En Masse via IPM software.

Central Communication and Alerts: Read Current, Voltage, Power, kWhr and more, Multi colour interface allows easy identification of alerts. Easily monitor the status of your power distribution on the LCD, via the web interface or via your management software.

How can I operate remotely with lights-out control, including remote re-booting,scheduled shut downs and restarts?

Equipment Switching: Switch individual outlets or group to switch equipment with multiple inputs, over multiple ePDUs for A and B feed, including sequencing and scheduled shut-down and restart. Supports Graceful Shutdown with Eaton's Intelligent Power Protector.

How to avoid downtime if a rack PDU becomes faulty or I want to upgrade?

No Downtime on Upgrades: ePDU G3 has Hot-Swap network components – update or change without changing the outlet state.

How do I ensure that my IT equipment is protected against IEC plugs being accidentally knocked out during maintenance or come lose through vibration?

Integrated Grip – IEC Plug Retention: Prevents accidental disconnect from being bumped or from vibration. Works with any IEC plug, no need to buy special cables or brackets.

How do I ensure that my PDUs will fit in all my different racks?

How do I ensure that nothing interferes with my IT Equipment and hot-swap components?

Small with Flexible Mounting:

Easily access hot-swappable IT equipment and components.

- Ensure the ePDU, plugs and cables are completely out of the way of equipment with button mount on the rear and sides
- Optionally side mount to face the rear doors of the rack to ensure the ePDU, plugs and cables don't interfere with hot-swap IT equipment
- Choose to raise of lower the ePDU in the rack to suit your installation
- Unique patented variable mounting system can be mounted at any point on the ePDU and gives full flexibility

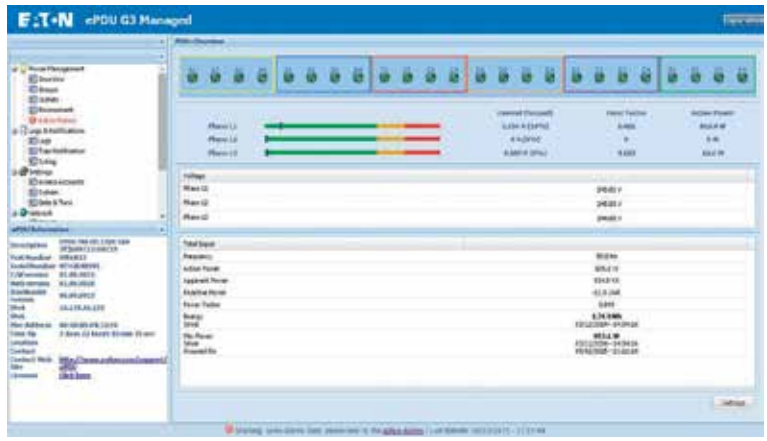
Low profile chassis:

- The ePDU doesn't protrude into the rack and is low profile even at the breakers
- 52mm wide x 53mm high and 58.7mm at breakers on most models
- Hydraulic-Magnetic Circuit Breakers include accidental-tip protection by default

How can I ensure business uptime if the power goes down?

Full integration into VMware and Citrix with Intelligent Power Manager

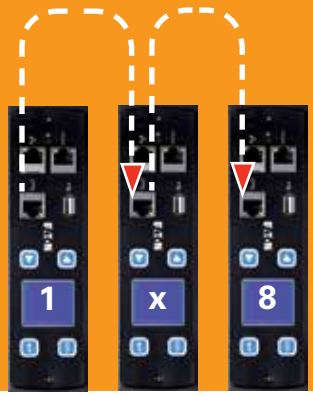
- Trigger VM migration or VMware Site Recovery Manager (SRM)
- User configurable alerts on the ePDU G3 work with Eaton's Intelligent Power Manager (IPM) software to trigger actions
- Trigger automatic migration of virtual servers in the event of a power failure via UPS, ePDU alarm or threshold, temperature/humidity or dry contact event
- User configurable: includes feed going down, branch circuit reaching a defined threshold etc.
- Full integration in VMware interface



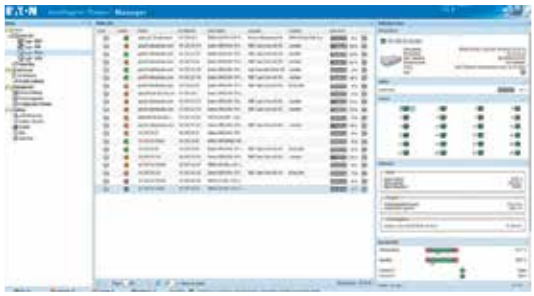
Detailed web-based interface on ePDU G3

How can I reduce the cost of networking for monitoring rack PDUs and reduce network traffic?

Daisy-Chain 8 ePDUs from one IP port and one IP address: this reduces the cost of networking, reduces IP addresses and data packets on the network. Daisy Chaining reduces network infrastructure costs by up to 87%.



Intelligent Power Manager integration into VMware interface



How can I easily monitor many ePDUs and IT equipment?

Intelligent Power Manager offers supervision and control through a single interface

- One interface to monitor your power usage of many ePDUs
- ePDU and UPS Management
- En masse Configuration of ePDU
- En masse Update of ePDU

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Key technology features & technical specifications

		Basic	In-Line Metered	Metered Input
Good	IEC outlet eGrip plug retention: retains all standard IEC plugs	√	N/A	√
	Colour-coded outlet and branch circuits for simple load balancing	√	N/A	√
	Eaton Hydraulic–Magnetic Circuit Breakers with accidental trip protection	√	N/A	√
	Low-profile form factor: 52mm wide x 53mm deep on most models	√	√	√
	60 Degree C operating temperature	√	√	√
	Installation: Button mounting on rear & side + variable mounting system	√	√	√
Better	Hot-Swap eNMC with Advanced LCD + Optional Temp/Humidity sensor		√	√
	±1% IEC Class 1 Billing Grade Accuracy for V, W, A and kWh		√	√
	Input and Phase Metering, Circuit Breaker Current Metering		√	√
	Daisy-Chain Network 8 ePDUs		√	√
	Standard Units with UK, French and Schuko outlets		N/A	√
	En masse configuration and update available via IPM software		√	√
	Single Pane Monitoring of many ePDUs+UPS as part of the power chain, via IPM		√	√
	Trigger advanced actions including Vmware SRM and VM migration via IPM		√	√
	HTTP, HTTPS, SSL, Telnet, FTP, SNMP, SMTP, DNS, DHCP, LDAP, RADIUS		√	√
Best	Circuit Breaker Status Monitoring			
	Outlet and IT Equipment Metering across A and B feed			
	Level 3 PUE measurements			
	Turn off unused outlets to control commissioning			
	Remote Site Management			
	Outlet and IT Equipment Switching/reboot /sequencing across A and B feed			

Basic Reliable Power Distribution with integrated plug retention

Add Metering of to upgrade existing basic PDUs

Meter the input and Branch circuits

	Input Type	Outlet type: Qty	Rating (A)	Breakers	Basic p/n	Dimensions L x W x D, mm	In-Line Metered p/n	Dimensions L x W x D, mm	Metered Input p/n	Dimensions L x W x D, mm
1 Phase	C14	8XC13	10		EBAB02	443x52x53				
	C14	12XC13	10		EBAB19	443x52x53				
	C14	16XC13	10		EBAB03	704x52x53			EMIB03	1070x52x53
	C20	16XC13	16		EBAB21	704x52x53				
	C20	18XC13 : 2XC19	16						EMIB09	1070x52x53
	C20	20XC13 : 4XC19	16		EBAB22	1070x52x53				
	IEC60309 16A	7XC13 : 1XC19	16							
	IEC60309 16A	18XC13 : 2XC19	16						EMIB10	1070x52x53
	IEC60309 16A	20XC13 : 4XC19	16		EBAB04	1070x52x53			EMIB04	1070x52x53
	IEC60309 32A	12XC13 : 4XC19	32	2 single pole					EMIB06	1070x52x53
	IEC60309 32A	20XC13 : 4XC19	32	2 single pole	EBAB05	1070x52x53			EMIB05	1154x52x53
	IEC60309 32A	36XC13 : 6XC19	32	2 single pole					EMIB08	1604x52x53
3 Phase	IEC60309 16A 3P	21XC13 : 3XC19	16A 3P							
	IEC60309 16A 3P	36XC13 : 6XC19	16A 3P		EBAB00	1604x52x53			EMIB00	1829x52x53
	IEC60309 32A 3P	6XC19	32A 3P	6 single pole	EBAB11	704x52x53			EMIB11	1070x52x53
	IEC60309 32A 3P	3XC13 : 6XC19	32A 3P	6 single pole	EBAB01	704x52x53				
	IEC60309 32A 3P	6XC13 : 12XC19	32A 3P	6 single pole					EMIB07	1604x52x53
	IEC60309 32A 3P	18XC13 : 6XC19	32A 3P	6 single pole						
	IEC60309 32A 3P	12XC13 : 12XC19	32A 3P	6 single pole					EMIB12	1604x52x53
	IEC60309 32A 3P	30XC13 : 12XC19	32A 3P	6 single pole					EMIB34	1829x52x65
In-Line	IEC60309 16A	1XIEC60309 16A	16	None			EILB13	443x52x53		
	IEC60309 32A	1XIEC60309 32A	32	None			EILB14	443x52x53		
	IEC60309 32A 3P	1XIEC60309 32A 3P	32 3P	None			EILB15	443x52x53		

all standard ePDUs come with 3m cable

Growing functionality

Metered Outlet p/n	Dimensions L x W x D, mm	Switched p/n	Dimensions L x W x D, mm	Managed p/n	Dimensions L x W x D, mm
EMOB03	1154x52x53	ESWB03	1154x52x53	EMAB03	1154x52x53
EMOB22	1604x52x53	ESWB22	1604x52x53	EMAB22	1604x52x53
		ESWB23	704x52x65		
EMOB04	1604x52x53	ESWB04	1604x52x53	EMAB04	1604x52x53
EMOB05	1604x52x53	ESWB05	1604x52x53	EMAB05	1604x52x53
EMOB20	1604x52x53	ESWB20	1604x52x53	EMAB20	1604x52x53
				EMAB33	1829x52x65

Need Something Special?

- Dedicated engineering teams in 3 centres of excellence are available to create your perfect ePDU
- Specific configurations or complete engineering projects
- Including national socket types, UK, French, Din/ Schuko – including combinations of up to 3 types of outlet on an ePDU

Accessories

Environmental monitoring via optional Temperature and Humidity probe. Includes 2 dry contacts for additional sensors. Configurable temperature/humidity thresholds and alarms on the ePDU G3.

Temperature/Humidity probe Part number: 116750224-001

- Cable ID tags allow the user to mark cables connected to ePDUs and branch circuits
- Easily link cables feeding IT equipment to outlets, breakers and branches on the physical unit and in the web interface
- Cable ID tags come in yellow, blue, red, orange, purple and green to match the ePDU branch circuits and the web interface
- Cable ID tags are included in Metered Outlet, Switched and Managed ePDUs, more can be ordered as needed:

Part Number	Description
IDTAG16A	Power cable ID tags for ePDU 16A 1Phase (42 blue)
IDTAG32A	Power cable ID tags for ePDU 32A 1Phase (21 blue/ 21 yellow)
IDTAG16A3P	Power cable ID tags for ePDU 16A 3Phase (14 blue/ 14 yellow/ 14 red)
IDTAG32A3P	Power cable ID tags for ePDU 32A 3Phase (7 blue/ 7 yellow/ 7 red/ 7 orange/ 7 purple/ 7 green)

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Printed in Singapore
ePDUG3_6PP_EA
July 2015