

Power distribution for IT equipment

Basic  
In-Line Metered  
Metered Input

Metered Outlet  
Switched  
Managed



# ePDU

## G3 Platform

**New** range extension 2017/2018

**EATON**

Powering Business Worldwide

### Outlet grip functionality on standard IEC cable

Eaton's patent-pending IEC outlet grip secures plugs in place with a lever-actuated grip that's integrated into each outlet. Once the levers click into the grip position, the plugs are secured from accidental disconnect due to bumps or vibrations without the need for special power cords.



0 is unlocked, + is grip engaged

### Advanced LCD pixel display with hot-swap capability

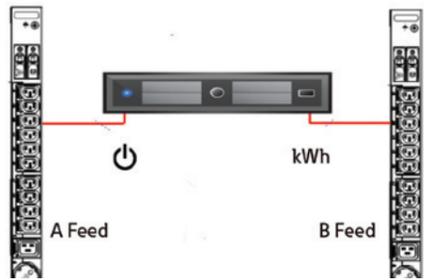
Eaton's new hot-swap eNMC (ePDU Network Management and Control) module can be replaced without the need to power down your rack. Increase uptime while enhancing serviceability and saving on unnecessary service calls. The menu-driven pixel display allows for easy setup and troubleshooting.



Module being removed without removing power to the ePDU

### Device reboot and measurement across A and B feed

When connecting multiple source input servers to an A and B feed power source, the daisy-chain capability allows you to group power supplies across the ePDU. As a result, all the power supplies are controlled with a single action, which saves time rebooting servers with two to six power supplies. The power consumption is available for each device.



Typical server with multiple power inputs powered by two ePDUs

### Universal Mounting

Models include both rear and side button mounting system and Eaton's patented variable mounting system.



### Outlet switching

Remotely control devices by powering on or off individual outlets. Save time and operating costs by rebooting machines from your control center without costly site visits.

### Sequential start up

Make sure your servers start sequentially to avoid in rush current and start your database before the application.



Green LED signifies power on and red is power off to outlet

### One percent billing grade accuracy

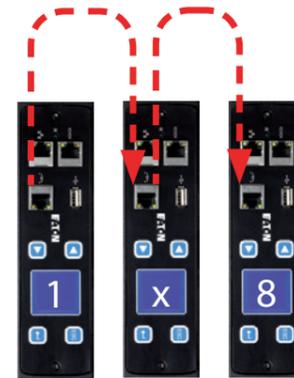
**+1%**



ePDU G3 provides one percent revenue-grade power monitoring for higher accuracy in department billing or colocation data centers. Effectively measure power usage to all outlets or individual outlets.

### Daisy chain eight units from one IP address

Eaton's new patented daisy-chain capability allows up to eight ePDUs to share the same network connection and IP address. Unlike competitive rack PDUs that require a dedicated IP address for best performance, Eaton technology provides a 87% percent reduction in network infrastructure costs.



A and B power PDU sharing a network connection via daisy chain

### Color-coded outlet sections

Color-coded outlet sections match a corresponding circuit breaker to easily identify which one feeds corresponding outlets and prevent unbalanced loading that would unnecessarily trip a breaker.



## Features and benefits

Category	Technology	Feature
Basic	All technologies	<b>Low-profile form factor:</b> Provide zero interference into the rail space
		<b>High 60°C operating temperature:</b> Fully functional in high operating temperature environments, resulting in reduced cooling costs
		<b>Integrated IEC outlet grips:</b> Integrated lever-actuated grip that easily secures plugs to prevent accidental disconnect
Standard	All technologies except Basic	<b>Color-coded outlet sections:</b> Color-coded outlet sections match corresponding color-coded circuit breakers to simplify load balancing
		<b>Flexible mounting options:</b> Button mounting on rear & side + variable mounting system
		<b>One percent billing grade accuracy:</b> Revenue-grade power monitoring for higher accuracy to help optimize power utilization
		<b>Remote site management:</b> Save time from onsite visits
		<b>Hot-swap meter:</b> Remove meter without power disruption to increase uptime while enhancing serviceability
Advanced	Managed and Metered Outlet	<b>Phase and section metering:</b> Meter color-coded sections to control power utilization
		<b>Advanced LCD pixel display:</b> Allow for easy IP setup and troubleshooting
		<b>Daisy chain (share network connection/IP address):</b> Share the same network connection and IP address for up to eight rack PDUs, which will reduce network infrastructure costs
		<b>Cybersecurity:</b> The firmware is updated on regular basis to keep the ePDU cybersecurity to highest standard.
		<b>Measure power consumption at outlet level:</b> Acquire precise data and gain detailed energy analysis to make informed decisions and assist with effectively deploying equipment
Advanced	Managed and Switched	<b>Measure Level 3 PUE:</b> Measuring power at the outlet level allows users to measure Level 3 Power Usage Effectiveness (PUE), which provides the possibility of transforming billing into revenue or utility discounts
		<b>Outlet switching:</b> Remotely control devices by powering on, off or rebooting individual outlets and set sequential start up across A&B feed
		<b>Group reboot for A and B feed:</b> Group multiple power supplies across the rack PDU to control all with a single action, saving time when rebooting servers with two or more power supplies
		<b>Turn off unused outlets:</b> Control unauthorized use

# Make more effective management decisions with intelligent power, space and environmental condition monitoring.

IPM Infrastructure helps to bridge the gap between facility and IT management by providing you just enough information, when you need it and where you need it.



Environmental monitoring including temperature and humidity with more functionality to follow.

Simple IT asset management including business prioritization capabilities.

Power chain monitoring including power kW, energy consumption (kWh), phase and circuit balancing.

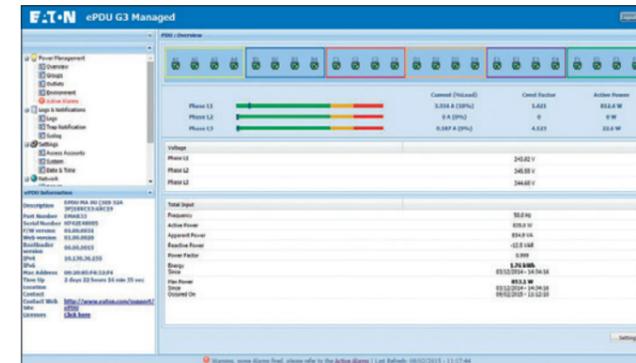
Trending analysis via an intuitive web interface with auditable logs and email alerts.

[www.eaton.eu/ipminfrastructure](http://www.eaton.eu/ipminfrastructure)

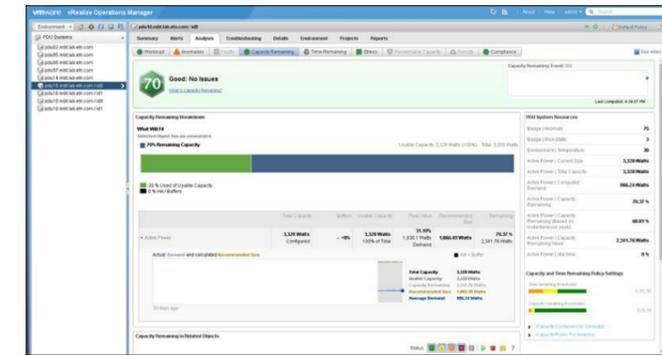
## Ensure business uptime and monitor ePDUs and It equipment with Intelligent Power Manager

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
- Full integration in VMware interface



Detailed web-based interface on ePDU G3



ePDU integration into vRealize Operations Manager (coming in 2018)

Intelligent Power Manager offers supervision and control through a single interface

- ePDU and UPS Management
- En masse Configuration of ePDU
- En masse Update of ePDU



Eaton collaborates with the leaders in converged and hyper-converged infrastructures and provide lab-validated power management solutions to ensure high uptime of IT systems and data integrity in case of power and environmental issues.



# ePDU G3 Key features & technical specification

## Range extension 2017

Also available in **1U** **2U**

	Basic	In-Line Metered	Metered Input	Metered Outlet	Switched	Managed
<b>Basic features</b>	✓	NA	✓	✓	✓	✓
Built-in IEC outlet eGrip retention, retains all standard IEC plugs	✓	NA	✓	✓	✓	✓
Colour-coded outlet and branch circuits for simple load balancing	✓	NA	✓	✓	✓	✓
60°C Operating temperature	✓	✓	✓	✓	✓	✓
Flexible mounting options: Button mounting on rear & side + variable mounting system	✓	✓	✓	✓	✓	✓
<b>Standard features</b>						
Hot-Swap Control module with Advanced LCD + Optional Temp/Humidity sensor		✓	✓	✓	✓	✓
±1% IEC Class 1 Billing Grade Accuracy for V, W, A and kWh & Cisco EnergyWise compliant		✓	✓	✓	✓	✓
Phase Metering, Circuit Breaker Current Metering and Input Metering		✓	✓	✓	✓	✓
Daisy-Chain up to 8 ePDUs, reduce network infrastructure costs		✓	✓	✓	✓	✓
En masse configuration and advanced action on virtual environment via Eaton Intelligent Power Manager IT		✓	✓	✓	✓	✓
Power chain monitoring & Real time Intelligence on your Data Center, via Eaton Intelligent Power Manager Infrastructure		✓	✓	✓	✓	✓
HTTPS, SSL, Telnet, FTP, SNMP, SMTP, DHCP, LDAP, RADIUS, DHCP 66/67 for Mass Configuration		✓	✓	✓	✓	✓
<b>Advanced features</b>						
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				✓	✓	✓
Outlet and IT Equipment Switching/reboot/sequencing across A and B feed				✓	✓	✓

Input Type / Rating (A)	Outlet type: Qty	Breakers	Nominal Power	Basic p/n	Dimensions L x W x D, mm	In-Line Metered & Dual p/n	Dimensions L x W x D, mm	Metered Input p/n	Dimensions L x W x D, mm	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	
<b>1 Phase</b>	<b>C14 10A</b>	8xC13	2.3kW	EBAB02	443x19"x53			1U EMIH02	1Ux19"x203							
		12xC13	2.3kW	EBAB19	443x19"x53											
		16xC13	2.3kW	EBAB03	704x52x53			EMIB03	1070x52x53	EMOB03	1154x52x53	ESWB03	1154x52x53	EMAB03	1154x52x53	
	<b>C20 16A</b>	8xFR: 1xC19	3.7kW	1U EFLX8F*	1Ux19"x80											
		8xGE: 1xC19	3.7kW	1U EFLX8D*	1Ux19"x80											
		6xUK: 1xC19	2 single pole	3.7kW	EFLX6B*	52x19"x120										
		12xC13: 1xC19	2 single pole	3.7kW	1U EFLX12I*	1Ux19"x80										
		16xC13	3.7kW	EBAB21	704x52x53											
		8xC13	3.7kW	1U EMIH28	1Ux19"x203	1U EMOH28	1Ux19"x203	1U ESWH28	1Ux19"x203	1U EMAH28	1Ux19"x203					
	<b>1 Phase</b>	<b>IEC60309 16A</b>	18xC13: 2xC19	3.7kW	EMIB09	1070x52x53										
			20xC13: 4xC19	3.7kW	EBAB22	1070x52x53			EMIB22	1070x52x53	EMOB22	1604x52x53	ESWB22	1604x52x53	EMAB22	1604x52x53
			7xC13: 1xC19	3.7kW												
<b>2 x IEC60309 16A</b>		18xC13: 2xC19	3.7kW					EMIB10	1070x52x53							
		20xC13: 4xC19	3.7kW	EBAB04	1070x52x53			EMIB04	1070x52x53	EMOB04	1604x52x53	ESWB04	1604x52x53	EMAB04	1604x52x53	
		IEC60309	3.7kW			EILB13	443x52x53									
<b>IEC60309 32A</b>		2 x IEC60309	3.7kW			EILB24	443x65x52									
		12xC13: 4xC19	2 single pole	7.4kW					EMIB06	1070x52x53						
		16xC13	2 single pole	7.4kW	2U EMIH06	2Ux19"x127			2U EMOH84	2Ux19"x225	2U ESWH84	2Ux19"x225	2U EMAH06	2Ux19"x225		
		20xC13: 2xC19	2 single pole	7.4kW	EBAB05	1070x52x53			EMIB05	1154x52x53	EMOB05	1604x52x53	ESWB05	1604x52x53	EMAB05	1604x52x53
		28xC13: 4xC19	2 single pole	7.4kW							EMOB71	1829x52x53			EMAB71	1829x52x53
		36xC13: 6xC19	2 single pole	7.4kW	EBAB08	1604x52x53			EMIB08	1604x52x53						
<b>IEC60309 16A</b>	IEC60309	7.4kW			EILB14	443x52x53										
	2 x IEC60309	7.4kW			EILB25	443x65x52										
	21xC13: 3xC19	11kW	EBAB20	1070x52x53			EMIB20	1070x52x53	EMOB20	1604x52x53	ESWB20	1604x52x53	EMAB20	1604x52x53		
	36xC13: 6xC19	11kW	EBAB00	1604x52x53			EMIB00	1829x52x53								
	6xC19	6 single pole	22kW	1U EBAB11	704x52x53			EMIB11	1070x52x53							
	3xC13: 6xC19	6 single pole	22kW	EBAB01	704x52x53											
<b>3 Phase</b>	<b>IEC60309 32A</b>	6xC13: 12xC19	6 single pole	22kW				EMIB07	1604x52x53							
		18xC13: 6xC19	6 single pole	22kW						EMOB33	1829x52x65		EMAB33	1829x52x65		
		12xC13: 12xC19	6 single pole	22kW					EMIB12	1604x52x53				EMAB12	1829x52x65	
		24xC13: 6xC19	6 single pole	22kW	EBAB32	1154x52x53			EMIB32	1604x52x53						
		30xC13: 12xC19	6 single pole	22kW					EMIB34	1829x52x65						
		IEC60309	22kW			EILB15	443x52x53									
2 x IEC60309	22kW			EILB26	443x65x52											

\* Basic G3 features not applicable for the FlexPDU range  
All standard ePDUs come with 3m cable

Need Something Special? We make your custom ePDUs, please contact your local reseller.  
Standard models above are stocked in Europe.

# ePDU G3 Accessories

Accessories	Part Number	Benefits
Sensor	EMP001	Get live measurement on temperature, humidity, set threshold and be notified in real time
Adaptor Fast Ethernet Gigabit	GBCONV	Quick and easy way to upgrade your 10/100 Mb network interface G3 ePDU to Gigabit speed
ePDU to UPS cables	CBL0UT32 CBL20UT32	Connect an ePDU 32A input to the hardware output UPS
Water leak detector*	WLD012	Detect floods and water leaks
Door contact sensor*	DCS001	Monitor your rack access
Intelligent Power Manager	IPM Basic, Silver, Gold	Monitor and managed multiple ePDUs Trigger actions from ePDUs & sensor events

\*Door contact sensor and water leak detector can be connected through EMP001 dry contacts



All ePDU G3 come with a 2 years warranty as standard.  
Warranty extension up to 3 years (Warranty+) and 5 years (Warranty 5) available

## New Rack PDU Selector

rackpduselector.eaton.com/gb

From, input plugs to form factors and measurement features, Eaton's Rack PDU selector tool can help you find the right solution for your specific IT needs.



# 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
- Colored ePDUs now available for the entire range, to easily identify your power source



## Rack PDU selector



[www.eaton.eu/ePDUG3](http://www.eaton.eu/ePDUG3)

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