Power distribution for IT equipment

Basic
In-Line Metered
Metered Input

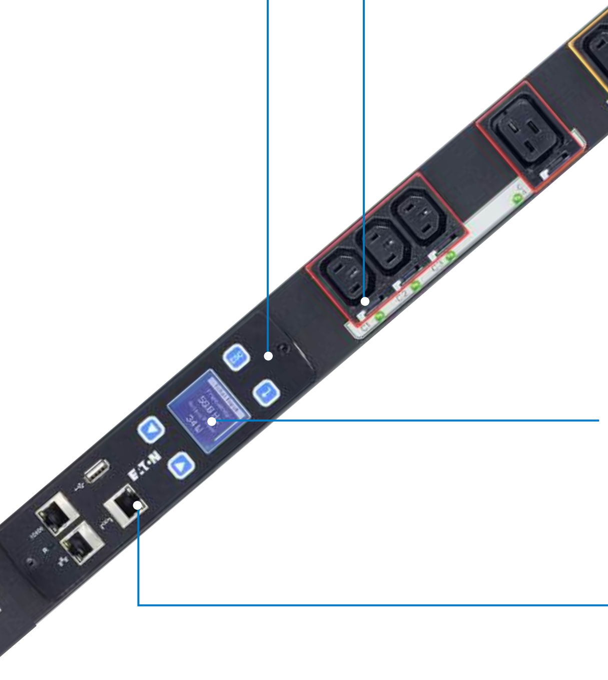
Metered Outlet
Switched
Managed

ePDU

G3 Platform

New range extension 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.

O is unlocked, + is grip engaged

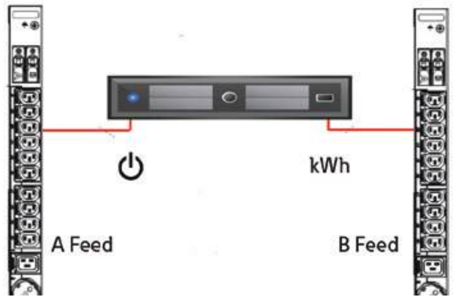
Advanced LCD pixel display with hot-swap capability

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

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 trip a breaker.

Universal Mounting

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

±1%

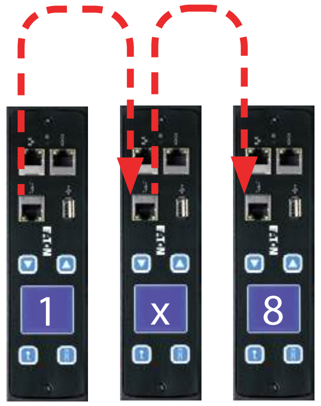
One percent billing grade accuracy

Total Input
Energy
0.617 kWh
since
28/05/2017
00:37:54

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

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 sequentialy to avoid in rush current and start your database before the application.

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

Features and benefits

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

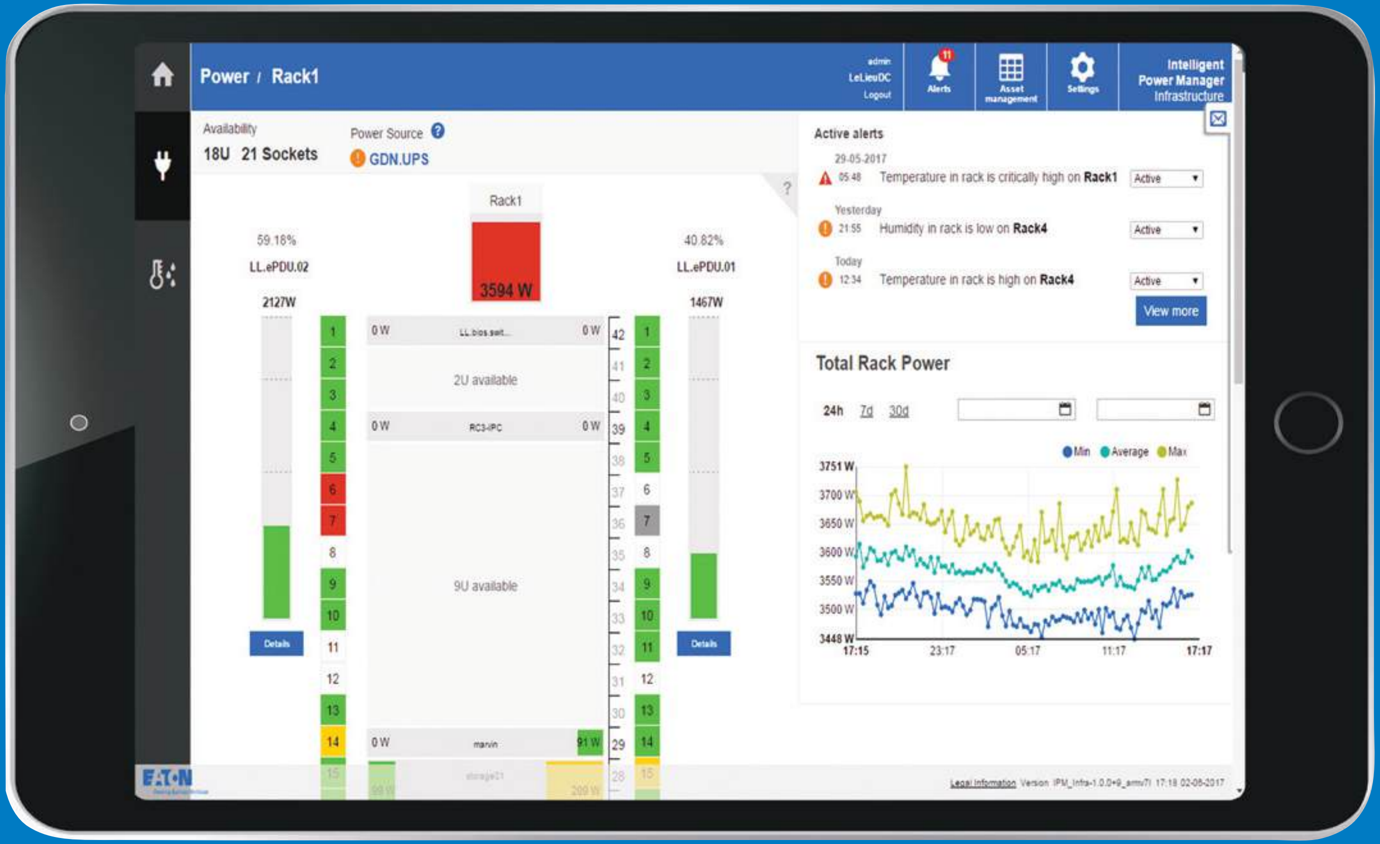
Environmental monitoring including temperature and humidity with more functionality to follow.

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



Active alerts

29-05-2017
05:48 Temperature in rack is critically high on **Rack1** Active

Yesterday
21:55 Humidity in rack is low on **Rack4** Active

Today
12:34 Temperature in rack is high on **Rack4** Active

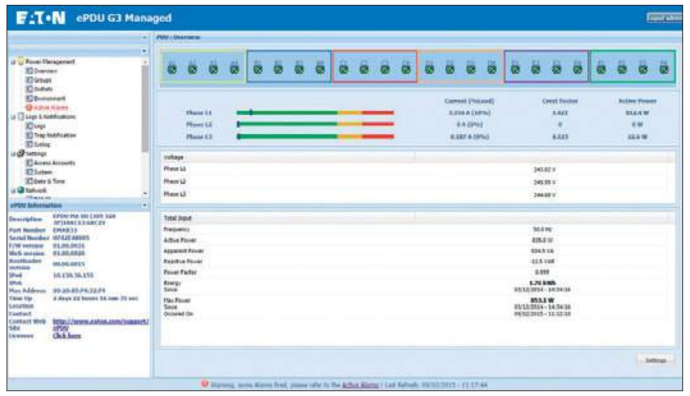
View more

Legal Information Version IPM_Infra-1.0.0+9_armv7l 17:18 02-06-2017

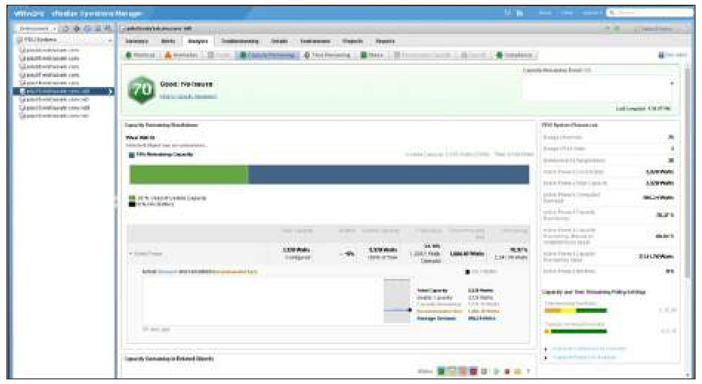
Ensure business uptime and monitor ePDUs and It equipment with Intelligent Power Manager

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



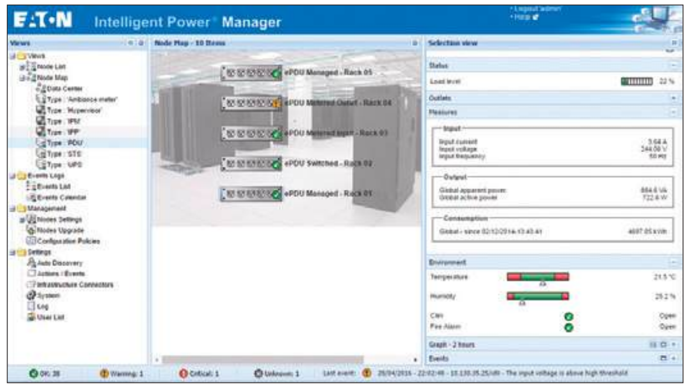
Detailed web-based interface on ePDU G3



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
Basic features	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	√	√	√	√	√	√
Standard features	**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 infratsructure costs		√	√	√	√	√
	En **masse configuration** and advanced action on **virtual environement** 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		√	√	√	√	√
Advanced features	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
1 Phase	**C14 10A**	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
	C20 16A	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**
		20xC13: 4xC19		3.7kW		EBAB22	1070x52x53				**EMIB22**	**1070x52x53**		EMOB22	1604x52x53		ESWB22	1604x52x53		EMAB22	1604x52x53
	IEC60309 16A	7xC13 : 1xC19		3.7kW													ESWB23	704x52x65			
		20xC13 : 4xC19		3.7kW		EBAB04	1070x52x53				EMIB04	1070x52x53		EMOB04	1604x52x53		ESWB04	1604x52x53		EMAB04	1604x52x53
		IEC60309		3.7kW				EILB13	443x52x53												
	2 x IEC60309 16A	2xIEC60309		3.7kW				EILB24	443x65x52												
	IEC60309 32A	12xC13 : 4xC19	2 single pole	7,4kW							EMIB06	1070x52x53									
										2U	EMIH06	2Ux19″x127							2U	**EMAH06**	**2Ux19″x225**
		20xC13 : 4xC19	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									
		IEC60309		7.4kW				EILB14	443x52x53												
	2 x IEC60309 32A	2xIEC60309		7.4kW				EILB25	443x65x52												
3 Phase	**IEC60309 16A**	21xC13 : 3xC19		11kW		**EBAB20**	**1070x52x53**				**EMIB20**	**1070x52x53**		EMOB20	1604x52x53		ESWB20	1604x52x53		EMAB20	1604x52x53
		36xC13 : 6xC19		11kW		EBAB00	1604x52x53				EMIB00	1829x52x53									
	IEC60309 32A	3xC13 : 6xC19	6 single pole	22kW		EBAB01	704x52x53														
		6xC13 : 12xC19	6 single pole	22kW							EMIB07	1604x52x53									
		18xC13 : 6xC19	6 single pole	22kW																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 32A	2xIEC60309		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	CBLOUT32 CBL2OUT32	Connect an ePDU 32A input to the hardwire 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


GBCONV


EMP001

DCS001*

WLD012*

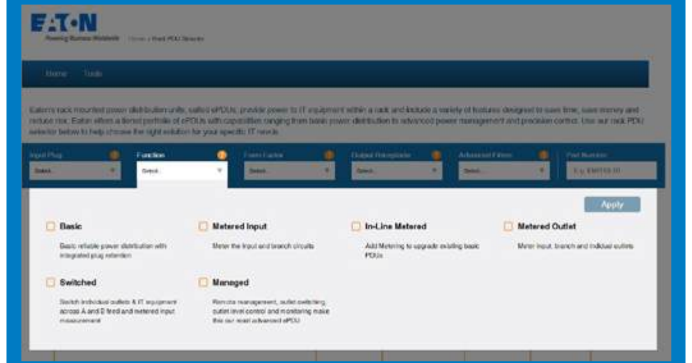

CBL2OUT32


CBLOUT32

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.

Eaton ePDU Basic G3 has a compliant environmental declaration