Product Brochure

Eaton ePDU G3
Managed



Powering Business Worldwide

Advanced power management and precision control

The Eaton® ePDU® third generation (G3) Managed models build on Eaton's existing state-of-the-art ePDU G3 technology while offering new capabilities for rack power distribution in data centers and information technology (IT) applications. You now have comprehensive management and monitoring capabilities down to the outlet level. This new level of precision saves time, saves money and avoids risk, making the ePDU G3 Managed the gold standard in power management.

Increasing level of control

Feature *(Value)*	Basic	Metered*	Managed
Integrated IEC outlet grips *(Easily secure plugs to prevent accidental disconnect)*	•	•	•
Low-profile form factor *(Provide zero interference into the rail space)*	•	•	•
High 140°F (60°C) operating temperature (Reduce cooling costs and maintain full functionality)	•	•	•
Color-coded outlet sections *(Simplify load balancing)*	•	•	•
Ease of installation *(Quick, easy and flexible for most environments)*	•	•	•
One percent billing grade accuracy *(Optimize power utilization)*		•	•
Advanced LCD pixel display *(Allow for easy IP setup and troubleshooting)*		•	•
Daisy chain (share network connection/IP address) *(Reduce network infrastructure costs by 87.5%)*		•	•
Hot-swap meter *(Remove meter without disruption)*		•	•
Phase and section power metering *(Control power utilization)*		•	•
Measure power consumption at outlet level *(Acquire precise data to make informed decisions)*		*Metered Outlet only*	•
Measure level 3 power usage effectiveness (PUE) *(Transform billing into revenue or utility discounts)*		*Metered Outlet only*	•
Outlet switching *(Remote on, off and reboot saves time and costs)*			•
Turn off unused outlets *(Control unauthorized use)*			•
Remote site management *(Save time from on-site visits)*			•
Group reboot for A and B feed *(Save time by controlling grouped power supplies)*			•
*Includes Metered Input and Metered Outlet models	***Good***	***Better***	***Best***

Key applications

ePDU G3 Managed models are available in a variety of plug and outlet configurations, including both 120 and 200-240 volt configurations. The ePDU G3 Managed models give you advanced control of the rack environment, making it a perfect fit for a variety of applications.





Remote office/branch office

- Portfolio of 120V and lower power ratings (kVA)
- Reboot devices without local IT staff assistance
- Control unused outlets to prevent unauthorized use
- LCD pixel menu display simplifies setup

Enterprise data center

- Up to 208V three phase 17kW for high density applications
- Network monitoring of power usage and capacity at the outlet level
- Save time by rebooting devices from the operations center
- Measure power for Level 3 PUE

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.

Turn off unused outlets

Secure and protect your environment by easily turning off unused outlets. Avoid overloading your system from others plugging in unauthorized devices. Also consider closing access with an outlet cap.



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



Cap secures in place with cable tie

Grouped reboot for 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.



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 unnecessarily trip a breaker.



O is unlocked, + is grip engaged

Outlet grip functionality

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.

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.



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

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 87.5 percent reduction in network infrastructure costs.

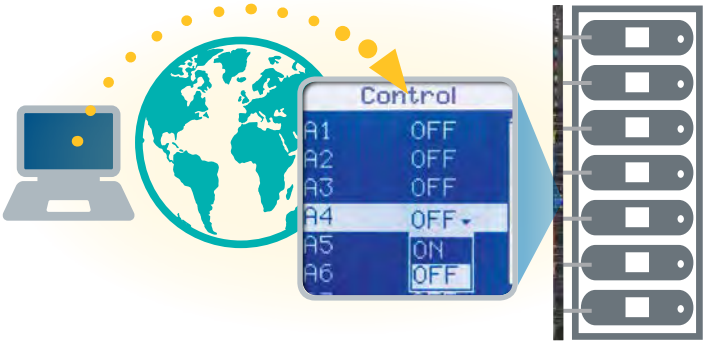


A and B power PDU sharing a network connection via daisy chain

Increase effectiveness and reduce operating costs

Remote site management

- Manage ePDU G3s using a web browser or SNMP integration into DCIM software
- Simplify management by using the daisy-chain capability to manage up to 8 ePDU G3s with a single IP address
- Avoid costly site visits by remotely rebooting and monitoring your site, allowing more time to manage other critical tasks



Measure power consumption at the outlet level

- Acquire more accurate and detailed data
- Gain energy analysis at a deeper level
- Make informed decisions to reduce power consumption



From meter screen, select outlets...

From outlet screen, select specific outlet to view...

View live power levels for selected outlet

Measure Level 3 PUE

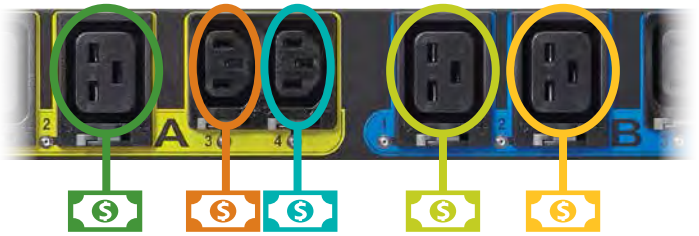
PUE is an industry-wide accepted method to measure power effectiveness. Measuring at the outlet level removes upstream devices from the calculation to provide an accurate view of how effectively power is being used for the connected IT equipment. Data center managers typically prefer Level 3 PUE for the most accurate PUE calculation.

PUE measurement	Level 1: Basic	Level 2: Intermediate	Level 3: Advanced
IT equipment energy	UPS outputs	PDU outputs	IT equipment input
Total facility energy	Utility inputs	Utility inputs	Utility inputs
Measurement intervals	Monthly/weekly	Daily/hourly	Continuous (15 minutes or less)

To obtain Level 3 PUE, you must take measurements at the IT equipment level in intervals of at least 15 minutes.

Perform department and customer billing

Metering at the outlet level provides customer-level energy tracking and turns power billing into a revenue stream that considers actual usage. Similarly, you can measure power usage per application and assign it to specific departments for budgeting purposes or to justify costs.



Each outlet can be billed separately.

Ease of installation

- Patented clip feet allow for multiple mounting methods
- Mounting buttons come pre-installed to reduce installation time
- Optional side mounting button locations to mount ePDU G3s at a 90-degree rotation in the rack, preventing interference with hot-swap fans and power supplies
- Double-sided buttons accommodate different variations of metal thickness



Eaton patented clip feet

ePDU G3 Managed selection guide

Catalog number	Input plug	Cord (ft)	Breaker	Current (A)	Max kW	Output receptacles	Dimensions (H x W x D, in)
EMA111-10	5-15P	10	None	12	1.44	(8) 5-15R	35.5 x 2.05 x 2.56
EMA112-10	5-15P	10	None	12	1.44	(16) 5-20R	66.5 x 2.05 x 2.56
EMA113-10	L5-20P (5-20P adapter)	10	None	16	1.92	(8) 5-20R	35.5 x 2.05 x 2.56
EMA114-10	L5-20P (5-20P adapter)	10	None	16	1.92	(24) 5-20R	66.5 x 2.05 x 2.09
EMA108-10	L5-30P	10	(2) 20A	24	2.88	(24) 5-20R	66.5 x 2.05 x 2.56
EMA106-10	C20 (L6-20 adapter)	10	None	16	3.84	(7) C13, (1) C19	35.5 x 2.05 x 2.1
EMA115-10	C20 (L6-20 adapter)	10	None	16	3.84	(21) C13, (3) C19	63.1 x 2.05 x 2.09
EMA107-10	L6-30P	10	(2) 20A	24	5.76	(20) C13, (4) C19	66.5 x 2.05 x 2.1
EMA334-10	L21-20P	10	None	16	5.76	(24) 5-20R	63.1 x 2.05 x 2.56
EMA324-10	L15-20P	10	(3) 20A	24	5.76	(18) C13, (6) C19	66.5 x 2.05 x 2.56
EMA325-10	L21-20P	10	(3) 20A	24	5.76	(18) C13, (6) C19	66.5 x 2.05 x 2.56
EMA339-10	L15-20P	10	(3) 20A	16	5.76	(21) C13, (3) C19	66.5 x 2.05 x 2.09
EMA340-10	L21-20P	10	(3) 20A	16	5.76	(21) C13, (3) C19	66.5 x 2.05 x 2.09
EMA326-10	L15-30P	10	(3) 20A	24	8.64	(18) C13, (6) C19	66.5 x 2.05 x 2.56
EMA327-10	L21-30P	10	(3) 20A	24	8.64	(18) C13, (6) C19	66.5 x 2.05 x 2.56
EMA333-10	L21-30P	10	(3) 20A	24	8.64	(21) C13, (6) C19, (1) 5-20R	66.5 x 2.05 x 2.56
EMA341-10	L15-30P	10	(3) 20A	24	8.64	(21) C13, (3) C19	66.5 x 2.05 x 2.09
EMA342-10	L21-30P	10	(3) 20A	24	8.64	(21) C13, (3) C19	66.5 x 2.05 x 2.09
EMA328-10	CS8365	10	(3) 20A	35	12.48	(18) C13, (6) C19	66.5 x 2.05 x 2.56
EMA343-10	CS8365	10	(3) 20A	35	12.48	(21) C13, (3) C19	66.5 x 2.05 x 2.09
EMA329-06	CS8365	6	(6) 20A	40	14.4	(12) C13, (12) C19	66.5 x 2.05 x 2.56
EMA330-06	IEC60309 460P9W	6	(6) 20A	48	17.3	(12) C13, (12) C19	66.5 x 2.05 x 2.56

ePDU G3 accessories

Part Number	Description
EMP001	Environmental monitoring probe
010-0029	2-foot C13 to C14 jumper cord
010-0028	4-foot C13 to C14 jumper cord
010-0027	6-foot C13 to C14 jumper cord
010-0025	8-foot C13 to C14 jumper cord
035-0113	C13 outlet cap
035-0119	C19 outlet cap

Environmental monitoring

The optional environmental monitoring probe connects to the serial port and enables you to collect temperature and humidity readings in the rack environment to monitor environmental data remotely. You can also monitor the status of two contact closure devices, such as door switches.



Part Number EMP001

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For more information on the new G3 platform, visit **Eaton.com/ePDUG3**