Eaton ePDU G3 Basic and Metered Input

epDly



Eaton's third-generation technology for power distribution

The new Eaton® ePDU® G3 platform provides best-in-class power distribution, enabling data center and information technology (IT) managers to effectively monitor and manage their rack environments. Featuring Eaton's third-generation (G3) ePDU technology, G3 is easy to install and reduces operating costs while increasing reliability. With a host of unique and state-of-the-art features for both Basic and Metered Input ePDUs, G3 sets the standard for power management in a wide range of key applications.

G3 key technology features	Basic (BA)	Metered Input (MI)
IEC outlet grip plug retention	•	•
±1% billing grade accuracy		•
Color-coded outlet sections	•	•
Advanced LCD pixel display		•
Hot-swap meter		•
Low-profile form factor	•	•
High operating temperature	•	•
Daisy chain of IP addresses		•
Ease of installation	•	•

Key applications

Designed for IT environments, G3 is available in a variety of plug and outlet configurations, including both 120 and 200-240 volt configurations. Power distribution is needed in racks to properly connect servers, switches and other IT equipment.

Small / medium business

- 120V and lower kVA options
- Economical Basic or Metered Input
- Local pixel LCD display for onsite management

Enterprise data centers

- 208V three phase up to 17 kW for high density
- Network monitoring of power usage and capacity
- Variety of outlet configurations

Billing grade accuracy



G3 provides one percent revenue-grade power monitoring for higher accuracy in department billing or collocation data centers. You are able to effectively measure power usage to all outlets and identify open capacity, resulting in full-power utilization.

Utility rebate programs also require measurements that meet revenue-grade standards.

Outlet grip plug retention

Eaton's new patented 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. Unlike competitor solutions, the new outlet grip eliminates the need for special power cords that can increase purchase prices by \$200 to \$300.



O is unlocked, + is arip engaged

Total Input Energy 9.702 kWh since 12/09/2013 00:32:22

Color-coded outlet sections

Each color-coded outlet section matches a corresponding circuit breaker in the new G3 models. This coding allows you to easily identify which circuit breaker feeds which outlets, and prevents unbalanced loading that could trip a breaker.



Advanced LCD pixel display

FITIN

The new G3 LCD pixel display simplifies local setup and trouble shooting. It also allows you to view voltage, power, total input, meters, LCD orientation and alarm history. In addition, the menu-driven display changes from blue to amber during an alarm situation, visually alerting you of a problem.

G3's advanced LCD pixel display



Local buttons allow for easy menu navigation and simplify setup

Hot-swap eNMC module

Eaton's new hot-swap eNMC (ePDU Network Management and Control) module can be replaced without the need to power down your rack. As a result, you not only increase uptime, but also enhance serviceability and potentially save \$200 to \$500 on an unnecessary service call.



Hot-swap meter is able to be replaced without powering down the rack.

Low-profile form factor

The width of the new G3 Basic and Metered Input ePDUs has been optimized for side mounting, resulting in zero interference into the rail space so you don't block hot-swap fans or power supplies. Some models feature low-profile circuit breakers to reduce interference when the ePDU is mounted with outlets facing the rail (center of the rack).



G3 in Eaton S-Series rack



G3 does not interfere with rail space



G3 mounted at 90-degree angle

High operating temperature

All G3 models are fully functional in high operating temperature environments up to 140°F (60°C), resulting in reduced cooling costs. A higher operating temperature is needed for most modern hot-air containment solutions. Since ePDUs are located in the back of the rack where server exhaust can elevate temperatures to as high as 116°F, based on ASHRAE's 80.6°F maximum inlet temperature guidelines, it's important to have the right solution.



Modern hot-air containment solution with ePDUs located in the hot air exhaust section

Daisy chain four units from one IP address

Eaton's new patented daisy chain is available on all network-connected G3 models. This feature allows four ePDUs to share the same network connection and IP address, resulting in a 75 percent reduction in network infrastructure costs, compared to competitor rack PDUs that require a dedicated IP address.

Demonstrated cost difference based on two ePDUs per rack:

	100 racks	200 racks	400 racks
Dedicated IP address	\$40,000	\$80,000	\$160,000
Daisy chain method	\$10,000	\$20,000	\$40,000
Cost savings	\$30,000	\$60,000	\$120,000

Ease of installation

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



Eaton patented clip feet



Clip feet easily attach to ePDUs



Mounting buttons come pre-installed on each G3

Light-weight aluminum chassis

• Offers a 30 percent lighter-than-steel chassis, making each unit easier to install

D.E.T.N CARO

- Lower shipping costs compared to competitive models made from steel
- Dissipates heat for better performance in high-density environments
- Offers better electrical conductivity for improved electrical grounding

Light-weight aluminum chassis can be easily held with one hand.

Network management

The advanced network capabilities of the G3 platform allow you to monitor multiple ePDUs through Eaton's power monitoring solutions. In addition, G3 has built-in support for third-party data center infrastructure management (DCIM) solutions by using SNMP v3 to communicate securely to each ePDU.

Software	Number of racks supported	Software type	Application	Cost
Web browser / email alerts	1-25	Embedded Web server	Data closet or small network	Included
Eaton Intelligent Power Manager	1-200	Server based / Web interface	Small-to-medium enterprise	Free up to 10 nodes
Third-party DCIM	50-1,000	Varies / SNMP data to third party	Medium-to-large enterprise	Varies
Eaton Foreseer	100-1,000	Server based / Web interface	Facility or large enterprise	Varies by size



Part Number EMP001

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.

G3 platform model selection guide

	Catalog Number	Function	Plug	Breaker	Max kW	Cord (ft)	Output receptacles	Dimensions (H x W x D, in)
	EBA301-10	BA	L15-20P	(3) 20A	5.76	10	(30) C13, (6) C19	66.5 x 2.05 x 2.1
	EBA311-10	BA	L15-20P	(3) 20A	5.76	10	(42) C13	69.5 x 2.05 x 2.1
	EBA308-10	BA	L21-20P	None	5.76	10	(21) 5-20R, (6) L6-20R	66.5 x 2.05 x 2.1
	EBA309-10	BA	L21-20P	None	5.76	10	(39) 5-20R	66.5 x 2.05 x 2.1
selection guide	EBA302-10	BA	L21-20P	(3) 20A	5.76	10	(30) C13, (6) C19	66.5 x 2.05 x 2.1
	EBA312-10	BA	L21-20P	(3) 20A	5.76	10	(42) C13	69.5 x 2.05 x 2.1
	EBA303-10	BA	L15-30P	(3) 20A	8.64	10	(30) C13, (6) C19	66.5 x 2.05 x 2.1
	EBA313-10	BA	L15-30P	(3) 20A	8.64	10	(42) C13	69.5 x 2.05 x 2.1
dels	EBA310-10	BA	L21-30P	(3) 20A	8.64	10	(30) C13, (6) C19, (1) 5-20R	66.5 x 2.05 x 2.1
	EBA304-10	BA	L21-30P	(3) 20A	8.64	10	(30) C13, (6) C19	66.5 x 2.05 x 2.1
asi d	EBA314-10	BA	L21-30P	(3) 20A	8.64	10	(42) C13	69.5 x 2.05 x 2.1
G3 B	EBA305-06	BA	CS8365	(3) 20A	12.48	6	(30) C13, (6) C19	66.5 x 2.05 x 2.1
	EBA315-10	BA	CS8365	(3) 20A	12.48	10	(42) C13	69.5 x 2.05 x 2.1
	EBA300-06	BA	CS8365	(2) 20A, (1) 30A	14.4	6	(24) C13, (4) C19, (2) L6-30P	66.5 x 2.05 x 2.1
	EBA306-06	BA	CS8365	(6) 20A	14.4	6	(21) C13, (12) C19	66.5 x 2.05 x 2.1
	EBA307-06	BA	IEC60309 460P9	(6) 20A	17.3	6	(21) C13, (12) C19	66.5 x 2.05 x 2.1
	EMI100-10	MI	5-15P	None	1.44	10	(24) 5-15R	66.5 x 2.05 x 2.1
	EMI101-10	MI	L5-20P (5-20P adapter)	None	1.92	10	(24) 5-20R	66.5 x 2.05 x 2.1
	EMI102-10	MI	L5-30P	(2) 20A	2.88	10	(24) 5-20R	66.5 x 2.05 x 2.1
	EMI103-10	MI	C20 (L6-20 adapter)	None	3.84	10	(18) C13, (2) C19	35.5 x 2.05 x 2.1
	EMI301-10	MI	L15-20P	(3) 20A	5.76	10	(30) C13, (6) C19	66.5 x 2.05 x 2.1
	EMI311-10	MI	L15-20P	(3) 20A	5.76	10	(42) C13	69.5 x 2.05 x 2.1
uide	EMI308-10	MI	L21-20P	None	5.76	10	(21) 5-20R, (6) L6-20R	66.5 x 2.05 x 2.1
on g	EMI309-10	MI	L21-20P	None	5.76	10	(39) 5-20R	66.5 x 2.05 x 2.1
ecti	EMI318-10	MI	L21-20P	None	5.76	10	(30) C13, (6) C19, (3) 5-20R	66.5 x 2.05 x 2.1
s sel	EMI302-10	MI	L21-20P	(3) 20A	5.76	10	(30) C13, (6) C19	66.5 x 2.05 x 2.1
dels	EMI312-10	MI	L21-20P	(3) 20A	5.76	10	(42) C13	69.5 x 2.05 x 2.1
Ĕ	EMI104-10	MI	L6-30P	(2) 20A	5.76	10	(36) C13, (6) C19	66.5 x 2.05 x 2.1
Inpu	EMI303-10	MI	L15-30P	(3) 20A	8.64	10	(30) C13, (6) C19	66.5 x 2.05 x 2.1
red	EMI313-10	MI	L15-30P	(3) 20A	8.64	10	(42) C13	69.5 x 2.05 x 2.1
Mete	EMI310-10	MI	L21-30P	(3) 20A	8.64	10	(30) C13, (6) C19, (1) 5-20R	66.5 x 2.05 x 2.1
63	EMI304-10	MI	L21-30P	(3) 20A	8.64	10	(30) C13, (6) C19	66.5 x 2.05 x 2.1
	EMI314-10	MI	L21-30P	(3) 20A	8.64	10	(42) C13	69.5 x 2.05 x 2.1
	EMI305-06	MI	CS8365	(3) 20A	12.48	6	(30) C13, (6) C19	66.5 x 2.05 x 2.1
	EMI315-10	MI	CS8365	(3) 20A	12.48	10	(42) C13	69.5 x 2.05 x 2.1
	EMI300-06	MI	CS8365	(2) 20A, (1) 30A	14.4	6	(24) C13, (4) C19, (2) L6-30R	66.5 x 2.05 x 2.1
	EMI316-06	MI	CS8365	(6) 20A	14.4	6	(9) C13, (12) C19	66.5 x 2.05 x 2.1
	EMI317-06	MI	IEC60309 460P9	(6) 20A	17.3	6	(9) C13, (12) C19	66.5 x 2.05 x 2.1

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