Power distribution for IT equipment

Basic
Metered Input

Switched
Managed

Rack PDU G4

Powering Business Worldwide

Rack PDU G4 rewrites the rules

When you talked about connectivity, we listened.

Boost efficiency, security, density and flexibility to meet today's data centre priorities Eaton's new rack PDU G4 - 4th generation delivers highly secured power distribution and business continuity, critical in today's data centre space. This has been achieved by in-depth work, incorporating customer experience and marketplace feedback.

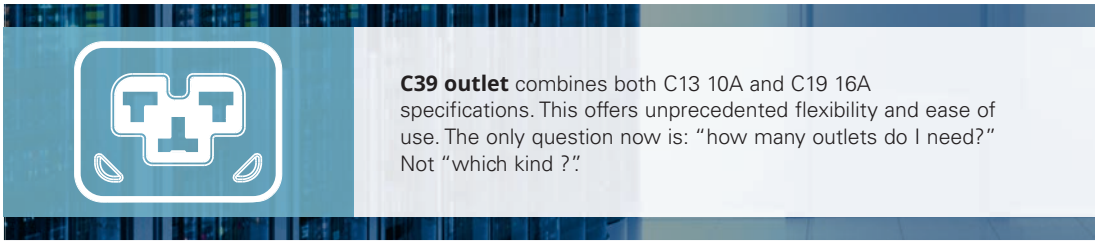
Business Continuity and Security

- Enhance the reliability of power connections, **prevent accidental disconnections**.
- Ensure **uninterrupted power supply and network availability** for essential business operations.
- Keep your data flowing without any interruptions. The Rack PDU G4 is designed to provide the **highest level of cybersecurity.**

Sustainable and Smart

- From conception to end-use, G4 PDU has been **designed to reduce energy consumption** whilst **optimising and monitoring power usage** accurately.
- Plan better for extended power failure events and monitor the installation in greater depth with **Environmental data extraction.**
- **Maximize compatibility** by controlling your PDU thanks to the multiple secure communication protocols.

Better User Experience



C39 outlet combines both C13 10A and C19 16A specifications. This offers unprecedented flexibility and ease of use. The only question now is: "how many outlets do I need?" Not "which kind ?".

- Meet specific infrastructure needs and **maximize available rack space** with a wide range of high outlet density PDU.
- Boost uptime and **improve service capability** with the hot-swap network module.
- LCD screen provides an improved user experience **for easier installation/commissioning**.
- **Save time on deployment** and save costs by swapping out equipment without the inconvenience of re-ordering a new rack PDU.

Designed for incremental feature upgrades

According to the latest market trends, the new G4 PDU range provides up to 48 outlets per PDU in a low-profile chassis. Eaton offers extensive PDU configurations including 1-Phase, 3-Phases, and 16A, 32A, 63A to meet specific infrastructure needs.

Basic

Basic G4 PDUs **provide cost-effective, reliable power distribution** with a secure, built-in high retention system to firmly hold standard power cords and a new type C39 outlet that combines C13 and C19 connectors.

Metered Input

Metered input G4 PDUs streamline power management and promotes efficient operations by **simplifying load balancing and preventing overloads.**

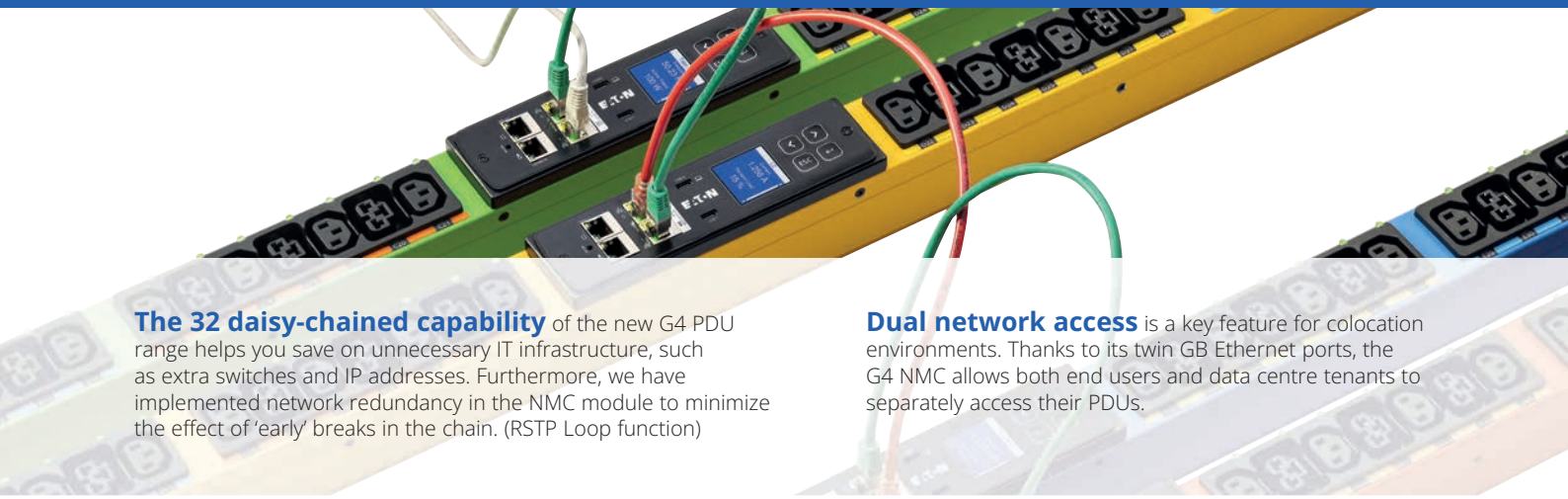
Switched

Advanced **control features** at outlet level combined with all power quality measurement capabilities of the Metered Input PDU.

Managed

Managed G4 PDUs incorporate all the features of the switched model and goes a step further by actively **monitoring and measuring** crucial power quality factors such as voltage, current and power consumption at the outlet level.

Business continuity and security

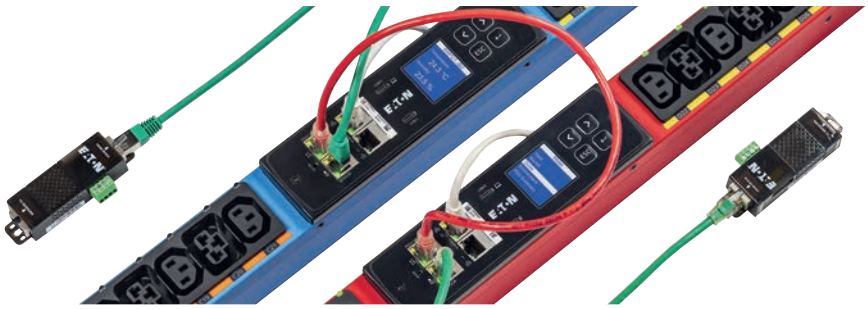


The 32 daisy-chained capability of the new G4 PDU range helps you save on unnecessary IT infrastructure, such as extra switches and IP addresses. Furthermore, we have implemented network redundancy in the NMC module to minimize the effect of 'early' breaks in the chain. (RSTP Loop function)

Dual network access is a key feature for colocation environments. Thanks to its twin GB Ethernet ports, the G4 NMC allows both end users and data centre tenants to separately access their PDUs.

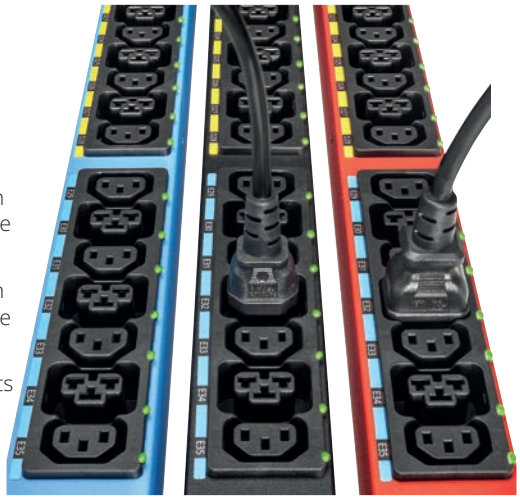
Power Sharing

The NMC also enables one G4 PDU to power up a second PDU's network module control should it lose power, while still enabling the network to access its critical data and connected sensors.



Outlet switching enables you to remotely control devices by powering individual outlets on or off.
Save time and operating costs by rebooting machines from your control centre without costly site visits.

- Sequential server start-up avoids the in rush of current – starting your database before the application.
- Sequential server start-up avoids the in rush of current – starting your database before the application.
- Easy turn off of unused outlets prevents unauthorised use.



G4's built-in high retention system at the outlet level enhances power connection reliability by preventing accidental disconnections from vibrations, tugs, or maintenance. G4 PDU outlets are also compatible with P-lock power cords.

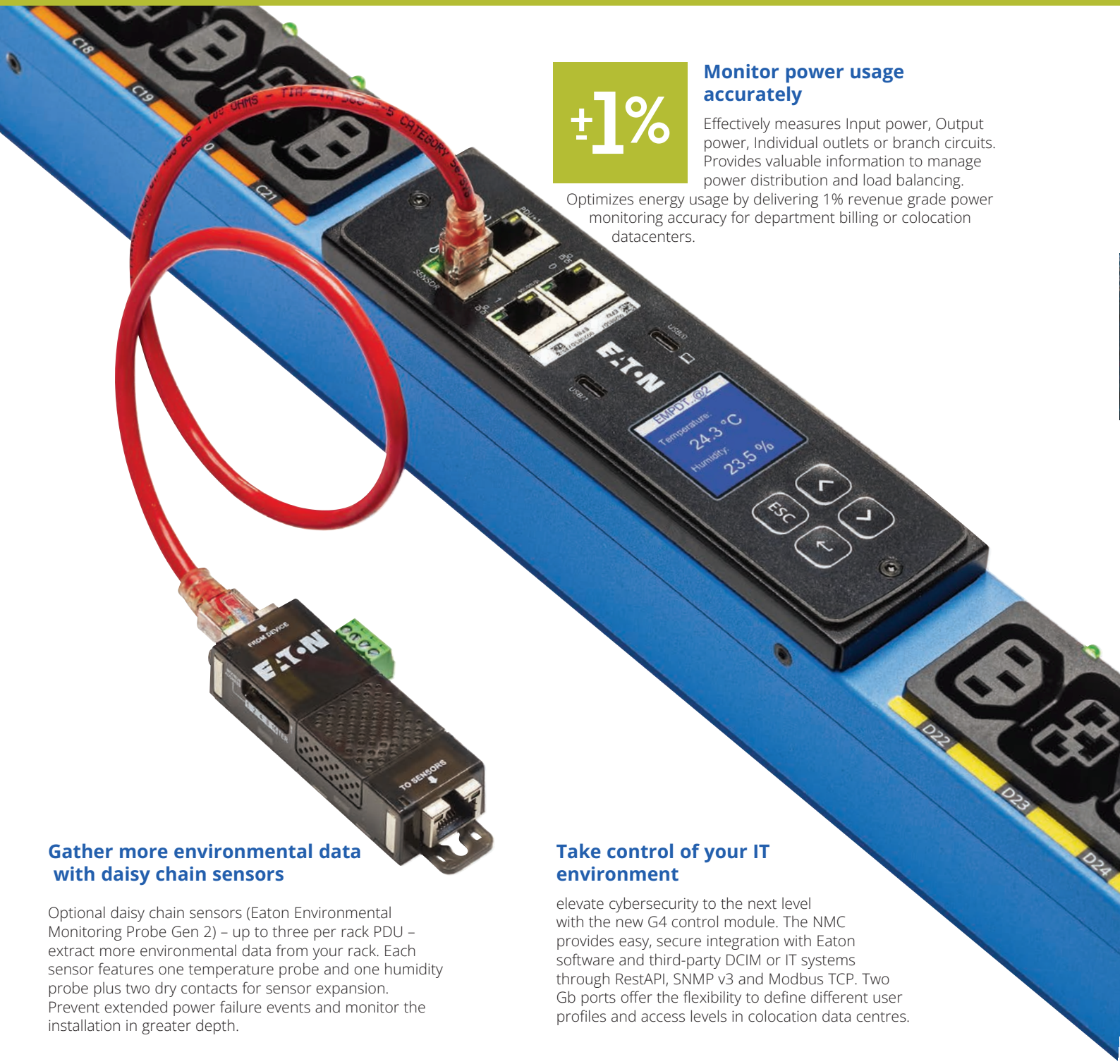
60°C operating capability

We made the G4 PDU more reliable and fully functioning even in high temperate environments, while reducing cooling costs.

Cybersecurity

Cybersecure-certified by independent authorities to UL 2900-1 and IEC 62443-4-2, G4's NMC uses a secured boot process by which it serves as a root of trust device, it is a specially authenticated, first line of defence against intrusion.

Sustainable and smart



±1% Monitor power usage accurately

Effectively measures Input power, Output power, Individual outlets or branch circuits. Provides valuable information to manage power distribution and load balancing.
Optimizes energy usage by delivering 1% revenue grade power monitoring accuracy for department billing or colocation datacenters.

Gather more environmental data with daisy chain sensors

Optional daisy chain sensors (Eaton Environmental Monitoring Probe Gen 2) – up to three per rack PDU – extract more environmental data from your rack. Each sensor features one temperature probe and one humidity probe plus two dry contacts for sensor expansion. Prevent extended power failure events and monitor the installation in greater depth.

Take control of your IT environment

elevate cybersecurity to the next level with the new G4 control module. The NMC provides easy, secure integration with Eaton software and third-party DCIM or IT systems through RestAPI, SNMP v3 and Modbus TCP. Two Gb ports offer the flexibility to define different user profiles and access levels in colocation data centres.

Green solution end to end by design

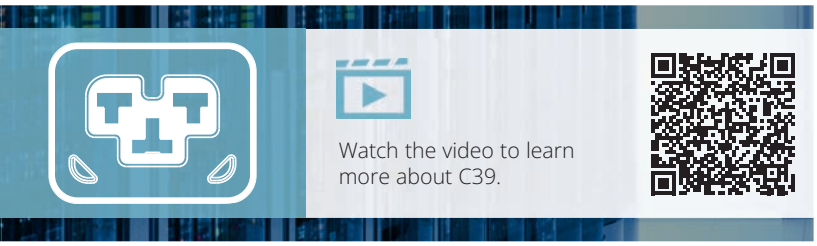
- **Halogen-free input cable** comes as standard with rack PDU G4. This reduces toxic, polluting emissions in the event of fire, offers greater resistance to corrosive chemicals, and meets the most stringent safety compliance regulations.
- Energy-efficient, **latching relay technology** controls the power supply without the need for continuous electrical input. Rack PDU G4 consumes up to **88% less energy** than a PDU with standard relay.
- Efficient, **eco-friendly packaging** uses recycled and recyclable materials. Compact packaging design also enables higher volumes per consignment that translate into lower transport costs.

PEP ecoPASSPORT

Better user experience

C39 combining C13 and C19 in a single outlet,

that securely connect both C14 and C20 power cords.Including visual Led power status.



Zero interference to 19" rail work space

Extra flat breakers and low-profile form factor chassis to avoid accidental tripping.

Natural load balancing

The G4 design alternates phase and/or breaker per section on all PDUs, naturally balancing rack power load.

Remotely manage servers

Enhance your power distribution with individual outlet remote control for streamlined energy monitoring and management.

New G4 control module

Boost uptime and enhance service capability with the hot-swap capability of network management and control module. Keep your servers up and running while replacing faulty NMC module.

Built-in high retention system

secures standard power cords to outlets.

True mounting flexibility

Factory-mounted buttons combined. with universal mounting brackets enable Eaton rack PDU G4 to fit any rack on the market.

Dual Gigabit ethernet ports offer the flexibility to define different user profiles and access levels in colocation data centres.

RNDIS provides an easy way to connect a laptop to the PDU via USB directly (plug & play) to access the PDU configuration during commissioning

HD LCD Screen Enhanced user experience during installation/ commissioning, thanks to the new high definition, wide-angle colored view display.

Technical specifications

Rack PDU G4 - vertical units (0U)

	Basic	Metered Input
C39 combines C13 and C19 in a single outlet, that securely connect both C14 and C20 power cords.	√	√
Built-in high retention plug system, for standard power cords. Compatible with P-lock power cords.	√	√
Colour-coded outlet and branch circuits for simple load balancing	√	√
Halogen free input cable (Except on C20 models)	√	√
60°C Operating temperature	√	√
Universal rack mouting system. (Factory mounted buttons & universal mounting brackets)	√	√
Hot-Swap network control module with high definition, wide angle colored view LCD + optional temp / humidity sensor		√
±1% IEC Class 1 billing grade accuracy for V, W, A and kWh		√
Phase metering, Circuit breaker current metering and Input metering		√
Network cascading, up to 32 PDUs, RSTP Loop compliant		√
Dual network access (twin 10/100/1000 Mb/s Ethernet ports)		√
Power sharing, one G4 PDU to power up a second PDU's network module control		√
Cybersecure-certified (UL 2900-1 and IEC 62443-4-2) and Secured boot process. Secure protocols: HTTPS, SSH, MQTT		√
Connect with Eaton software and third-party DCIM solutions or IT systems through RestAPI, SNMPv3 and Modbus TCP		√
Commisionning: USB (RNDIS), DHCP 66/67		√
Circuit breaker status monitoring		
Energy-efficient, latching relay technology		
Outlet and IT equipment switching / reboot / sequencing start-up / turn off unused outlets to control unauthorized use		
Individual outlet metering		
Level 3 PUE measurements		

	Input Type / Rating (A)	Outlet type and Qty	Outlet total and Qty	Breakers	Nominal Power	Basic p/n	Dimensions L x W x D, mm	Metered Input p/n	Dimensions L x W x D, mm
1 Phase	C20 16A	12xC13 : 12xC39	24		3.7kW	**EVBAFC20A**	1000x52x53*	**EVMIFC20A**	1000x52x53*
	IEC60309 16A	12xC13 : 12xC39	24		3.7kW	**EVBAF116A**	1000x52x53*	**EVMIF116A**	1000x52x53*
	IEC60309 32A	12xC13 : 12xC39	24	2 single pole	7.4kW	**EVBAF132A**	1000x52x53*	**EVMIF132A**	1730x52x53
		24xC13 : 18xC39	42	2 single pole	7.4kW	**EVBAF132X**	1730x52x53	**EVMIF132X**	1730x52x53
	IEC60309 63A	24xC13 : 18xC39	42	6 single pole	14.5kW			**EVMIF163X**	1730x52x53
3 Phases	IEC60309 16A	12xC13 : 12xC39	24		11kW			**EVMIF316A**	1000x52x53*
		24xC13 : 18xC39	42		11kW	**EVBAF316X**	1730x52x53	**EVMIF316X**	1730x52x53
	IEC60309 32A	12xC13,12xC39	24	6 single pole	22kW			**EVMIF332A**	1730x52x53
		24xC13 : 18xC39	42	6 single pole	22kW	**EVBAF332X**	1730x52x53	**EVMIF332X**	1730x52x53
		24xC13 : 24xC39	48	6 single pole	22kW				

**35° angled design ensures optimal PDU input cable flexibility and space efficiency on a rack*

Rack PDU G3+

	Basic	Metered Input	Switched
Outlets with dual built-in security mechanism eGrip & P-Lock, 60°C Operating temperature	√	√	√
Hot-Swap Control module, ±1% Billing Grade Accuracy, Daisy-Chain up to 8 ePDUs, SNMP v1, V3		√	√
Turn off unused outlets to control unauthorized use, Circuit Breaker Status Monitoring			√
Outlet and IT Equipment Metering across A and B feed, Level 3 PUE measurements			

	Input Type / Rating (A)	Outlet type and Qty	Breakers	Nominal Power	Basic p/n	Dimensions L x W x D, mm	Metered Input p/n	Dimensions L x W x D, mm	Switched p/n	Dimensions L x W x D, mm
1 Phase	C14 10A	8xC13	2.3kW	2.3kW			1U **EMIH02**	1Ux19"x203		
	FlexPDU inlet C20 16A	8xFR : 1x C19		3.7kW	1U **EFLX8F***	1Ux19"x80				
		8xFR : 1xC19		3.7kW	1U **EFLX8D***	1Ux19"x80				
		8xFR : 1xC19	2 single pole	3.7kW	**EFLX6B***	52x19"x120				
		12xC13 : 1xC19	2 single pole	3.7kW	1U **EFLX12I***	1Ux19"x80				
	C20 16A	8xC13		3.7kW			1U **EMIH28**	1Ux19"x203	1U **ESWH28**	1Ux19"x203
	IEC60309 32A	12XC13 : 4XC19	2 single pole	7,4kW			2U **EMIH06**	2Ux19"x127		
3 Phases	IEC60309 63A	18xC13 : 12xC19	12 single pole	43.6kW			**EMIB352**	1829x52x65		
		21xC13 : 12xC19	12 single pole	43.6kW	**EBAB338**	1829x52x65				

**Basic G3 features not applicable for the FlexPDU range*

Switched	Managed
√	√
√	√
√	√
√	√
√	√
√	√
√	√
√	√
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	√

Switched p/n	Dimensions L x W x D, mm	Managed p/n	Dimensions L x W x D, mm
EVSWFC20A	1000x52x53*	EVMAFC20A	1000x52x53*
EVSWF116A	1000x52x53*	EVMAF116A	1000x52x53*
EVSWF132A	1730x52x53	EVMAF132A	1730x52x53
		EVMAF132X	1730x52x53
		EVMAF163X	1730x52x53
EVSWF316A	1000x52x53*	EVMAF316A	1000x52x53*
		EVMAF316X	1730x52x53
		EVMAF332A	1730x52x53
		EVMAF332X	1730x52x53
		EVMAF332C	1900x52x53

Managed
√
√
√
√

Managed p/n	Dimensions L x W x D, mm
1U EMAH28	1Ux19"x203
2U EMAH06	2Ux19"x225

3-year warranty for all Rack PDU G4

Warranty+1

Warranty+3

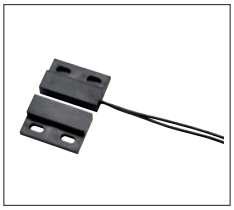
Standard warranty can be extended by one additional year (Warranty +1) or three additional years (Warranty +3).

PDU Accessories

Accessories	Part Number	Benefits
Environmental sensor monitoring probe	EMPDT1H1C2	Monitor temperature and humidity in real-time, connect additional sensors via two dry contacts. Enhance control, receive notifications, and avoid downtime.
Water leak detector*	WLD012	Water leak detector provides real-time detection, immediate notifications, and helps prevent costly repairs.
Door contact sensor*	DCS001	Door Contact Sensor monitors rack door access, detects door status in real-time, and provides immediate notifications, enhancing security.
PDU to UPS cable adaptor	CBLOUT32	Cable adapter ensures easy and secure connection of a 32A single-phase PDU to a hardwire UPS
2x PDUs to UPS adaptor	CBL2OUT32	Cable adapter ensures easy and secure connection of two 32A single-phase PDU to a hardwire UPS

*The EMPDT1H1C2 dry contacts serve as a connection point for both the door contact sensor and the water leak detector.

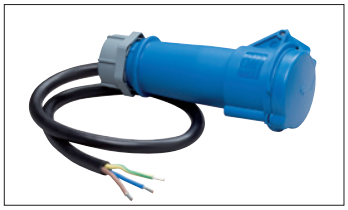
EMPDT1H1C2



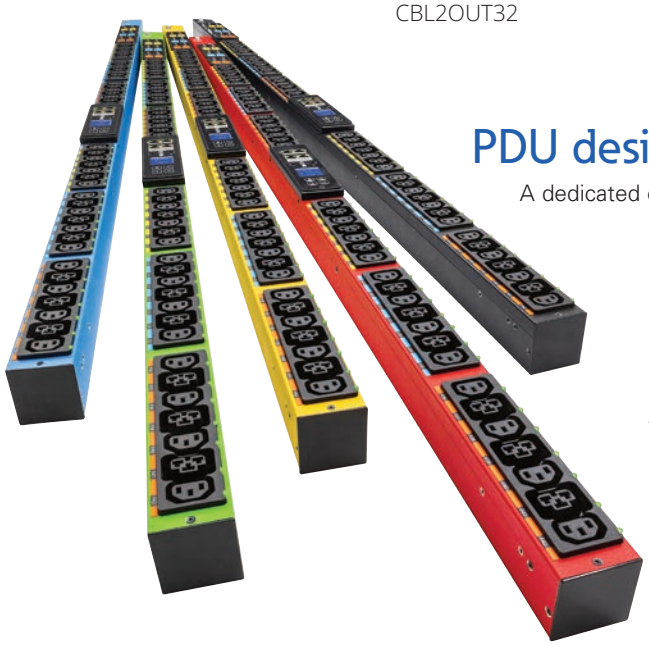
DCS001*

WLD012*

CBL2OUT32



CBLOUT32



PDU design for specific project

A dedicated engineering team to design custom PDU

- Easily identify power feeds with color chassis of your choice
- Optimize the number of outlets to your needs
- Add national outlets to power-up specific IT equipment
- Reduce or increase the PDU input cord length to optimize your rack space

New Rack PDU G4

eaton.com/RackPDUg4

Explore additional resources and tools to help you find the perfect solution for your unique IT needs.

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