Product brochure

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Eaton Rack PDU G4

Optimize power management. Maximize cybersecurity. Standardize globally.



Enterprise-quality power distribution

Eaton Rack PDU G4 provides enterprise-quality power distribution to IT equipment within a rack, enabling data center and IT managers to simplify installation, enhance operation and maximize control of their environment. Eaton offers a tiered portfolio of rack PDUs in multiple form factors with capabilities ranging from basic power distribution to advanced power management designed to save time, save money and reduce risk.



1 Optimize power management

Features like remote individual outlet control and outlet-level power monitoring allow you to increase efficiency, reduce costs, maintain uptime and improve performance.

2 Maximize cybersecurity

Industry-leading cybersecurity features like zero-trust architecture, zerotouch provisioning and a user-configurable firewall make Rack PDU G4 a security asset on enterprise networks instead of a liability.

3 Standardize globally

The versatile Universal Input Rack PDU (UPDU) G4 has global certifications, interchangeable input cord sets and flexible C39 outlets, allowing you to standardize on a common PDU platform worldwide. UPDU G4 allows you to simplify ordering, reduce inventory requirements and streamline power management.

What this means for you

Save time

- Configure PDUs and keep them up to date with zero-touch provisioning.
- Simplify installation with toolless and flexible mounting options.
- Reboot unresponsive devices without site visits or local assistance.
- Manage diverse power assets worldwide from a central location.

Save money

- Standardize globally to increase operational efficiency and agility.
- Monitor outlet-level power to improve power visibility, increase efficiency and reduce costs.
- Cascade up to 32 PDUs per network port to reduce network infrastructure costs. (Eliminating the need for 31 out of 32 ports reduces costs up to 97%.)

Reduce risk

- Maximize cybersecurity with zero-trust architecture and user-configurable firewall.
- Control unused outlets to prevent unauthorized use.
- Prevent accidental disconnection with integrated plug retention.
- Increase critical system runtime with strategic load shedding.

Flexible portfolio to fit your global needs

Eaton Rack PDU G4 is distinguished for quality, dependability, scalability, versatility and cybersecurity. The versatile PDU platform provides enterprise-quality power distribution, advanced power management and compatibility worldwide.

Which Rack PDU G4 technology is right for me?

Basic PDU

Reliable, cost-effective PDU provides branch circuit protection for all connected equipment in your rack. Low-profile form factor and toolless mounting buttons ease setup.

Metered input PDU

Remote monitoring capabilities provide access to your power data whenever you want it, wherever you are. Monitor your critical equipment within each color-coded outlet section from a single interface.

Managed PDU

Remote management, outlet-level control and monitoring make this our most advanced rack PDU. Remotely reboot connected equipment, turn off unused outlets and measure the most accurate Level 3 power usage effectiveness (PUE).

UPDU

Eaton's Universal Input Rack PDU (UPDU) G4 offers the ultimate in global flexibility. Basic, metered input and managed UPDU models can be paired with any one of 17 input cables with plug types to match electrical standards for different regions and applications. Simplify rack provisioning and reduce inventory with a common PDU chassis that can handle many different power needs worldwide.

High density (HD) configurable PDU

In addition to the other features of Rack PDU G4, HD rack PDUs offer configure-to-order customization. Designed with data center customers in mind, HD rack PDUs offer increased outlet counts, color chassis options and alternating phase outlets.

Key applications

Enterprise data center

- Up to 23 kW per PDU for high-density applications like HPC and AI
- Network monitoring of power usage and capacity at the outlet level
- Time-saving remote device reboots from the operations center
- Measurement of Level 3 PUE
- Best-in-class cybersecurity

Colocation data center

- Up to 23 kW per PDU for high-density applications
- Control of unused outlets to prevent unauthorized use
- Billing-grade power monitoring for billing customers per power usage
- Measurement of Level 3 PUE
- Best-in-class cybersecurity

Edge

- · Lower power ratings available for highly distributed installs
- Remote device reboots without requiring local IT staff assistance
- Control of unused outlets to prevent unauthorized use
- Advanced LCD pixel display for local monitoring and simplified setup
- Optional environmental monitoring probes
- Best-in-class cybersecurity







Optimize power management

Measure power consumption at the outlet level

- Acquire more accurate data by measuring power at the outlet level.
- **Analyze** detailed power data to assist decision-making and IT deployment.
- **Compare** efficiency to make smart choices and reduce consumption.



From meter screen, select outlets...

Select specific outlet...

View live power levels.

• Measure Level 3 PUE to provide an accurate view of how effectively power is being used for connected IT equipment.

Individual outlet control

- Remotely control and reboot connected devices.
- Save time and reduce costs by minimizing site visits.
- Provide sequential startup to manage inrush current.
- Shed nonessential loads strategically to increase UPS runtime of critical equipment during outages.
- Turn off outlets to prevent unauthorized devices from causing overloads.

Flexible AC input options

Rack PDU G4 offers a variety of fixed and interchangeable input cable options.



Universal Input Rack PDU (UPDU) G4 offers 17 interchangeable input cable options with 15 different plugs, providing worldwide single-phase and three-phase power compatibility.



Green LED indicates power on and red indicates power off to outlet.

Color-coded outlet sections

Alternating phase sections distribute power evenly across up to six groups of seven outlets for balanced loading across circuits and phases. Circuit breakers and corresponding outlets are evenly distributed across the length of the PDU for easy cable routing.

Network module with industry-leading cybersecurity

Managed and metered input versions of Rack PDU G4 include a hot-swappable Gigabit Network Module (GNM). The menu-driven LCD allows easy setup and troubleshooting at the rack. Remote management maximizes uptime, enhances serviceability and eliminates unnecessary on-site service calls. Network access is protected by industry-leading cybersecurity.

Flexible C39 outlets

Each C39 outlet combines the functionality of the C13 and C19, providing two outlet options in one. Since the C39 is so versatile, a single outlet layout can handle a wider variety of applications without wasting outlets.



Network cascading for 32 PDUs

Eaton's new cascading capability allows up to 32 PDUs to share the same physical network connection in your data center, reducing associated network infrastructure costs up to 97%. Each cascaded PDU is assigned its own unique IP address.

Integrated plug retention

High contact retention, a secure grip built into each outlet's metal contacts, holds standard plugs in place. Once the plug is firmly seated in the outlet, it is automatically protected from accidental disconnection due to bumps or vibrations—without the need for special power cords. Outlets are also compatible with P-lock cords for applications that require full locking.

Outlet C1 Energy 4.251 kWh since 12/09/2023 00:32:22

Billing-grade power monitoring

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Managed versions of Rack PDU G4 provide ±1% power usage accuracy for departmental billing or customer billing in colocation data centers. They effectively measure usage for all outlets or individual outlets. Granular power usage data also aids budgeting, cost justifications and equipment evaluations.

High-temperature operation

Rack PDU G4 operates in temperatures up to 140°F (60°C) without power derating. This supports high power density, hot-aisle containment and industrial applications while helping to reduce cooling costs.

Manage Rack PDU G4 remotely

Network-connected versions of Rack PDU G4 allow you to view and manage your IT equipment remotely for greater convenience and peace of mind.

For smaller environments, you can connect to PDUs using a standard web browser and receive email alerts. For larger deployments spanning multiple locations, Rack PDU G4 integrates smoothly via SNMP or MQTT with digital solutions from our Brightlayer Data Centers suite. This includes <u>Distributed IT Performance Management (DITPM)</u> and <u>Data Center Performance Management (DCPM)</u> software, as well as our cloud-based <u>Remote Monitoring Service</u>, also known as PredictPulse[™], which is an around-the-clock service that aggregates data from your PDUs and dispatches an Eaton field technician when a critical event occurs.

Distributed IT Performance Management software provides deep intelligence into network-connected equipment, such as rack PDUs and UPS systems, spread across multiple sites. This allows you to manage and control assets installed at your remote locations, as well as proactively identify and automate actions to prevent IT equipment downtime.

Data Center Performance Management software allows you to maximize IT application uptime while minimizing capital and operating expenditures. It monitors and manages your power, space, connectivity and cooling resources across one or more facilities while charting trends, sending alerts and generating reports. It provides the insights you need to optimize your operations over time so you can increase your data center's performance while managing costs.

Both software solutions provide powerful capabilities when used with Rack PDU G4, including:

- Power load insights Load balancing A/B feeds and failover analysis help maintain uptime and utilize capacity effectively.
- Capacity expansion Configurable dashboards help you understand utilization to provision new equipment quickly.
- Power utilization reporting Real-time reports and trend charts on power usage, such as PUE, power capacity and other efficiency metrics, help you identify inefficiencies and optimize energy use.
- Bulk configuration Push configuration changes to PDUs in minutes to save time and keep your organization safer from cybersecurity vulnerabilities.
- Real-time alerts Circuit breaker alarms, over-capacity alarms and outlet alarms for on/off detection are prioritized by severity and escalated when needed.
- Environmental and rack data support View thermal maps based on temperature probes or rack-level power draw to help optimize cooling efficiency and performance.

Validated power management for virtualization

Eaton is the leader in power management for virtualization platforms and has more than 500 hours invested in testing with alliance partners like Cisco, ConnectWise, DataCore, Dell, HPE, Microsoft, NetApp, Nutanix, Scale Computing, Synology and VMware. We've done the heavy lifting by validating our power management offering on leading IT platforms to increase compatibility, efficiency and reliability.







Maximize cybersecurity

Industry-leading cybersecurity features like zero-trust architecture, zero-touch provisioning and a user-configurable firewall make Rack PDU G4 a security asset on enterprise networks instead of a liability. **Rack PDU G4 is the only rack PDU on the market with all these critical cybersecurity features.**

Zero-trust architecture

- Minimizes cybersecurity vulnerabilities through hardware root of trust, enabling secure boot and complete chain of trust with private hardware key encryption.
- Network card can only be upgraded by genuine Eaton firmware.
- USB-C port enables direct computer connection to the PDU control module while protecting against non-compliant devices.

Zero-touch provisioning

- Automatically configures networked rack PDUs to save time and reduce errors in large-scale deployments.
- Makes it easier to keep PDUs up to date with the latest firmware and security updates.
- Firmware updates are free of charge and do not require a support contract.

User-configurable firewall

- Reduces organization's attackable surface area and helps meet network/security compliance requirements.
- Supports IP white list.

RESTful API

• Allows organizations to easily integrate networked PDUs with native systems and automate M2M interactions.





Standardize globally with the UPDU

Enterprise data centers operate on a global scale and need easy-to-manage power distribution solutions to help maximize operational efficiency. The versatility of the Universal Input Rack PDU (UPDU) G4 product line allows users to standardize global operations on a single power distribution platform.

Global design and safety approvals

- All UPDU models have a global design and safety approvals, meaning they have been tested for worldwide use.
- Data center operators with sites in the Americas, EMEA and APAC can standardize on one PDU and ship it to all their locations with input cord sets matching the region's power standards.
- This simplifies the deployment process and global power management.
- Managed, metered input and basic models are available to accommodate a range of applications.

Interchangeable AC input cables

 Interchangeable UPDU input cables (sold separately) offer a choice of 15 different plug types that support a wide variety of voltages, single-phase or three-phase power and capacities up to 23 kW. (See page 9 for available options.)





L6-30P cable CBL350-10



360P6W cable CBL362-10



460P9W cable CBL356-10



532P6W cable CBL358-10

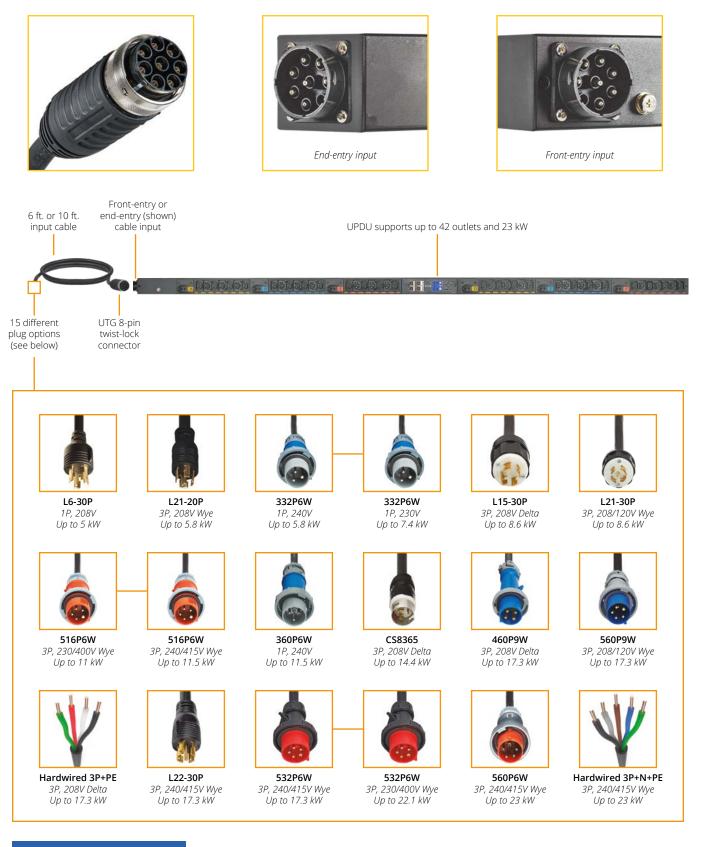
Flexible, high-density outlet arrays

- UPDUs support up to 42 outlets per PDU, including C13 outlets and flexible C39 outlets that combine the functionality of C13 and C19 outlets.
- C13 and C39 outlets are compatible with power standards worldwide.



UPDU input cable options

Interchangeable 6 or 10 ft. input cables (sold separately) have locking UTG 8-pin connectors and a choice of 15 different plug types that support a variety of single-phase and three-phase voltages and capacities up to 23 kW. The UTG 8-pin twist-lock connector was developed for demanding military/aerospace applications and features extremely durable overmolded construction. Input cables can connect at the front or end of the UPDU.



Simplify installation



Lightweight aluminum chassis

- Weighs 30% less than steel chassis, making installation easier.
- Reduces shipping costs compared to steel chassis.
- Dissipates more heat for better thermal performance in high-density environments.
- Offers better electrical conductivity for improved electrical grounding.

Flexible mounting options

- OU PDUs are vertically mounted in the rear of the rack, providing high outlet density without using valuable rack space.
- Toolless mounting buttons are preinstalled to reduce installation time.
- Double-sided buttons accommodate different variations of metal thickness.
- Optional side-mounting button locations allow PDUs to mount turned 90 degrees, preventing interference with hot-swap fans and power supplies.

Low-profile form factor

- 2.05 in. width comfortably supports double-wide PDU installation.
- \leq 72 in. height fits in a 42U enclosure.
- ≤ 2.56 in. depth and low-profile circuit breakers prevent interference with servers, storage or networking equipment in the rack.
- Circuit breakers and corresponding outlet banks are evenly distributed for easy cable routing.



Accessories



Eaton Tripp Lite series SmartRack enclosures

Whether you have a network closet, server room or multi-tenant data center, Eaton Tripp Lite series SmartRack enclosures provide an easy-to-configure solution for IT equipment storage. The enclosures feature toolless setup, optimized mounting for power distribution, flexible cable management solutions and integrated security provisions.

Ideal for Rack PDU G4

Today's increasing power densities require flexible rack PDU mounting and cable management solutions.

- Multiple mounting options allow easy out-of-the-box installation for rack PDUs.
- Cable pathways at the top and bottom of the enclosure accommodate large connectors and cable loops.
- Toolless rack PDU mounting rails have integrated cable management.

Part number	Description
SR25UB	25U SmartRack standard-depth rack enclosure with doors and side panels
SR42UB	42U SmartRack standard-depth rack enclosure with doors and side panels
SR45UB	45U SmartRack standard-depth rack enclosure with doors and side panels
SR48UB	48U SmartRack standard-depth rack enclosure with doors and side panels

See more options at TrippLite.Eaton.com/Racks

Environmental monitoring probe

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

C13-to-C14 power cords



Part number	Description
010-0029	2 ft. C13 to C14 jumper cord
010-0028	4 ft. C13 to C14 jumper cord
010-0027	6 ft. C13 to C14 jumper cord
010-0025	8 ft. C13 to C14 jumper cord



EMPDT1H1C2	Environmental monitoring probe Gen 2
EIVIPULITICZ	Environmental monitoring probe Gen Z

Part number	PDU type	Input plug	Cord length	Phase	Voltage	Current (derated		Total outlets (C13/C39)	Dimensions (H x W x D)	
Managed Rack PI	U G4 (Advanced	d remote management wi	th outlet-leve	el control an	d monitoring)					
EVMAL620A	MA	C20/L6-20P	10 ft.	1P/2P	100-240V	16A	3.8 kW	24 (12/12)	39.4 x 2.1 x 2.1 in.	
EVMAL630A	MA	L6-30P	10 ft.	1P	208V	24A	5 kW	24 (12/12)	68.1 x 2.1 x 2.1 in.	
EVMAL630B	MA	L6-30P	10 ft.	1P	208V	24A	5.8 kW	20 (10/10)	39.4 x 2.1 x 2.1 in.	
EVMAL630X	MA	L6-30P	10 ft.	1P	208V	24A	5.8 kW	42 (24/18)	68.1 x 2.1 x 2.1 in.	
EVMA2120A	MA	L21-20P	10 ft.	3P	120/208V Wye	16A	5.8 kW	24 (12/12)	68.1 x 2.1 x 2.1 in.	
EVMA1530A	MA	L15-30P	10 ft.	3P	208V Delta	24A	8.6 kW	24 (12/12)	68.1 x 2.1 x 2.1 in.	
EVMA1530X	MA	L15-30P	10 ft.	3P	208V Delta	24A	8.6 kW	42 (24/18)	68.1 x 2.1 x 2.1 in.	
EVMA2130A	MA	L21-30P	10 ft.	3P	120/208V Wye	24A	8.6 kW	24 (12/12)	68.1 x 2.1 x 2.1 in.	
EVMA2130X	MA	L21-30P	10 ft.	3P	120/208V Wye	24A	8.6 kW	42 (24/18)	68.1 x 2.1 x 2.1 in.	
EVMA8365X	MA	CS8365	10 ft.	3P	208V Delta	24A	14.4 kW	42 (24/18)	72 x 2.1 x 2.6 in.	
EVMA4609X	MA	460P9W	10 ft.	3P	208V Delta	48A	17.3 kW	42 (24/18)	72 x 2.1 x 2.6 in.	
EVMA4609X-06	MA	460P9W	6 ft.	3P	208V Delta	48A	17.3 kW	42 (24/18)	72 x 2.1 x 2.6 in.	
EVMAG332C	MA	532P6W	10 ft.	3P	240/415V Wye	48A	17.3 kW	48 (24/24)	74.8 x 2.1 x 2.1 in.	
EVMAG332X	MA	532P6W	10 ft.	3P	240/415V Wye	24A	17.3 kW	42 (24/18)	68.1 x 2.1 x 2.1 in.	
EVMAGU23X	MA (UPDU)	Front-entry UTG 8-pin (1)	6 or 10 ft.	1P or 3P	200-415V	16-55A	5-23 kW	42 (24/18)	72 x 2.1 x 2.6 in.	
EVMAGU23X-E	MA (UPDU)	End-entry UTG 8-pin (1)	6 or 10 ft.	1P or 3P	200-415V	16-55A	5-23 kW	42 (24/18)	72 x 2.1 x 2.6 in.	
EVMAGU23A-E	MA (UPDU)	End-entry UTG 8-pin (1)	6 or 10 ft.	1P or 3P	200-415V	16-55A	5-23 kW	24 (12/12)	55.9 x 2.1 x 2.6 in.	
Metered Input Ra	ck PDU G4 (Rem	note management with ba	nk-level mon	nitoring)						
EVMIL620A	MI	C20/L6-20P	10 ft.	1P	100-240V	16A	3.8 kW	24 (12/12)	39.4 x 2.1 x 2.1 in.	
EVMIL630X	MI	L6-30P	10 ft.	1P	208V	24A	5.8 kW	42 (24/18)	68.1 x 2.1 x 2.1 in.	
EVMI2120X	MI	L21-20P	10 ft.	3P	120/208V Wye	16A	5.8 kW	42 (24/18)	68.1 x 2.1 x 2.1 in.	
EVMI1530X	MI	L15-30P	10 ft.	3P	208V Delta	24A	8.6 kW	42 (24/18)	68.1 x 2.1 x 2.1 in.	
EVMI2130X	MI	L21-30P	10 ft.	3P	120/208V Wye	24A	8.6 kW	42 (24/18)	68.1 x 2.1 x 2.1 in.	
EVMI8365X	MI	CS8365	10 ft.	3P	208V Delta	40A	14.4 kW	42 (24/18)	72 x 2.1 x 2.6 in.	
EVMI4609X	MI	460P9W	10 ft.	3P	208V Delta	48A	17.3 kW	42 (24/18)	72 x 2.1 x 2.6 in.	
EVMI4609X-06	MI	460P9W	6 ft.	3P	208V Delta	48A	17.3 kW	42 (24/18)	72 x 2.1 x 2.6 in.	
EVMIG332X	MI	532P6W	10 ft.	3P	240/415V Wye (2)	24A (2)	17.3 kW (2)	42 (24/18)	68.1 x 2.1 x 2.1 in.	
EVMIGU23X	MI (UPDU)	Front-entry UTG 8-pin (1)	6 or 10 ft.	1P or 3P	200-415V	16-55A	5-23 kW	42 (24/18)	72 x 2.1 x 2.6 in.	
EVMIGU23X-E	MI (UPDU)	End-entry UTG 8-pin (1)	6 or 10 ft.	1P or 3P	200-415V	16-55A	5-23 kW	42 (24/18)	72 x 2.1 x 2.6 in.	
EVMIGU23A-E	MI (UPDU)	End-entry UTG 8-pin (1)	6 or 10 ft.	1P or 3P	200-415V	16-55A	5-23 kW	24 (12/12)	55.9 x 2.1 x 2.6 in.	
Basic Rack PDU G	4 (Reliable, cost	-effective power distribu	tion with brai	nch circuit p	rotection)					
EVBAGU23X-E	BA (UPDU)	End-entry UTG 8-pin (1)	6 or 10 ft.	1P or 3P	200-415V	16-55A	5-23 kW	42 (24/18)	64.4 x 2.1 x 2.6 in.	
UPDU cable optio	ns (UTG 8-pin tv	vist-lock connector, derat	ed current sh	iown)						
CBL350-10 L6-30P	, 10 ft., 1P, 208V, 2	4A, 5.0 kW	CBL362-10 3	60P6W, 10 ft.,	, 1P, 240V, 48A, 11.5 kV	V	CBL368-10 L22-30P,	10 ft., 3P, 240/415V V	Vye, 24A, 17.3 kW	
CBL367-10 L21-20	P, 10 ft., 3P, 208V	Wye, 16A, 5.8 kW	CBL364-06	S8365, 6 ft., 3	P, 208V Delta, 40A, 14.4	4 kW	CBL358-10 532P6W,	10 ft., 3P, 240/415V V	Vye, 24A, 17.3 kW	
	L 354-10 332P6W, 10 ft., 1P, 240V, 24A, 5.8 kW or 1P, 230V, 32A, 7.4 kW			CBL364-10 CS8365, 10 ft., 3P, 208V Delta, 40A, 14.4 kW CBL356-06 460P9W, 6 ft., 3P, 208V Delta, 48A, 17.3 kW				or 3P, 230/400V Wye, 32A, 22.1 kW		
	L15-30P, 10 ft., 3P, 208V Delta, 24A, 8.6 kW CBL356-10 460P9W, 10 ft., 3P, 208V Delta, 48A, 17.3 kW						CBL360-10 560P6W, 10 ft., 3P, 240/415V Wye, 32A, 23.0 kW			
	L21-30P, 10 ft., 3P, 208/120V Wye, 24A, 8.6 kW CBL350-10 400P3W, 10 ft., 3P, 208/					22.0 /4//				
CBL355-10 516P6	N, 10 ft., 3P, 230/4	100V Wye, 16A, 11.0 kW			PE, 10 ft., 3P, 208V De					
01 3P,	240/415V Wye, 16/	M, TT.O KVV								

(1) UPDUs are compatible with 17 different input cable options with 15 plug types to match different applications and regions. See options (sold separately) at end of table. End-entry UPDUs also support front-entry configuration. (2) Also supports 3P, 230/400V Wye, 32A, 22.1 kW.

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March 2024

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