

G5 Intelligent Power Distribution Units (iPDUs)

OVERVIEW

The G5 iPDU shall monitor the data center power and environment (at the rack or cabinet level), by continuously scanning for electrical circuit overloads, and physical environmental conditions that place critical IT equipment at risk. These iPDUs are more than a power distribution unit and energy monitoring device. Panduit's iPDUs provide comprehensive, accurate, energy measurement data to efficiently use power resources, make informed capacity planning decisions, improve uptime, measure PUE (power usage effectiveness), and drive green data center initiatives to save energy and money.

Making the right choice in IT equipment is essential for a safe, efficient data center operation. Panduit's full range of iPDUs, environmental sensors, and dual locking power cords are the key to fulfilling mission-critical data center needs.

STANDARDS AND FLAME RATING

North America – UL, CB Test Approved File number: E218078	RoHS Compliant
International – CE Approved, EAC Russia Approval	REACH Compliant

TECHNICAL INFORMATION

<i>Attributes:</i>	Height In. (mm)	Width In. (mm)	Depth In. (mm)
1U:	1.6 (40.6)	17.5 (444.5)	2.0 (50.8)
1U:	1.7 (43.2)	17.5 (444.5)	7.8 (198.1)
1U:	1.7 (43.2)	17.5 (444.5)	10.6 (269.2)
2U:	3.4 (86.4)	17.5 (444.5)	7.8 (198.1)
0U HALF:	32.2 (818)	2.0 (51)	2.1 (53)
0U MID:	58.6 (1488)	2.0 (51)	2.1 (53)
0U MID:	58.6 (1488)	2.2 (56)	2.4 (61)
0U MID:	58.6 (1488)	58.6 (1488)	2.9 (74)
0U FULL:	68.9 (1750.1)	2.0 (50.8)	2.1 (53.3)
0U FULL:	70 (1778)	2.2 (56)	2.4 (61)
0U FULL:	70 (1778)	2.2 (56)	2.9 (74)
0U FULL:	72 (1829)	2.2 (56)	2.9 (74)
0U FULL +:	74.6 (1896)	2.0 (50.8)	2.1 (53.3)
0U FULL Wide:	74.0 (1880)	3.3 (83.8)	2.1 (53.3)
0U FULL Wide:	68.9 (1750)	3.3 (84)	2.1 (53)
0U FULL Wide:	70 (1778)	3.3 (84)	2.9 (74)
0U FULL Wide +:	70 (1778)	4.1 (104)	2.9 (74)

Mounting: Vertical units provide up to 48 outlets and without encroaching on the EIA space. Horizontal units provide up to 16 outlets and mount in standard (1U or 2U) TIA/EIA rack space.

KEY FEATURES AND BENEFITS

Combination Outlets[†]:	Combination outlets provide the ultimate in flexibility by allowing a customer to use an outlet as either an C13/C15 outlet or a C13/C15/C19/C21 outlet respectively. All combination outlets also accept the Panduit dual locking power cords to eliminate accidental disconnects.
Dual rated PDUs:	Simplify your supply chain by selecting a Dual Rated PDU. Dual rated PDUs have ratings and NRTL approvals for both North American & EMEA on the same part number.
Hot swappable controller:	Replace the controller and display module without having to power down the rack
Redundant network access:	Specifically designed for Landlord/Tenant (Co-Lo's) allowing for remote access of real-time, vital statistics and operating information on two separate, secure networks
Hardened security:	SNMP v3, TLS, Encrypted Security; allows for Panduit PDUs to pass standard popular industry certified security scans
1 GB ethernet:	Reduces deployment time by auto-negotiating with data center level network switches
Plug & play sensors:	Digital sensors not only allow for multiple sensors on the same bus; but also identify themselves to the controller to simplify setup and commissioning

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KEY FEATURES AND BENEFITS (CONTINUED)

Multi-color PDUs:	Different color PDUs simplify power feed identification in redundant power schemes
Mobile & desktop friendly web GUI:	Enhanced web interface that detects the type of device that you are on (laptop, tablet or smart phone); and automatically adjusts the screen for an optimal experience
Outlet density:	Meets demands of densely packed IT equipment in rack or cabinet space
Form factor:	Optimal form factor enables efficient rack space utilization and airflow
Operating temperature:	60°C ambient at full load for operational reliability in high temperature areas
Cable retention:	Innovative cable tie accepting outlets allow for secure cord retention (C13 & C19 only) using a cable tie for added safety and security. (Panduit part number: PLT21-C0)
Circuit breakers:	Protects data center equipment for increased reliability by interrupting potentially hazardous circuit over-current conditions*
Color coded circuits†:	Easily identify phase to outlet banks to aid in fault isolation or load balancing
External chassis ground:	Meets NEC requirements and installation guidelines for IT equipment
Load balancing:	Monitored through visual display on oLED (for three-phase units only)
Multiple input plug options:	A full breadth offering to seamlessly interoperate with existing building power wiring schemes
Multiple mounting options:	Enables simple out of the box commissioning and flexibility with Panduit cabinets and industry standard mounting features enabling installation into third party cabinets
Mounting buttons:	Allows tool-less mounting of rack PDUs for faster installations on vertical 0U units
Supported metering:	Frequency, VA, PF, plus aggregate and per phase Amperage, Voltage, Wattage, and Kilowatts per hour
Cisco compatible:	Panduit's intelligent PDUs are compatible with Cisco Nexus Dashboard software to enhance its insights related to Energy Savings and Sustainability

*Applies to products outfitted with circuit breakers

†Applies to products outfitted with combination outlets

IPDU PRODUCT FAMILIES























MI series:	Rack PDUs that have the ability for aggregate power monitoring to quickly identify potential power issues, and reclaim available or under-utilized power capacity
MS series:	Rack PDUs that have the ability for aggregate power monitoring and outlet level switching capabilities for individual outlets or a group of outlets. Enabling power sequencing, rebooting equipment or restrict unauthorized use of individual outlets.
MPO series:	Rack PDUs that have the ability for outlet level (and aggregate) power monitoring to quickly identify potential power issues, and reclaim available or under-utilized power capacity at the outlet level enabling the redeployment or decommissioning of individual servers to reclaim available or under-utilized power capacity
MSPO series:	Rack PDUs that have the ability for outlet level (and aggregate) power monitoring and outlet level switching capabilities for individual outlets or a group of outlets. Power monitoring at the individual outlet level provides actionable management data on the power consumption of each connected IT device enabling the redeployment or decommissioning of individual servers to reclaim available or under-utilized power capacity. Ideal for remote power reset, and cabinet power on sequencing and restrict unauthorized use of individual outlets.

APPLICATIONS

Panduit iPDUs can be easily installed into Panduit (or third-party cabinets) by utilizing the installed mounting buttons (18.4mm diameter). Where necessary, a Small Diameter (14.5mm) mounting button is available (sold separately, P/N: [MA018](#)). PD Us feature threaded inserts on the back and both sides for the ultimate in mounting flexibility. They safely and efficiently manage and distribute power to multiple devices through a single input power connector, per PDU, to enhance scalability of network build outs.









G5 Intelligent Power Distribution Units (iPDUs)

MONITORED SWITCHED – MS SERIES

Part Number	Region	Input Current per Phase	Form Factor	Input Plug Type	Circuit Breakers	Apparent Power (kVA)	Outlet Count	Outlet Configuration	Length In. (mm)	Width In. (mm)	Depth In. (mm)
P24E13M	NA	30	OU FULL	NEMA L22-30P	6	17.3	24	 (24)C13	68.9 (1750.06)	2.0 (50.8)	2.1 (53.34)
P36E01M	NA	30	OU FULL - Wide +	IEC 60309 3P+N+E 6h (IP67)	6	17.3	36	 (24)C13  (12)C19	68.9 (1750.06)	3.3 (83.82)	2.1 (53.34)
P36E03M	NA	30	OU FULL - Wide +	IEC 60309 3P+N+E 6h (IP67)	6	17.3	36	 (30)C13  (6)C19	68.9 (1750.06)	3.3 (83.82)	2.1 (53.34)
P36E04M	NA	30	OU FULL - Wide +	IEC 60309 3P+N+E 6h (IP44)	6	17.3	36	 (24)C13  (12)C19	68.9 (1750.06)	3.3 (83.82)	2.1 (53.34)
P36E05M	NA	30	OU FULL - Wide +	IEC 60309 3P+N+E 6h (IP44)	6	17.3	36	 (30)C13  (6)C19	68.9 (1750.06)	3.3 (83.82)	2.1 (53.34)
P36E02M	NA	30	OU FULL - Wide +	NEMA L22-30P	6	17.3	36	 (24)C13  (12)C19	68.9 (1750.06)	3.3 (83.82)	2.1 (53.34)
P36E06M	NA	30	OU FULL - Wide +	NEMA L22-30P	6	17.3	36	 (30)C13  (6)C19	68.9 (1750.06)	3.3 (83.82)	2.1 (53.34)
P48E04M	NA	30	OU FULL - Wide +	NEMA L22-30P	6	17.3	48	 (48)C13	74.0 (1879.6)	3.3 (83.82)	2.1 (53.34)
P48E03M	NA	30	OU FULL - Wide +	IEC 60309 3P+N+E 6h (IP67)	6	17.3	48	 (48)C13	74.0 (1879.6)	3.3 (83.82)	2.1 (53.34)
P48E11M	NA	30	OU FULL - Wide +	IEC 60309 3P+N+E 6h (IP44)	6	17.3	48	 (48)C13	74.0 (1879.6)	3.3 (83.82)	2.1 (53.34)
P48E05M	NA	30	OU FULL - Wide +	IEC 60309 3P+N+E 6h (IP67)	6	17.3	48	 (42)C13  (6)C19	74.0 (1879.6)	3.3 (83.82)	2.1 (53.34)
P48E06M	NA	30	OU FULL - Wide +	NEMA L22-30P	6	17.3	48	 (42)C13  (6)C19	74.0 (1879.6)	3.3 (83.82)	2.1 (53.34)
P48E12M	NA	30	OU FULL - Wide +	IEC 60309 3P+N+E 6h (IP44)	6	17.3	48	 (42)C13  (6)C19	74.0 (1879.6)	3.3 (83.82)	2.1 (53.34)

Note: MOQ 30 & LT 30 Business Days applies for all 415 V PDUs for North America. All 415 V PDUs for North America include 10 kAIC circuit breakers.

MONITORED PER OUTLET – MPO SERIES

Part Number	Region	Input Current per Phase	Form Factor	Input Plug Type	Circuit Breakers	Apparent Power (kVA)	Outlet Count	Outlet Configuration	Length In. (mm)	Width In. (mm)	Depth In. (mm)
P24F01M	NA	30	OU FULL	NEMA L6-30P	2	5	24	 (20)C13  (4)C19	68.9 (1750.06)	2.0 (50.8)	2.1 (53.34)
P36F15M	NA	30	OU FULL	NEMA L6-30P	2	5	36	 (30)C13  (6)C19	68.9 (1750.06)	2.0 (50.8)	2.1 (53.34)
P24F06M	INTL	32	OU FULL	IEC 60309 2P+E 6h (IP44)	2	7.4	24	 (20)C13  (4)C19	68.9 (1750.06)	2.0 (50.8)	2.1 (53.34)
P32F10M	INTL	32	OU FULL	IEC 60309 2P+E 6h (IP44)	2	7.4	32	 (24)C13  (8)C19	68.9 (1750.06)	2.0 (50.8)	2.1 (53.34)