SWITCHED PRO eCONNECT® PDU

KEY FEATURES

- Optimized for high density applications with a low profile design, universal tool-less mounting and use in ambient air temperatures up to 149°F (65°C)
- Connect any combination of up to 20 networked PDUs together and access all PDUs through a single IP address using the built-in web interface
- Remote control of individual outlets by turning outlets on, off or cycling power
- Continuous power monitoring at each breaker and each outlet
- Local display with an interactive screen that displays combined power measurements
- Remote monitoring and outlet control through a network connection using a web browser
- Easy network setup using the local display to enter the IP address for fast deployment onto your network
- User defined alarms for each circuit breaker on the PDU indicated by a flashing LED near the central display and summarized on the built-in web interface
- Create multiple outlet groups to track total current use for several pieces of equipment
- Group outlets from multiple Switched PDUs to cycle power for redundantly powered devices with one click using the built-in web interface
- Broad selection of standard configurations that combine different power inlets/plugs with a mix of outlets to match your facility requirements
- Low profile design that fits in the zero U space at the side of your equipment cabinet and does not block access to equipment mounting rails or exhaust airflow from equipment

APPLICATIONS

- CPI's Switched Pro eConnect PDUs allow you to turn each outlet on the PDU on and off remotely and provide continuous outlet-level power monitoring
- Provides local and remote power monitoring for the PDU and remote monitoring and control for each outlet on the PDU
- Use in data center and equipment room cabinets and racks to remotely control power to each outlet, to remotely monitor power use by each piece of equipment, and to help balance power loads for all attached equipment

USE WITH

- CPI Cabinet Systems
- CPI Rack Systems

RELATED ACCESSORIES

- Remote Infrastructure Management (RIM-600) System
- LCD/KVM Drawers and Switches



Switched and Monitored Outlets – Remote outlet control power monitoring through network connections using a web browser

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Local Display – Interactive screen with easy network set-up shows power measurements from each breaker

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Cord Retention Tethers – Secure power cords to C13 and C19 outlets

CPI's Switched Pro eConnect[®] PDUs are a new generation of power distribution products that connect you to your evolving enterprise data center. Whether you need to connect a few pieces of equipment or need to support high density computing with multiple blade servers in every cabinet, Switched Pro eConnect PDUs provide reliable power distribution with remote per-outlet power monitoring and control.

Choose a Switched Pro eConnect PDU when you need to remotely monitor and control power at each outlet. Switched Pro allows you to turn individual outlets off, on or cycle power to the outlet and attached equipment, as well as measure current, power (kW) and energy use (kWh) for each outlet. Use the built-in web interface to group outlets and see combined current use for multiple outlets—an excellent way to track power for different types of equipment attached to the same PDU. Set power cycle delays to prevent power problems or to allow a sequenced power-on process. Name each outlet to more easily associate the outlet with equipment. Group outlets from several linked PDUs and cycle power as if they were all one outlet, using just one button to remotely cycle power for redundantly powered equipment.

Also equipped with a broader functionality that includes all the features found across the eConnect PDU family, Switched Pro provides each user with control of their PDU through local and remote access. A central display located directly on the PDU provides an easily understood and accessible point for power measurements, while the PDU's Ethernet connection allows you to utilize a web browser for detailed measurements on up to 20 PDUs from a single IP address. Complementing the Ethernet connection are two connections that support linking capabilities and an external connection for two environmental probes. When used together, these connections allow users to easily click between linked PDUs and views all alarms summarized on a separate tab, forward email alarm notifications to staff and log data and events to keep records of power use and alarms. As an alternative, you can monitor the PDU with third-party software that accepts SNMP traps.

The PDUs feature a low profile design, universal tool-less mounting and can be confidently deployed in cabinets with CPI Vertical Exhaust Ducts or in hot aisle containment applications in ambient air temperatures up to 149°F (65°C). Various combinations of IEC C13, IEC C19 and NEMA 5-20R outlets are spaced and grouped for convenience, and there is an attachment point next to each C13 and C19 outlet for a snap-on power cord tether that is used to secure power cord connections. Most PDUs include an attached 10'L (3 m) power cord with an IEC or NEMA style plug rated for 100-125 Volt, 200-240 Volt or 380-415 Volt input. Alternately, some models have an IEC C20 inlet and the power cord is ordered separately to match specific site requirements. Simply choose the plug and outlet combination that matches your power requirements.

See reverse for product selection or contact CPI Technical Support for configuration assistance.



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SPECIFICATIONS

- Single-input, vertical rack-mount PDUs
- For indoor use only, in environmentally controlled areas, may not be used outdoors or in harsh environments
- Power Input:
- Specific to PDU, alternating current, 50/60 Hz (see order table)
- Stated as a voltage range, maximum current, load and inlet/plug type
- Power Output:
- Specific to PDU, limited by circuit breakers (see order table)
- On single-phase units output voltage equals input voltage
- On three-phase units output voltage through IEC C13 and C19 outlets is 208 VAC nominal and output voltage through NEMA 5-20R outlets is 120 VAC nominal
- Power Inlet/Plugs:
- NEMA or IEC power inlet/plug
- Specific to PDU (see order tables)
- Power Cord:
- Standard attached cord is 10'L (3.0 m), not rated for plenum use
- Order cord separately for models with IEC C20 inlet
- Power Outlet Receptacles:
- NEMA 5-20R, IEC C13 and/or IEC C19 outlets
- Specific to PDU (see order tables)
- Includes power cord retention tethers to secure power cords at C13 and C19 outlets
 Circuit Protection:
- UL 489 listed, single-pole or two-pole, hydraulic magnetic breakers to resist effects of high temperatures
- Low profile design minimizes size of breaker boxes on PDUs and accidental discharge
 Number and type specific to PDU (see order tables)
- Network/External Connections:
- (1) 10/100 Mbps RJ-45 Ethernet connection (IPv4 and IPv6)
- (1) RJ11 Environmental Probe connection
- (1) RJ45 Serial/PDU In-linking connection (RS-232)
- (1) RJ45 PDU Out-linking connection
- (1) USB port for firmware updates
- Internal Metering:
- Monitors unit voltage, current, power (kW), power factor and energy (kWh) at each breaker
- ±1% metering accuracy at each breaker
- Monitors voltage, current and power (kW) and energy (kWh) at each outlet
- Local Display:
- Liquid Crystal Display (LCD) for easy viewing
- Allows initial setup of IP and subnet addresses without computer
- Displays total voltage, current and power on single-phase and split-phase PDUs
- Displays total voltage, power and line input current on three-phase PDUs
- Displays voltage, current, power and power factor for each breaker
- Displays temperature and humidity when optional environmental probe (P/N 11761-003) is attached to the PDU
- Displays current through each outlet receptacle
- Displays alarm notifications
- Separate LED flashes red on alarm
- Network Monitoring:
- Monitor voltage, current, power (kW), power factor and energy (kilowatt-hours) through the Ethernet using a web browser (HTTP or HTTPS), SSH2 or Telnet or an application that accepts alarms as SNMP v1, v2c or v3 traps

- Monitor temperature and humidity when external environmental probes (P/N 11761-003) are attached to the PDU
- Set and automatically monitor high and low alarm thresholds for power (excludes line input current), temperature and humidity
- Log data and events and receive alarm notifications by email
- IP Consolidation (PDU linking):
- Use the PDU In/Out connections to link up to 20 PDUs together using standard RJ45 Cat 5/6 patch cords
- View all connected PDUs through a single network connection and IP address
- Supports a backup, second network connection through a user assigned alternate PDU
- Optional alarm notification if primary IP connection is lost or if a PDU link is dropped
 Monitored Outlets:
- Remotely monitor voltage, current, power (kW) and energy (kWh) at each outlet
- Name outlets to easily identify attached equipment
- Create outlet groups to see combined power use
 Switched Outlets:
- Turn outlets on and off and remotely cycle power to equipment
- Set initial power on and cycle delays to power multiple outlets on at user defined intervals
- Link a group of outlets together to toggle power to multiple outlets using a single click
 Bonding/Grounding:
- All PDUs have a grounded power inlet/plug and an external ground connection with a threaded M5 attachment point
- Includes a grounding kit with a 12"L (300 mm), 12 AWG stranded copper wire jumper, and drop in attachment hardware for F-Series TeraFrame Gen 3 Cabinet, N-Series TeraFrame Gen 3 Cabinet or GF-Series GlobalFrame Gen 2 Cabinet
- Certifications:
- LII
- CSA C22.2 (Canada)
- CE (EU)
- FCC Part 15, Class A
- EN 55022
- RoHS Compliant
- Operating Conditions:
- Temperature: 32°F 149°F (0°C 65°C) at Input Power Rating (kW)
- Relative Humidity: 5% 95%, non-condensing
- Elevation: 0 10,000 feet (0 3,000 meters)
- Storage/Non-Operating Conditions:
- Temperature: -13 149°F (-25 65°C)
- Relative Humidity: 5% 95%, non condensing
- Elevation: 0 50,000 feet (0 15,000 m)
- Installation Hardware:
- Includes two tool-less mounting shoulder washers and installation hardware
- Can be installed with the inlet power cord near the cabinet top or bottom
- Washers can be installed spaced 64.75" (1645 mm) or 61.25" (1556 mm) apart to match most rack/cabinet mounting brackets
- The washers can also be offset 2" (51 mm) to provide additional space at the top or bottom of the cabinet for the power cord in shorter cabinets
- PDU that are 75"H (1905 mm) must be placed in 45U or taller cabinets.
- Rack/Cabinet Mounting Brackets:
- Not included with PDU, order separately
- Included with most CPI Cabinets, check cabinet specifications
- PDU that are 75"H (1905 mm) must be placed in 45U or taller cabinets.
- Finish: Black only

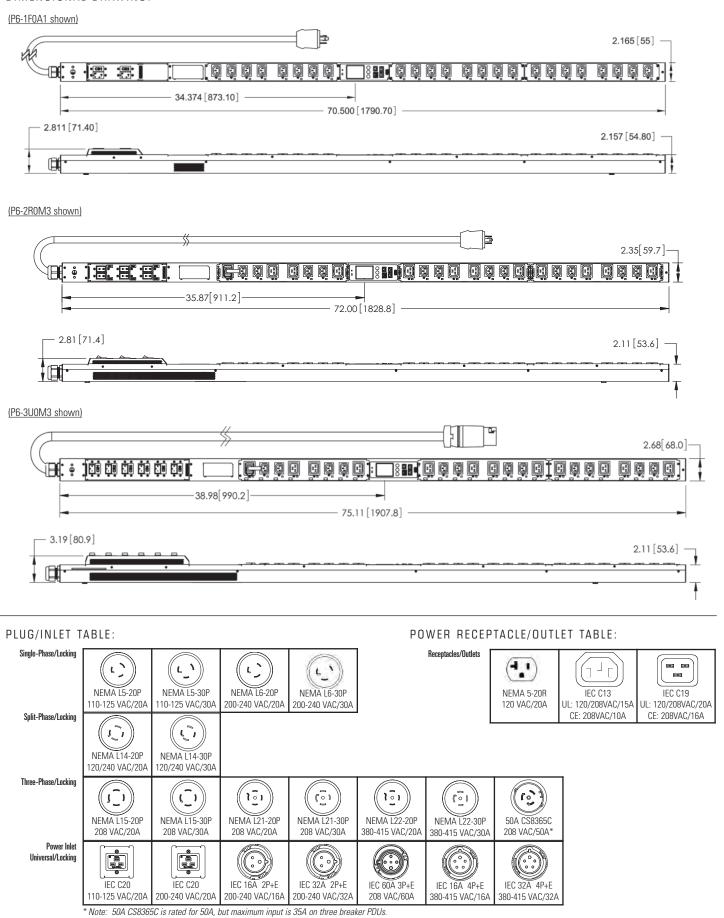
ORDERING INFORMATION

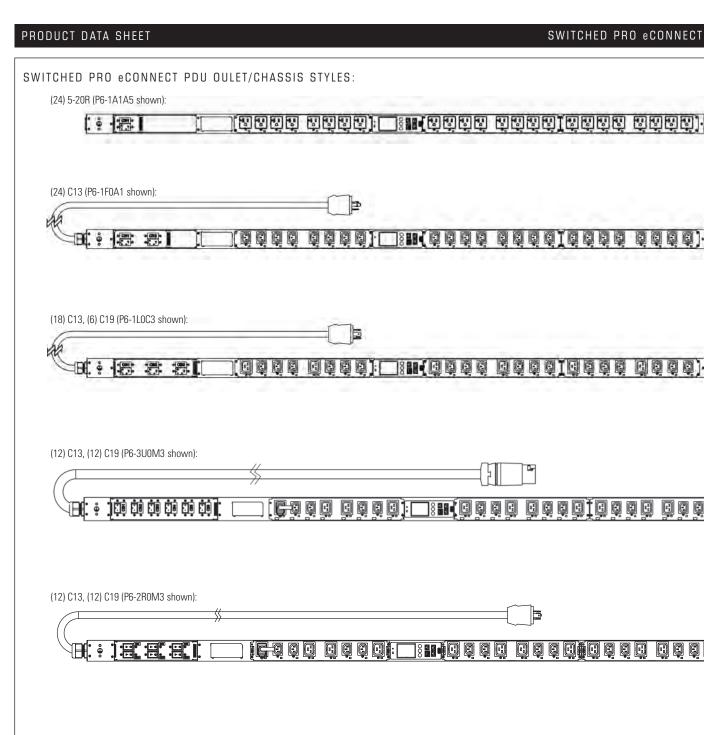
Part Number	Input			Output		Di	Dims - in (mm)		
	Amp	Power kW*	Plug	Breakers	Outlets	Н	W	D	
				110-125 Volt, Sing	gle-Phase PDUs	•			
P6-1A1A5	20	1.9	IEC C20**	1 x 2P 20A	(24) 5-20R	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1C0A5	20	1.9	NEMA L5-20P	1 x 2P 20A	(24) 5-20R	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1D0A5	30	2.9	NEMA L5-30P	2 x 2P 20A	(24) 5-20R	70.5 (1791)	2.2 (56)	2.2 (56)	
			11	0-125 or 200-240 Vol	t, Single-Phase PDUs	•			
P6-1A1A1	20	1.9 or 3.3	IEC C20**	1 x 2P 20A	(24) C13	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1A1C3	20	1.9 or 3.3	IEC C20**	1 x 2P 20A	(18) C13, (6) C19	70.5 (1791)	2.2 (56)	2.2 (56)	
				200-240 Volt, Sing	gle-Phase PDUs				
P6-1E0A1	20	3.3	NEMA L6-20P	1 x 2P 20A	(24) C13	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1E0C3	20	3.3	NEMA L6-20P	1 x 2P 20A	(18) C13, (6) C19	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1F0A1	30	5.0	NEMA L6-30P	2 x 2P 20A	(24) C13	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1F0C3	30	5.0	NEMA L6-30P	2 x 2P 20A	(18) C13, (6) C19	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1G0A1	16	2.7	IEC 16A 2P+E	1 x 2P 16A	(24) C13	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1G0C3	16	2.7	IEC 16A 2P+E	1 x 2P 16A	(18) C13, (6) C19	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1H0A1	32	5.3	IEC 32A 2P+E	2 x 2P 16A	(24) C13	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1H0C3	32	5.3	IEC 32A 2P+E	2 x 2P 16A	(18) C13, (6) C19	70.5 (1791)	2.2 (56)	2.2 (56)	
				208 Volt, Three	-Phase PDUs				
P6-1L0A1	20	5.8	NEMA L15-20P	3 x 2P 20A	(24) C13	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1L0C3	20	5.8	NEMA L15-20P	3 x 2P 20A	(18) C13, (6) C19	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1N0A1	20	5.8	NEMA L21-20P	3 x 2P 20A	(24) C13	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1N0A5	20	5.8	NEMA L21-20P	3 x 2P 20A	(24) 5-20R	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1N0C3	20	5.8	NEMA L21-20P	3 x 2P 20A	(18) C13, (6) C19	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1M0A1	30	8.6	NEMA L15-30P	3 x 2P 20A	(24) C13	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1M0C3	30	8.6	NEMA L15-30P	3 x 2P 20A	(18) C13, (6) C19	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1P0A1	30	8.6	NEMA L21-30P	3 x 2P 20A	(24) C13	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1P0A5	30	8.6	NEMA L21-30P	3 x 2P 20A	(24) 5-20R	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1P0C3	30	8.6	NEMA L21-30P	3 x 2P 20A	(18) C13, (6) C19	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1T0A1	50	12.6	50A CS8365C	3 x 2P 20A	(24) C13	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1T0C3	50	12.6	50A CS8365C	3 x 2P 20A	(18) C13, (6) C19	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-3U0M3	50	14.4	50A CS8365C	6 x 2P 20A	(12) C13, (12) C19	75.0 (1905)	2.7 (69)	2.2 (56)	
P6-3V0M3	60	17.3	IEC 60A 3P+E	6 x 2P 20A	(12) C13, (12) C19	75.0 (1905)	2.7 (69)	2.2 (56)	
				380-415 Volt, Thr	ee-Phase PDUs				
P6-100A1	20	11.1	NEMA L22-20P	3 x 2P 20A	(24) C13	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-100C3	20	11.1	NEMA L22-20P	3 x 2P 20A	(18) C13, (6) C19	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-2R0M3	30	16.6	NEMA L22-30P	6 x 1P 20A	(12) C13, (12) C19	72.0 (1829)	2.4 (61)	2.2 (56)	
P6-1W0A1	16	8.9	IEC 16A 4P+E	3 x 2P 16A	(24) C13	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-1W0C3	16	8.9	IEC 16A 4P+E	3 x 2P 16A	(18) C13, (6) C19	70.5 (1791)	2.2 (56)	2.2 (56)	
P6-2Y0M3	32	17.7	IEC 32A 4P+E	6 x 1P 20A	(12) C13, (12) C19	72.0 (1829)	2.4 (61)	2.2 (56)	

Notes: Order mounting brackets separately. PDUs that are 75⁺H (1905 mm) must be placed in 45U or taller cabinets. On Single-Phase PDUs, output voltage equals input voltage. On Split- and Three-Phase PDUs, 208 VAC nominal output through C13 and C19 outlets; 120 VAC nominal output through NEMA 5-20R outlets. * For kW column, all values are derated calculations per UL for use in North America. For 50A PDUs, the 50A CS8365C plug is rated for 50A, but maximum input is 35A (12.6 kw) on three breaker PDUs. ** Order power cord separately for PDU with C20 input

PRODUCT DATA SHEET

DIMENSIONAL DRAWING:





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ACCESSORIES:

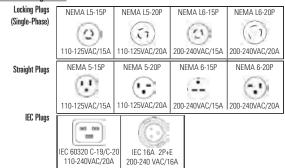
IEC C20 PDU Input Power Cords

Input power cords for use with eConnect PDUs that have IEC C20 inlets.

- Select power cord to match power connection in the facility
- IEC C19 Connector attaches to the C20 Inlet on the PDU
- Sold individually, order one power cord per PDU

Part Number	Description	Shipping Weight Ib (kg)
17763-001	PDU Input Power Cord, 110-125 VAC or 200-240 VAC, IEC C19 Connector to IEC C20 Plug, 10'L (3 m)	3 (1.4)
17763-002	PDU Input Power Cord, 110-125 VAC, IEC C19 Connector to NEMA 5-15P Plug, 8'2"L (2.4 m)	3 (1.4)
17763-003	PDU Input Power Cord, 110-125 VAC, IEC C19 Connector to NEMA 5-20P Plug, 8'2"L (2.4 m)	3 (1.4)
17763-004	PDU Input Power Cord, 200-240 VAC, IEC C19 Connector to NEMA 6-15P Plug, 8'2"L (2.4 m)	3 (1.4)
17763-005	PDU Input Power Cord, 200-240 VAC, IEC C19 Connector to NEMA 6-20P Plug, 8'2"L (2.4 m)	3 (1.4)
17763-006	PDU Input Power Cord, 110-125 VAC, IEC C19 Connector to NEMA L5-15P Plug, 10'L (3 m)	3 (1.4)
17763-007	PDU Input Power Cord, 110-125 VAC, IEC C19 Connector to NEMA L5-20P Plug, 10'L (3 m)	3 (1.4)
17763-008	PDU Input Power Cord, 200-240 VAC, IEC C19 Connector to NEMA L6-15P Plug, 10'L (3 m)	3 (1.4)
17763-009	PDU Input Power Cord, 200-240 VAC, IEC C19 Connector to NEMA L6-20P Plug, 10'L (3 m)	3 (1.4)
17763-010	PDU Input Power Cord, 200-240 VAC, IEC C19 Connector to IEC 16A 2P+E Plug, 10'L (3 m)	3 (1.4)

Power Cord Plug Table:



Environmental Probe with Temperature and Humidity Sensor

Monitored eConnect PDUs include a single external connection that can attach up to two Environmental Probes using a splitter. When attached, the PDU will report temperature and humidity measurements for each probe on the local display and remotely through the built-in web interface.

- · Sold individually or in a kit with two probes and a splitter
- Each probe is a combination temperature and humidity sensor with attached 6'L (1.8 m) cord allowing the sensor to be positioned appropriately within the cabinet

Part Number	Description	Shipping Weight Ib (kg)
17761-003	 (2) Environmental Probes with (1) Temperature and (1) Humidity Sensor Kit with splitter 72"L (1828 mm) x 2"H (50 mm) x 2"W (50 mm) 	1 (0.5)
17761-001	Environmental Probe with (1) Temperature and (1) Humidity Sensor 72°L (1828 mm) x 1″H (25 mm) x 1″W (25 mm)	1 (0.5)
17761-002	Environmental Probe Splitter 6"L (152 mm) x 2"H (50 mm) x 2"W (50 mm)	1 (0.5)

Note: You can attach one probe directly to the PDU; the splitter is required to attach two probes.

CHATSWORTH PRODUCTS



eConnect PDU Service Parts

Order eConnect PDU Service Parts as replacement parts.

- Cord Retention Tethers are used with cable ties to secure power cords next to C13 and C19 outlets and to C20 power inlets. The tethers snap onto a small stud next to each outlet/inlet on the PDU. Order cable ties separately.
- Ground Wire Kit includes a ground strap and installation hardware to create an external ground connection for the PDU chassis
- Tool-less Mounting Hardware Kit includes shoulder washers and installation hardware used to mount the PDU on rack and cabinet mounting brackets; mounting brackets are sold separately

Part Number	Description	Shipping Weight Ib (kg)
17762-003	Cord Retention Tethers, Pack of 50	1 (0.5)
17762-002	Ground Wire Kit	1 (0.5)
17762-001	Tool-less Mounting Hardware Kit, Pack of 2	1 (0.5)

Note: Each PDU includes the components above. Order these components as replacement/service parts.

Vertical PDU Mounting Bracket Kit

Used to attach Vertical PDUs to CPI Cabinet and Rack Systems.

- Brackets support two 2.2"W (56 mm) PDUs side-by-side or one 2.7"W (69 mm) PDU
- PDUs that are 75"H (1905 mm) must be placed in 45U or taller cabinets.
- Each Mounting Bracket Kit includes a pair of mounting brackets to support the PDU.
 Select the kit to match the cabinet or rack model.

Part Number	Description	Shipping Weight Ib (kg)
39110-C01	For F-Series TeraFrame Gen 3 Cabinet System or GF-Series Gen 2 Cabinet System	2 (0.9)
13780-C01	For F-Series TeraFrame Gen 2 Cabinet System	2 (0.9)
25140-701	For GF-Series GlobalFrame Gen 1 Cabinet System	2 (0.9)
13762-701	For M-Series MegaFrame Cabinet System or C-Series SlimFrame Cabinet System	2 (0.9)
35700-701	For Rack Systems	2 (0.9)

Note: Mounting Bracket Kits are included with CPI Cabinet Systems.



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