POWER DISTRIBUTION UNITS (PDUs)

for CPI Rack and Cabinet Systems

KEY FEATURES

- Distribute power to multiple devices from a single power connection
- NEMA or IEC style plug and outlet receptacles
- Available with circuit breakers to limit current and protect circuits from overload
- Available with local and networked current meters to provide easy current monitoring
- Available with switched outlets to allow remote power cycling and by-outlet current monitoring
- Select models integrate with Scalable Enterprise Management Application (SEMA) software providing real-time IP-based power monitoring across your entire enterprise

APPLICATIONS

- CPI's Power Distribution Units (PDUs) distribute single-phase power to multiple pieces of equipment from a single-phase or three-phase power connection.
- Use to monitor current use by attached equipment using local meters, networked meters or enterprisewide with SFMA software

USE WITH

- CPI Cabinet Systems
- CPI Rack Systems
- SEMA
- PowerScope In-Line Meter

RELATED ACCESSORIES

- eConnect™ PDU
- LCD/KVM Console
- Electronic Locking System
- Remote Infrastructure Management (RIM-600) System



PowerWedge, Controlled PDU 19"EIA, 4-Post Rack-Mount P/N 35882-5A2



CPI's rack-mount Power Distribution Units (PDUs) simplify power distribution into racks and cabinets in data centers and equipment rooms. Select models provide real-time power monitoring to help identify power problems allowing you to organize IT processes and equipment for the most efficient use of available power.

There are four progressive levels of PDUs: basic, metered, monitored and controlled. Basic PDUs feature electromagnetic circuit breakers which isolate power problems to a particular group of power outlets preventing disruption of power on other circuit segments. Metered PDUs include an in-line digital ammeter that displays the amount of current being used by attached equipment so that you can track current use and estimate remaining power on each circuit segment. Monitored PDUs include an Ethernet port that allows network-based monitoring of current use, temperature and humidity using a web browser or CPI's Scalable Enterprise Management Application (SEMA) software or another application via SNMP. An optional sensor (ordered separately) is required to measure temperature and humidity. Controlled PDUs feature switchable outlets for remote power cycling with port monitoring which lets you measure current use at each outlet. Additionally, some PDUs are available without circuit breakers.

Choose PDUs to match the voltage and current rating of the power connection. Single-phase or three-phase, vertical or horizontal PDUs with various outlet and plug combinations are available. Combine CPI monitored or controlled PDUs with SEMA software for real-time enterprise wide IP-based power monitoring. Other PDUs can be upgraded for network monitoring with the PowerScope In-Line Meter.

See inside for product selection. Contact CPI Technical Support for configuration assistance. The Technical Support Team assists customers and partners to solve IT infrastructure problems in a timely and accurate manner by understanding their requirements and creating practical and suitable CPI Solutions.

SPECIFICATIONS

- Single-input, vertical or horizontal rack-mount PDUs
- For indoor use only, in environmentally controlled areas; may not be used outdoors, in harsh environments or in air-handling spaces
- Power Input:
- Specific to PDU (see order tables)
- Stated as maximum rated voltage and current of inlet/plug
- 50/60 Hz
- Power Output:
- Specific to PDU (see order tables)
- Single-phase 3-wire configurations, same voltage/frequency as input
- Three-phase 4-wire DELTA configurators, same voltage/frequency as input
- Three-phase 5-wire WYE configurations, may have different voltage than input
- Power Inlet/Plugs:
- Specific to PDU (see order tables)
- NEMA or IEC power inlet/plug
- Power Cord:
- Attached, 10'L (3.0 m)
- Order cord separately for models with IEC60320 C-20 Inlets
- Not rated for plenum use
- Power Outlet Receptacles:
- Specific to PDU (see order tables)
- NEMA or IEC outlets/receptacles
- Circuit Protection:
- Specific to PDU (see order tables)
- PDUs without breakers must be attached to a protected branch circuit
- PDUs with breakers have magnetic (not thermal) breakers
- One or two breaker(s) in-line with circuit segment(s) on single-phase PDUs
- Three breakers in-line with each phase group (XY, YZ, ZX) on three-phase PDUs
- · Current Metering:
- Digital ammeter(s) are included on metered, monitored and controlled PDUs
- There is a separate ammeter in-line with each circuit segment or phase group (XY, YZ, ZX)
- Each ammeter has a 3-digit LED display
- Current Monitoring:
- Network-based current monitoring is included on monitored and controlled PDUs
- PDUs have a single 10/100 Mbps RJ-45 Ethernet connection and a single RJ-45 serial connection
- Monitor PDUs through the Ethernet connection using a web browser (http), CPI's SEMA software or an application that supports SNMP v1 (PDUs can send alarms as SNMP trans)
- Monitor PDUs through the serial connection with provided software; serial connection requires a Serial Setup Cable (P/N 35941-131) ordered separately

- Temperature/Humidity Monitoring Port:
 - Included on monitored and controlled PDUs
 - PDUs have an RJ-11 connection for an external temperature/humidity sensor (P/N 35941-132) that is ordered separately
- Controlled/Monitored Outlets:
- Controlled/monitored outlets are included on controlled PDUs only
- 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
- Monitor current use at each outlet; SEMA software reports individual equipment power use
- When used with SEMA software, users can define a current limit that will prevent unused outlets that are turned off from being turned on to prevent circuit overload
- Bonding/Grounding:
- All PDUs have a grounded power inlet/plug
- Certifications:
 - PDUs are UL Listed, NWGO.E212076; FCC, ICES-003 Class B; CE mark on all models
- Operating Conditions:
 - Temperature: $23 125^{\circ}F (-5 52^{\circ}C)$
- Relative Humidity: 10% 90%, non-condensing
- Elevation: 0 10,000 feet (0 3000 meters)
- Shock, Vibration: 5 Hz 500 Hz, 0.5 g (0.1 octave/min)
- Heat Dissipation: 90 BTU/hr maximum
- Storage/Non-Operating Conditions:
- Temperature: -13 149°F (-25 65°C)
- Relative Humidity: 5% 95%, non-condensing
- Elevation: 0 30,000 feet (0 9,144 meters)
- Rack/Cabinet Mounting Brackets:
 - Horizontal PDUs include rack-mount brackets for 19"EIA racks
- Vertical PDUs part numbers listed on this document do not include mounting brackets for racks and cabinets but do include tool-less mounting hardware that is spaced 64.75" (1645 mm) apart
- Tool-less mounting hardware can be used to attach the vertical PDU to the PDU mounting bracket kit that is included with the 37U and taller F-Series TeraFrame Cabinet, GF-Series GlobalFrame Cabinet, M-Series MegaFrame Cabinet,
- C-Series SlimFrame Cabinet or the accessory power managers for these cabinets
- To order individual mounting brackets for racks and cabinets, see Vertical PDU Mounting Brackets on page 6 or refer to the CPI Catalog for part numbers of the Vertical PDUs that include mounting brackets
- Finish: Black only

PLUG/INLET TABLE:

Single-Phase/Locking	NEMA L5-20P	NEMA L5-30P	NEMA L6-20P	NEMA L6-30P
	110-125 VAC/20A	110-125 VAC/30A	200-240 VAC/20A	200-240 VAC/30A
Three-Phase/Locking	NEMA L15-20P	NEMA L15-30P	NEMA L21-20P	NEMA L21-30P
	208 VAC/20A	208 VAC/30A	208 VAC/20A	208 VAC/30A
Power Inlet	IEC C20	IEC C20	IEC 16A 2P+E	IEC 32Ā 2P+E
Universal/Locking	110-125 VAC/20A	200-240 VAC/20A	200-240 VAC/16A	200-240 VAC/32A

POWER RECEPTACLE/OUTLET TABLE:

Receptacles/Outlets



IEC C13 UL: 120/208VAC/15A

CE: 208VAC/10A

IEC C19 UL: 120/208VAC/20A CE: 208VAC/16A

Included Features	Basic PDU	Metered PDU	Monitored PDU	Controlled PDU
Tool-less Mounting on Vertical PDUs	•	•	•	•
Circuit Breakers	0	0	0	•
Digital Meters		•	•	•
Network Access			•	•
Temp/Humidity Sensor Port			•	•
SEMA-Compatible			•	•
Controlled Outlets				•
Monitored Outlets				•

Note: • means included o means optional

PDUs rated above 20 Amperes require Circuit Breakers.

ORDERING INFORMATION

Basic, Vertical PDUs

		In	ıput	Output		Dims - in (mm)				
Part Number	Amp	kW	Plug	Breakers	Outlets	Н	W	D		
	110-125 Volt, Single-Phase PDUs									
35643-1A2	30	2.9	NEMA L5-30P	2 x 20A	(24) C13, (6) C19	68.5 (1740)	2.0 (51)	3.5 (89)		
				200-240 Volt, Si	ngle-Phase PDUs					
35622-1A1	20	3.3	NEMA 6-20P	No	(24) C13	68.5 (1740)	2.0 (51)	3.5 (89)		
35623-1A1	20	3.3	NEMA L6-30P	2 x 20A	(24) 6-20R	68.5 (1740)	2.0 (51)	3.5 (89)		
				208 Volt, Thre	ee-Phase PDUs					
35632-1A2	20	5.8	NEMA L21-20P	No	(24) 6-20R	68.5 (1740)	2.0 (51)	3.5 (89)		
35633-1B2	30	8.6	NEMA L21-30P	3 x 20A	(24) 6-20R	68.5 (1740)	2.0 (51)	3.5 (89)		
35815-1G3	40	11.5	IEC 60A 3P+E	3 x 20A	(42) C13	68.5 (1740)	2.0 (51)	3.5 (89)		
35815-1G2	40	11.5	IEC 60A 3P+E	3 x 20A	(15) C13, (9) C19	68.5 (1740)	2.0 (51)	3.5 (89)		
35616-1A1	48	17.3	IEC 60A 3P+E	6 x 20A	(12) C19	68.5 (1740)	2.0 (51)	3.5 (89)		

Note: Order mounting brackets separately.

Metered, Vertical PDUs

		In	ıput		Output	D	ims - in (mm)	
Part Number	Amp	kW	Plug	Breakers	Outlets	Н	W	D
				110-125 Volt, Si	ngle-Phase PDUs			
35643-2A1	30	2.9	NEMA L5-30P	2 x 20A	(24) 5-20R	68.5 (1740)	2.0 (51)	3.5 (89)
35643-2A2	30	2.9	NEMA L5-30P	2 x 20A	(24) C13, (6) C19	68.5 (1740)	2.0 (51)	3.5 (89)
				200-240 Volt, Si	ngle-Phase PDUs			
35623-2A1	20	3.3	NEMA L6-30P	2 x 20A	(24) 6-20R	68.5 (1740)	2.0 (51)	3.5 (89)
35822-2C1	30	5.0	NEMA L6-30P	2 x 15A	(24) C13	68.5 (1740)	2.0 (51)	3.5 (89)
35623-2A2	30	5.0	NEMA L6-30P	2 x 20A	(24) C13, (6) C19	68.5 (1740)	2.0 (51)	3.5 (89)
				208 Volt, Thre	ee-Phase PDUs			
35632-2A1	20	5.8	NEMA L21-20P	No	(24) 5-20R	68.5 (1740)	2.0 (51)	3.5 (89)
35632-2A2	20	5.8	NEMA L21-20P	No	(24) 6-20R	68.5 (1740)	2.0 (51)	3.5 (89)
35632-2A7	20	5.8	NEMA L21-20P	No	(24) 5-20R, (6) L6-20	68.5 (1740)	2.0 (51)	3.5 (89)
35633-2C4	30	8.6	NEMA L15-30P	3 x 20A	(24) C13, (6) C19	68.5 (1740)	2.0 (51)	3.5 (89)
25633-2A1	30	8.6	NEMA L21-30P	3 x 20A	(24) 5-20R	68.5 (1740)	2.0 (51)	3.5 (89)
35633-2B2	30	8.6	NEMA L21-30P	3 x 20A	(24) 6-20R	68.5 (1740)	2.0 (51)	3.5 (89)
35815-2G1	40	11.5	IEC 60A 3P+E	3 x 20A	(24) C13	68.5 (1740)	2.0 (51)	3.5 (89)

Note: Order mounting brackets separately.

Monitored, Vertical PDUs

		In	iput		Output	Dims - in (mm)			
Part Number	Amp	kW	Plug	Breakers	Outlets	Н	W	D	
200-240 Volt, Single-Phase PDUs									
35821-3B3	20	3.3	NEMA L6-20P	1 x 20A	(24) C13, (4) C19	68.5 (1740)	2.0 (51)	3.5 (89)	
35822-3C3	30	5.0	NEMA L6-30P	2 x 20A	(24) C13, (4) C19	68.5 (1740)	2.0 (51)	3.5 (89)	
35821-3A3	16	2.7	IEC 16A 2P+E	1 x 16A	(24) C13, (4) C19	68.5 (1740)	2.0 (51)	3.5 (89)	
35823-3G3	32	5.3	IEC 32A 2P+E	2 x 16A	(24) C13, (4) C19	68.5 (1740)	2.0 (51)	3.5 (89)	
				208 Volt, Thre	ee-Phase PDUs				
35632-3A2	20	5.8	NEMA L21-20P	No	(24) 6-20R	68.5 (1740)	2.0 (51)	3.5 (89)	
35633-3B2	30	8.6	NEMA L21-30P	3 x 20A	(24) 6-20R	68.5 (1740)	2.0 (51)	3.5 (89)	
35815-3G2	40	11.5	IEC 60A 3P+E	3 x 20A	(15) C13, (9) C19	68.5 (1740)	2.0 (51)	3.5 (89)	
35616-3A1	48	17.3	IEC 60A 3P+E	6 x 20A	(12) C19	68.5 (1740)	2.0 (51)	3.5 (89)	

Note: Order mounting brackets separately.

ORDERING INFORMATION

Basic, Horizontal Rack-Mount PDUs

		In	put		Output		Dims - in (mm)		
Part Number	Amp	kW	Plug	Breakers	Outlets	Н	w	D	
110-125 Volt, Single-Phase PDUs									
35692-111	20	1.9	NEMA 5-20P	No	(4) C13, (4) C19	1U	19"EIA	1.9 (48)	
35692-121	20	1.9	NEMA L5-20P	No	(4) C13, (4) C19	1U	19"EIA	1.9 (48)	
35693-112	30	2.9	NEMA L5-30P	2 x 20A	(12) 5-20R	1U	19"EIA	6.5 (165)	
35693-113	30	2.9	NEMA L5-30P	2 x 20A	(20) 5-20R	2U	19"EIA	6.0 (152)	
35693-111	30	2.9	NEMA L5-30P	2 x 20A	(12) C13	1U	19"EIA	6.5 (165)	
			110-	-125 or 200-240 Volt,	Single-Phase PDUs				
35662-112	16	2.7	IEC C20*	No	(10) C13	1U	19"EIA	1.6 (41)	
35662-111	16	2.7	IEC C20*	No	(16) C13	1U	19"EIA	4.5 (114)	
				200-240 Volt, Sing	le-Phase PDUs				
13653-701	20	3.3	NEMA 6-20P	1 x 20A	(12) 6-20R	1U	19"EIA	6.5 (165)	
35682-111	20	3.3	NEMA 6-20P	No	(4) C13, (4) C19	1U	19"EIA	1.9 (48)	
13653-702	20	3.3	NEMA L6-20P	1 x 20A	(12) 6-20R	1U	19"EIA	6.5 (165)	
35682-121	20	3.3	NEMA L6-20P	No	(4) C13, (4) C19	1U	19"EIA	1.9 (48)	
35683-111	30	5.0	NEMA L6-30P	2 x 20A	(12) C13	1U	19"EIA	6.5 (165)	
35663-111	32	5.3	IEC 32A 2P+E	2 x 16A	(12) C13	1U	19"EIA	6.5 (165)	
				208 Volt, Three-	Phase PDUs				
35676-111	48	17.3	IEC 60A 3P+E	6 x 20A	(12) C19	2U	19"EIA	9.0 (230)	

Note: Includes mounting brackets for 19"EIA rack/cabinet. Order power cord for models with C20 Input separately.

Metered, Horizontal Rack-Mount PDUs

		Ir	nput		Output		Dims - in (mm)		
Part Number	Amp	kW	Plug	Breakers	Outlets	Н	W	D	
110-125 Volt, Single-Phase PDUs									
35692-211	20	1.9	NEMA 5-20P	No	(4) C13, (4) C19	1U	19"EIA	1.9 (48)	
35692-221	20	1.9	NEMA L5-20P	No	(4) C13, (4) C19	1U	19"EIA	1.9 (48)	
35693-212	30	2.9	NEMA L5-30P	2 x 20A	(12) 5-20R	1U	19"EIA	6.5 (165)	
35693-213	30	2.9	NEMA L5-30P	2 x 20A	(20) 5-20R	2U	19"EIA	6.0 (152)	
35693-211	30	2.9	NEMA L5-30P	2 x 20A	(12) C13	1U	19"EIA	6.5 (165)	
			110-1	25 or 200-240 Vo	olt, Single-Phase PDUs				
35662-212	16	2.7	IEC C20*	No	(10) C13	1U	19"EIA	1.6 (41)	
35662-211	16	2.7	IEC C20*	No	(16) C13	1U	19"EIA	4.5 (114)	
				200-240 Volt, Si	ngle-Phase PDUs				
13653-751	20	3.3	NEMA 6-20P	1 x 20A	(12) 6-20R	1U	19"EIA	6.5 (165)	
35682-211	20	3.3	NEMA 6-20P	No	(4) C13, (4) C19	1U	19"EIA	1.9 (48)	
13653-752	20	3.3	NEMA L6-20P	1 x 20A	(12) 6-20R	1U	19"EIA	6.5 (165)	
35682-221	20	3.3	NEMA L6-20P	No	(4) C13, (4) C19	1U	19"EIA	1.9 (48)	
35683-211	30	5.0	NEMA L6-30P	2 x 20A	(12) C13	1U	19"EIA	6.5 (165)	
35882-2A2	30	5.0	NEMA L6-30P	2 x 15A	(24) C13	2U	19"EIA	8.0 (203)	
35663-211	32	5.3	IEC 32A 2P+E	2 x 16A	(12) C13	1U	19"EIA	6.5 (165)	

Note: Includes mounting brackets for 19"EIA rack/cabinet. Order power cord for models with C20 Input separately.

ORDERING INFORMATION

Monitored, Horizontal Rack-Mount PDUs

		In	put	Output		Dims - in (mm)			
Part Number	Amp	kW	Plug	Breakers	Outlet	Н	W	D	
	200-240 Volt, Single-Phase PDUs								
35882-3A1	30	5.0	NEMA L6-30P	2 x 15A	(24) L6-15R	2U	19"EIA	8.0 (203)	
35882-3A2	30	5.0	NEMA L6-30P	2 x 15A	(24) C13	2U	19"EIA	8.0 (203)	
208 Volt, Three-Phase PDUs									
35676-311	48	17.3	IEC 60A 3P+E	6 x 20A	(12) C19	2U	19"EIA	9.0 (230)	

Note: Includes mounting brackets for 19"EIA rack/cabinet.

Controlled, Horizontal Rack-Mount PDUs

		In	put	Output		Dims - in (mm)		
Part Number	Amp	kW	Plug	Breakers	Outlet	Н	w	D
	200-240 Volt, Single-Phase PDUs							
35882-5A2	30	5.0	NEMA L6-30P	2 x 15A	(24) C13	1U	19"EIA	28 (711)
35883-5B2	32	5.3	IEC 32A 2P+E	2 x 16A	(24) C13	1U	19"EIA	28 (711)

Note: Includes mounting brackets for 19"EIA 4-post rack or cabinet. Requires front and rear support.



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:

Locking Plugs (Single-Phase)

NEMA L5-15P	NEMA L5-20P	NEMA L6-15P	NEMA L6-20P
110-125VAC/15A	110-125VAC/20A	200-240VAC/15A	200-240VAC/20
NEMA 5-15P	NEMA 5-20P	NEMA 6-15P	NEMA 6-20P

Straight Plugs

TTU-TZJVAG/TJA	110-123VAG/20A	200-240 VAO/13A	200-240 VAG/20A
NEMA 5-15P	NEMA 5-20P	NEMA 6-15P	NEMA 6-20P
110-125VAC/15A	110-125VAC/20A	200-240VAC/15A	200-240VAC/20A

IEC Plugs

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IEC 60320 C-19/C-20 110-240VAC/20A	IEC 16A 2P+E 200-240 VAC/16A

SERVICE PARTS:

Vertical PDU Mounting Bracket Kit

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

- 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 GlobalFrame Gen 2 Cabinet System	2 (0.9)
13780-C01	For F-Series TeraFrame Cabinet System	2 (0.9)
25140-701	For GF-Series GlobalFrame 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.



