Z4-SERIES SEISMICFRAME® CABINET SYSTEM

KEY FEATURES

- Industry-leading 1500 lb (680 kg) seismic equipment load to support more equipment in your cabinet
- OSHPD OPM-0112-13 provides pre-approved, code-compliant seismic designs of supports and attachments for the cabinet when used in health facilities in California.
- UL Listed 2416 for a 3000 lb (1360 kg) static (non-seismic) equipment payload and integrated grounding and bonding features
- Multiple size options, including 1200 mm D cabinets to support deeper equipment, like modular network switches and high-density server applications
- Adjustable-depth equipment mounting rails match equipment mounting requirements
- Wide range of thermal and cable management accessories
- Pre-drilled top attachment points for mounting overhead pathway and bracing
- Includes transport casters for moving the cabinet into place during initial installation
- Simplified installation only requires floor anchorage eliminating the requirement for costly engineering calculations for external bracing
- Primary and secondary anchorage points provide flexibility in anchoring the cabinet to the floor

APPLICATIONS

- Secure and protect critical computer server, data storage and network equipment in computer rooms, equipment rooms and other facilities that are located in seismically active areas

USE WITH

- Air Dam
- Ring Cable Manager
- Cable Lashing Bracket
- Clik-Nut™ Hardware Kits
- Full Height Dual PDU Bracket

RELATED ACCESSORIES

- Snap-In Filler Panels
- eConnect® PDUs

Industry-Leading Seismic Load

1500 lb (680 kg) seismic equipment load plus 100 lb (45 kg) top load

Infinitely Adjustable Rails

Provide increased flexibility and more unobstructed interior space for accessories

UL LISTED

Load-Tested GR-63 Zone 4

California OSHPD OPM-0112-13

The Z4-Series SeismicFrame® Cabinet System by Chatsworth Products (CPI) is an engineered solution specifically designed to store critical rack-mount server, data storage and network equipment in computer rooms, equipment rooms and other communications facilities that are located in active seismic areas.

Featuring an industry-leading 1500 lb (680 kg) equipment load, the Z4-Series SeismicFrame can also support an additional 100 lb (45 kg) top load for cabling. The Z4-Series SeismicFrame Cabinet was tested by a Telecommunications Carrier Group and ISO 17025 certified Independent Testing Laboratory (ITL) to meet the Telcordia Technologies GR-63-CORE, Issue 4, April 2012, Sections 4.4 per Zone 4 requirements. This seismic test was originally developed by the telecommunications industry to define general requirements for central office equipment with a focus on preventing system downtime. GR-63-CORE seismic testing includes a series of physical shaker table tests, during which a loaded cabinet is placed through simulated earthquake conditions. Zone 4 testing includes the most severe test conditions in which the cabinet must perform with limited movement and survive the test without permanent structural or mechanical damage ensuring the internal equipment is not damaged.

Additionally, the Z4-Series SeismicFrame Cabinet also holds a California Office of Statewide Health Planning and Development, Pre-Approval of Manufacturer's Certification (OSHPD OPM-0112-13). The OPM is a set of pre-approved, code-complaint seismic designs of supports and attachments for the cabinet that can be incorporated into construction documents for health facilities in California.

The Z4-Series SeismicFrame Cabinet is available in two heights, two widths and two depths with a solid top panel, side panels and perforated front and rear doors. It is also available as a frame only solution without doors or panels. The cabinet is UL Listed for a 3000 lb (1360 kg) static (non-seismic) load, has integrated grounding and bonding features, factory-installed transport casters for easy movement and recessed leveling feet to simplify installation.

Add thermal and cable management accessories to optimize system performance in accordance with industry best practices. Thermal management accessories manage airflow through the cabinet, keeping hot and cold air separated within the cabinet, allowing the cabinet to be fully integrated into an aisle containment strategy. Cable management accessories keep network and power cables neatly organized and physically separated. See inside for product details. Contact CPI Technical Support for configuration assistance.

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CHATSWORTH PRODUCTS

SPECIFICATIONS

- Zone 4 Seismic Rating; the seismic equipment load was independently verified with shaker table tests per GR-63 requirements
- Freestanding equipment cabinet provides front and rear support for 19"W (482.6 mm) EIA rack-mount equipment and shelves
- For indoor use only, in environmentally controlled areas, not harsh environments
- Includes:
  - Welded and bolted steel four-post frame
  - Equipment mounting rails, two pairs
  - Grounding/bonding system and ground lug
  - Recessed leveling feet with hex top for simple field leveling
  - Removable transport casters
  - Baying kit
  - Equipment mounting hardware, (50) M6 cage nuts and screws
- Equipment space:
  - See Height, Width and Depth tables under Ordering Information/Dimensions
- Doors/lock kits:
  - Perforated front door
  - Double perforated rear door
  - Perforated area is 78% open
  - Front door opens to 135° when bayed or not bayed
  - Rear door opens to 180° when bayed or not bayed
  - Hinge pins allow easy removal during maintenance
  - Reversible to open from the right or left, must move hinges/latch
  - Interchangeable front or rear, must move hinges/latches
  - Swing handle with keyed or combination/keyed locks
  - Front door has a single-point latch
  - Rear door has a three-point latch
- Side panels
  - Order with cabinet or as service part
  - Solid, two-piece panels (half height, full depth)
  - Individual top/bottom panels
  - Bolted attachment, two points per panel
  - Keyed lock, one per panel, matches door
  - Bay cabinets with panels installed or removed
- Top panel:
  - One-piece, solid panel with four large grommets over cable openings, one per corner
  - Grommets are plastic, snap on, seal cable openings and can be cut to pass cables
  - Unsealed openings are 4.5"W x 9.0"D (114 mm x 228 mm), wide enough for large PDU plugs
  - Bolt holes for attaching 12"W (300 mm), 18"W (460 mm) and 24"W (610 mm) Cable Runway (ladder rack) along both sides of the top panel, holes are sealed with snap on caps
- Equipment support:
  - Two pairs of mounting rails in the cabinet
  - Adjustable depth, rails slide front-to-back, marks on frame for easy vertical alignment
  - 1-3/4"H (44.45 mm) U spacing, marked and numbered on all rails
  - 19"W, EIA-310-E Universal 5/8"-5/8"-1/2" (15.9 mm – 15.9 mm – 12.7 mm) vertical hole spacing
  - Square-punched holes accepts Clik-Nut Hardware Kits and standard cage nuts
  - Includes 50 each M6 cage nuts and screws
- Load capacity
  - 1500 lb (680 kg) internal seismic equipment load
  - 100 lb (45 kg) additional cabinet rooftop load (Tested to Telcordia Technologies GR-63-CORE, Issue 4, April 2012, Sections 4.4, per Zone 4 requirements)
  - 3000 lb (1360 kg) static load (Tested to UL 2416, Issue 2, July 2013 Section 11.1.4, 4x rating load test)
- Grounding/Bonding:
  - Mounting rails, top panel, side panels and doors are electrically bonded to the cabinet frame
  - Prepared location for ground lug at the top and bottom of the frame
  - A grounding lug is included to attach the frame to ground
- Certifications:
  - EIA-310-E compliant
  - UL Listed 2416, NWIN, File #E227626
- Certifications (continued):
  - TCG NEBS Compliant, Telcordia Technologies, GR-63-CORE, Issue 4, April 2012, Sections 4.4, per Zone 4 requirements
  - OSHPD OPM-0112-13, California, Office of Statewide Health Planning and Development (OSHPD), Preapproval of Manufacturer's Certification (OPM)
- Material:
  - Steel frame, slides, rails and panels
  - Plastic grommets/seals
- Construction:
  - Welded/bolted frame
  - Mounting rails bolt to frame
- Finish:
  - Epoxy-polyester hybrid powder coat paint on frame, rails, panels in Black or Glacier White
  - Grommets/seals, door handles/hinges are black
- Installation:
  - Attach cabinet frame directly to the concrete floor using four Hilti HSL-3 M12/50 heavy duty expansion anchors (Hilti Item #371782, ordered separately), one per corner

Installation Products

Installation products include equipment mounting hardware, concrete floor anchors and expanding adhesive foam sealing tape. Be sure to secure your cabinets to the floor with seismic anchors, and seal openings in panels and the raised floor.

39150-001

76543-001

Part Number	Description	Shipping Weight lb (kg)
Leveling Feet Height Adjustment Tool		
39150-001	5 mm Hex Ball Driver Tool, 12"L (300 mm)	1 (0.5)
Equipment Mounting Hardware		
12637-001	Cage Nuts, Screws, M6, 25 Pack, Gold	1 (0.5)
12638-001	Cage Nuts, Screws, #10-32, 25 Pack, Zinc	1 (0.5)
12639-001	Cage Nuts, Screws, #12-24, 25 Pack, Black	1 (0.5)
76543-001*	Clik-Nut Hardware Kit; Cage Nut and Screws	1 (0.5)
AisleLok™ Acrycell™ Sealing Tape		
13876-000	.5" Tape, 32.8'L (10 m), 5 Rolls, Black	3 (1.4)
13876-001	1" Tape, 18.4'L (5.6 m), 5 Rolls, Black	5 (2.3)
13876-002	2" Tape, 8.5'L (2.6 m), 5 Rolls, Black	7 (3.2)

*Note: Recommended Floor Anchors are Hilti, Heavy Duty Expansion Anchor, HSL-3, M12/50, Item #371782, 4 required per cabinet, order from Hilti. *Additional thread sizes and quantities available.*

ORDERING INFORMATION

Z4-Series SeismicFrame Cabinet is available in three basic configurations: a full cabinet with or without side panels; a cabinet with no doors with or without side panels or a frame only with no doors or panel work. Use the part number configurators below to select a Z4-Series SeismicFrame Cabinet. Choose Height, Width, Depth, Front Door, Locks and Sides based on your requirements.

Z4	-	H	W	D	-	R	FD	RD	L	-	C	TP	SP

Z4-Series SeismicFrame Cabinets – Frame with Top Panels and Doors, Side Panels are optional

	1. Height				2. Width			3. Depth			-	4. Rails	5. Front Door	6. Rear Door	7. Latch	-	8. Color	9. Top Panel	10. Side Panels
	U	in.	mm.		in.	mm.		in.	mm.		Description	Description	Description	Description		Description	Description	Description
Z4-	1	40	78.7	1999	1	23.6	600	N	41.3	1050	1 Square-Punched 2-Pair	0 None	3 Double, Perf	C Two-Point, Keyed		C Black	1 Standard	0 None
	2	43	83.9	2132	2	31.5	800	U	47.3	1200		1 Single, Perf		E Two-Point, Keyed/ Combination Lock		E Glacier White		2 Solid, 2 each

Z4-12U-113C-C12 shown

Z4-Series SeismicFrame Cabinets – Frame with Top Panel, no Doors, Side Panels are optional

	1. Height				2. Width			3. Depth			-	4. Rails	5. Front Door	6. Rear Door	7. Latch	-	8. Color	9. Top Panel	10. Side Panels
	U	in.	mm.		in.	mm.		in.	mm.		Description	Description	Description	Description		Description	Description	Description
Z4-	1	40	78.7	1999	1	23.6	600	N	41.3	1050	1 Square-Punched 2-Pair	0 None	0 None	0 None		C Black	1 Standard	0 None
	2	43	83.9	2132	2	31.5	800	U	47.3	1200						E Glacier White		2 Solid, 2 each

Z4-12U-1000-C10 shown

Z4-Series SeismicFrame Cabinets – Frame Only, No Top Panel, Doors or Side Panels

	1. Height				2. Width			3. Depth			-	4. Rails	5. Front Door	6. Rear Door	7. Latch	-	8. Color	9. Top Panel	10. Side Panels
	U	in.	mm.		in.	mm.		in.	mm.		Description	Description	Description	Description		Description	Description	Description
Z4-	1	40	78.7	1999	1	23.6	600	N	41.3	1050	1 Square-Punched 2-Pair	0 None	0 None	0 None		C Black	0 None	0 None
	2	43	83.9	2132	2	31.5	800	U	47.3	1200						E Glacier White		

Z4-12U-1000-C00 shown

Notes:

1. *There are eight possible frame sizes.*
2. *Use the first matrix to order a complete cabinet with top, doors and sides; use the second matrix to order a cabinet with no doors; use the last matrix to order a Frame Only with no top, doors or sides.*
3. *You must include a top panel, when ordering a cabinet with doors.*
4. *You can order a cabinet with or without side panels.*
5. *You can order a cabinet with or without a front door.*
6. *Choose latch/lock style: keyed or combination/keyed. Every door must have a latch. The (0) option should only be selected if there are no doors. Doors have a swing handle on the exterior. The combination lock uses a 3-digit combination entered on 3-dials that are integrated into the swing handle or a key. The combination lock can be reprogrammed in the field.*
7. *The front door has a single-point latch; the rear door has a two-point latch.*

DIMENSION TABLES

Height Dimensions - in (mm)			
Rack Mount Spaces (U)	**Overall with Casters**	**Frame Only No Casters**	**Front Opening**
40	78.7 (1999)	77.4 (1965)	70.4 (1789)
43	83.9 (2132)	82.6 (2099)	75.7 (1922)

Casters are factory installed on the cabinet, used to move the cabinet into position, and then removed before installation. The cabinet frame attaches directly to the floor.

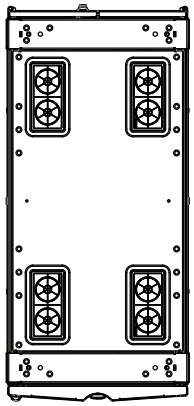
Depth Dimensions - in (mm)			
Nominal Depth	**Overall with Doors**	**Frame Only No Doors**	**Maximum Rail Depth**
1050	45.1 (1146)	41.3 (1050)	35.8 (911)
1200	51.1 (1296)	47.2 (1200)	41.7 (1061)

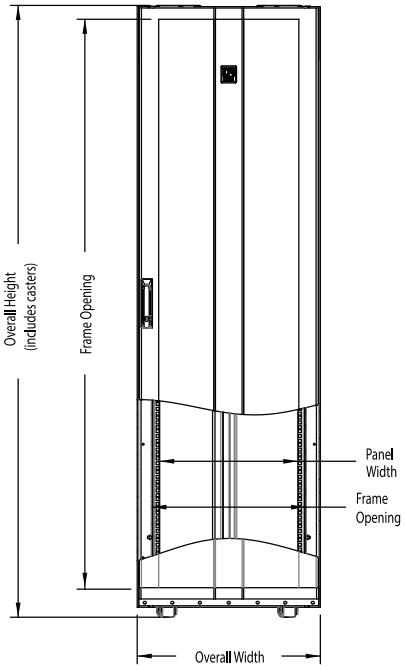
Front Door is approximately 2.2"D (56 mm) and Rear Door is approximately 1.7"D (43 mm) with hinges/latches. Minimum rail depth is 10.2" (258 mm). The front rail is 6.7" (170 mm) deep; the rear rail is 3.5" (89 mm) deep. Rail Depth is reduced when vertical accessories are placed in corners.

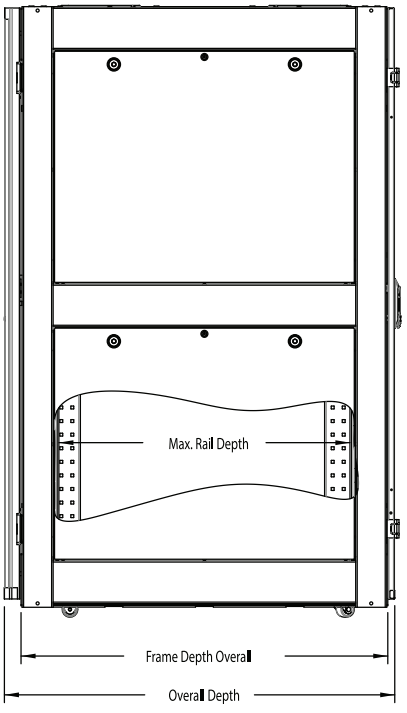
Width Dimensions - in (mm)			
Nominal Width	**Overall with Side Panels**	**Front Opening**	**Rack-Mount Panel Width**
600	23.6 (600)	19.6 (498)	19 (482.6)
800	31.5 (800)	27.5 (698)	19 (482.6)

Mounting Rail clearance is 17.8" (452 mm), mounting hole spacing is 18.3" (465 mm).

DIMENSIONAL DRAWINGS:







Service Parts

Service parts include mounting rails, top panel, side panels, doors and door lock kits, and are used as replacement parts or to upgrade cabinets as applications change. The Z4-Series SeismicFrame Service Parts Cut Sheet is available for download at www.chatsworth.com, or contact CPI Technical Support at 800-834-4969 or techsupport@chatsworth.com for assistance.

ACCESSORIES

Thermal Management Accessories

Thermal Management accessories enhance Thermal performance and play a critical role in controlling airflow inside the cabinet.

Snap-In Filler Panels

Snap-In Filler Panels block airflow in-between equipment by sealing unused rack-mount spaces (U) in the cabinet. Use with Air Dam to separate cold and hot air within the cabinet.

- Easy, tool-less attachment and removal on square-punched mounting rails
- Fills entire U space to form a tight seal between panels and equipment
- Material: Plastic
- Finish: Black or Glacier White
- Available in 1U and 2U heights, individual or bulk packs, color-matched to cabinet

Part Number			Height (U)	Shipping Weight lb (kg)
Each (1)	Pack (6)	Pack (50)		
34537-X00	34537-X01	34537-X02	1U	14 (6.4)
34538-X00	34538-X01	34538-X02	2U	21 (9.5)

X=color; 0=Black, E=Glacier White. Shipping Weights are for 50 pack.

Air Dam

Air Dam blocks airflow around the sides and top of the equipment mounting space, so cold air passes through equipment, and hot air does not recirculate around equipment.

- Use with Snap-In Filler Panels and Equipment Rail Grommet Kit
- Attaches to and adjusts with mounting rails
- Requires a minimum rail setback of 2.3" (58 mm) from the front of the cabinet frame
- Flexible seal against top and side panels
- Includes: top, bottom and side baffles; installation hardware
- Material: Steel baffles, plastic seals
- Finish: Black or Glacier White; seals are Black
- Select part number to match the width, usable height and color of the cabinet

Part Number		Height (U)	Shipping Weight lb (kg)
23.6"W (600 mm)	31.5"W (800 mm)		
14435-X00	14435-X02	40	14 (6.4)
14435-X01	14435-X03	43	21 (9.5)

X=color; C=Black, E=Glacier White. Shipping Weights are for 800 mm kits.

Label Holder Kit

Label Holder Kit includes 24 each, 1"H x 4"W (25 mm x 100 mm) label holders that can be attached to the front or sides of cabinets and hold labels for identifying the cabinet.

- Plastic, L-shaped, adhesive backed label holder for easy attachment to the cabinet
- Tough, heat resistant material and adhesive for long life
- Each kit includes 24 label holders
- 1"H x 4"W (25 mm x 100 mm) surface for labels; labels not included
- Material: Rigid PVC plastic, UL94-VO, Finish: Black

Part Number	Description	Shipping Weight lb (kg)
39151-001	Label Holder Kit, Pack of 24, Black	1 (0.5)

Cable Port Brush Kit

Cable Port Brush Kit is a pair of snap on brush covers that can be used to replace the plastic grommets included with the top panel to form a better seal for cable openings.

- Easy addition and removal of cables through brush opening
- Brushes form a tight seal around cables to minimize air leakage through cable openings
- Split, two-piece, snap on design for easy installation around cable bundles
- Includes: (2) brush covers
- Material: Plastic housing, nylon brushes

Part Number	Description	Shipping Weight lb (kg)
25190-001	Brush Covers, Pack of 2	2 (0.9)

Color is Black.

Equipment Rail Grommet Kit

Set of plastic grommets that cover cable openings in the equipment mounting rails in the wider cabinets to block airflow around equipment.

- Grommets are plastic, snap on, seal cable openings and can be cut to pass cables
- Includes: (8) grommets
- Material: Plastic

Part Number	Description	Shipping Weight lb (kg)
39133-001	Equipment Rail Grommet Kit, Pack of 8	2 (0.9)

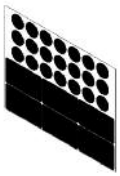
Color is Black. Use with 31.5"W (800 mm) cabinets.

Baying Seal Kit

Baying Seal Kit is only used with 23.6"W (600 mm) cabinets when the cabinets are bayed to align with 24"W (610 mm) floor tiles. The Baying Seal Kit fills the small gaps left between cabinets.

- Flexible plastic insert that blocks airflow between cabinets
- Includes: side baffles, cut to length
- Material: Plastic
- Finish: Black only
- Select part number to match the usable height of the cabinet

Part Number	Height (U)	Shipping Weight lb (kg)
39137-700	40	5 (2.3)
39137-703	43	5 (2.3)



Seal Kit

Cover unused holes in the frame for hinges and installation brackets to prevent bypass airflow.

- Pre-cut, plastic, color-matched, adhesive backed labels for easy attachment to the cabinet
- Tough, heat resistant material and adhesive for long life
- Each kit includes 12 sheets; each sheet includes 21 round labels and six rectangular labels
- Round labels are .75" (19 mm) diameter. Rectangular labels are 1.3" x 2.2" (34 mm x 55 mm).
- Material: Thermoplastic polycarbonate film
- Finish: Black or Glacier White
- Select to match the color of the cabinet

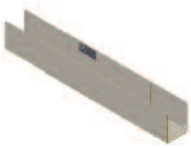
Part Number	Height (U)	Shipping Weight lb (kg)
39076-X00	Seal Kit	1 (0.5)

X=color: C=Black, E=Glacier White.

ACCESSORIES

Cable Management Accessories

Keep network, KVM and power cables separate and organized using the following cable management accessories.



Front-to-Rear Cable Manager

Front-to-Rear Cable Manager attaches to the back of equipment mounting rails creating a front-to-rear pathway between the front and rear mounting rails for cables.

- For use on 31.5"W (800 mm) cabinets
- Mounting locations behind cable openings on each rail
- Attaches to mounting rails and extends from 17.5" (445 mm) to 30.5" (775 mm) to match rail depth
- Creates a 3.0"H (76 mm) by 2.5"W (64 mm) front-to-rear pathway for cables
- Includes: cable manager, installation hardware
- Material: Steel panels
- Finish: Black or Glacier White
- Select part number to match the color of the cabinet

Part Number - Width		Rail Depth Range in (mm)	Shipping Weight lb (kg)
23.6"W (600 mm)	31.5"W (800 mm)		
N/A	14485-X00	17.5 – 30.5 (445 - 775)	6 (2.7)

X=color: C=Black, E=Glacier White.

Cable Lashing Bracket

Cable Lashing Bracket creates a simple, separate vertical pathway for a small bundle of cables and has multiple slots for CPI Saf-T-Grip® Straps or tie wraps to secure cables to the bracket.

- Attaches to the frame in a fixed location, independent of the equipment mounting rails
- Use multiple to increase capacity
- Bracket is 1.6"W (41 mm)
- Includes: brackets, installation hardware; order Saf-T-Grips or cable ties separately
- Material: Steel
- Finish: Black or Glacier White
- Select part number to match the usable height and color of the cabinet

Part Number	Height (U)	Shipping Weight lb (kg)
14465-X00	40	3 (1.4)
14465-X01	43	3 (1.4)

X=color: C=Black, E=Glacier White.

Ring Cable Manager

Ring Cable Manager is independent of the equipment mounting rails, creating a separate vertical pathway for cables and includes plastic cable rings to organize cables.

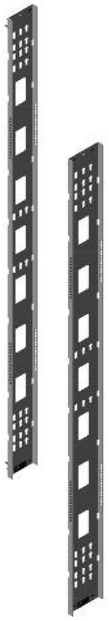
- Attaches to the frame in a fixed location, independent of the equipment mounting rails
- Rings have an opening on the front for easy addition or removal of cables
- Includes: brackets, rings, installation hardware
- Material: Steel brackets, plastic rings
- Finish: Black or Glacier White; rings are Black
- Select part number to match the width, usable height and color of the cabinet

Part Number – Width		Height (U)	Shipping Weight lb (kg)
23.6"W (600 mm)	31.5"W (800 mm)		
14440-X00	14445-X00	40	13 (5.9)
14440-X01	14445-X01	43	13 (5.9)

X=color; C=Black, E=Glacier White. Shipping Weights are for 800 mm managers.

Inside Dimensions, Usable Internal Cable Area, Rail Setback				
Cabinet Width	Width in (mm)	Depth in (mm)	Cable Area in^2 (mm^2)	Rail Setback in (mm)
23.6 (600)	.9 (29)	3.3 (84)	2.9 (1870)	9.5 (240)
31.5 (800)	4.2 (107)	3.5 (89)	14.7 (9480)	9.7 (246)

Note: Rail setback is the minimum distance required between the front edge of the cabinet frame and the front edge of the equipment mounting rail.



Full Height Dual PDU Bracket

by-side and has multiple slots for CPI Saf-T-Grip® Straps or tie wraps to secure cords to the bracket.

- Attaches to the frame in a fixed location, independent of the equipment mounting rails
- Available in two widths: Dual and Wide
- Dual bracket is 4.8"W (121 mm) and supports two PDUs up to 2.2"W (51 mm) side-by-side
- Wide bracket is 5.8"W (147 mm) and supports two PDUs up to 2.7"W (69 mm) side-by-side
- Wide bracket is required to mount two 6-breaker eConnect PDUs (series P/Ns PX-3XXXX) side-by-side; eConnect PDUs (series P/Ns PX-3XXXX) will only fit in the 43U cabinet.
- Tool-less mounting on 28" (711 mm), 61.25" (1556 mm) or 64.75" (1645 mm) centers
- Includes: brackets, installation hardware; order Saf-T-Grips or cable ties separately
- Material: Steel
- Finish: Black or Glacier White
- Select part number to match PDU size, usable height and color of the cabinet

Part Number		Height (U)	Shipping Weight lb (kg)
Dual	Wide		
14480-X00	14481-X00	40	12 (5.4)
14480-X01	14481-X01	43	11 (5.0)

X=color: C=Black, E=Glacier White. Shipping weights are for Wide managers. eConnect PDUs (P/Ns PX-3XXXX) will not fit inside a 40U cabinet.

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