

Protecting your technology investment.

Cabinet & Enclosure Systems





Data Center Cabinets & Enclosures

The cabinet platform on which your enterprise is built is just as critical as the equipment it stores. Using a properly configured cabinet that is designed to fit your equipment, and work with your data center's cooling system is crucial.

As a global provider of innovative storage solutions that protect IT equipment, Chatsworth Products (CPI) offers configurability, quality and value with a breadth of integrated system components, covering your physical layer needs.

Advantages of CPI Cabinets and Enclosures

- High-quality construction and engineering design
- Solutions that are optimized to meet best energy-saving and thermal management practices
- Ability to configure specific solutions that meet any data center and equipment requirement
- Numerous options and accessories that come preinstalled for reduced labor time
- Industry-leading performance standards, such as high static load ratings and shock pallet options
- · Specialty solutions to meet unique requirements and applications, such as seismic or warehouse environments

Engineering expertise, configurability & quick availability—we've got you covered

Whether you are designing a new data center or enhancing an existing one, CPI can help you achieve the ultimate solution based on your specific needs today, while allowing you the flexibility to succeed tomorrow.

TeraFrame® Cabinet System

Highly configurable premium enclosures that provide exceptional thermal and cable management

GlobalFrame® Cabinet System

Industry-standard server and network cabinet with smart airflow management provisions

MegaFrame® Cabinet System

Lightweight aluminum cabinets that are partially assembled and perfect for challenging installations in tight spaces or limited door clearances

Seismic Frame® Cabinet System

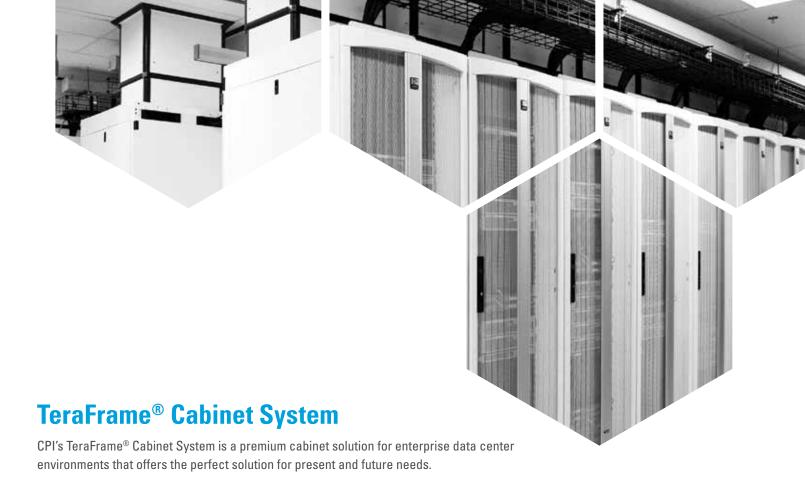
Seismic-rated cabinet with industry-leading load rating

RMR® Modular Enclosures

Advanced industrial enclosure with cutting-edge sealing technology for warehouse, manufacturing and outdoor applications has mounting options for IT equipment or industrial automation controls



Cabinet System	F-Series TeraFrame Cabinet	N-Series TeraFrame Network Cabinet	GF-Series GlobalFrame Cabinet	M-Series MegaFrame Cabinet	Z4-Series Seismic Frame Cabinet	RMR Modular Enclosure
Application, Design	High-performance server, network	High-performance network cabinet	Economical server, network and integrator cabinet	Lightweight, partially assembled	Robust, high-load rated seismic cabinet	Industrial, certified with NEMA protection rating
Heights (rack-mount units)	42 - 52, in 1U increments	42 - 52, in 1U increments	42, 45, 48, 52	25, 38, 42, 45	40, 43	24, 42, 45, 47
Frame Width	23.6" (600 mm) 27.6" (700 mm) 31.3" (800 mm)	31.3" (800 mm) 40" (1016 mm)	23.6" (600 mm) 27.6" (700 mm) 31.3" (800 mm)	27.3" (694 mm), 31.4" (796 mm)	23.6" (600 mm) 31.3" (800 mm)	23.6" (600 mm) 31.3" (800 mm)
Frame Depth (no doors)	31.3" – 47.2" (800 mm - 1200 mm), in 25 mm increments	39.4" – 47.2" (1000 mm - 1200 mm), in 25 mm increments	31.3" (800 mm) 39.4" (1000 mm) 41.4" (1050 mm) 43.3" (1100 mm) 47.2" (1200 mm)	27.2" (691 mm) 33.2" (844 mm) 39.2" (996 mm) 42.2" (1072 mm)	41.4" (1050 mm) 47.2" (1200 mm)	32.1" (816 mm) 38.1" (969 mm)
Maximum Static Load	3000 lb (1360 kg)	2500 lb (1134 kg)	3000 lb (1360 kg)	2000 lb (907 kg)	1500 lb (680.0 kg)	-
Colors	Black Glacier White	Black Glacier White	Black Glacier White	Black White Gray	Black Glacier White	Black White Gray



TeraFrame Cabinets are configurable solutions that allow you to choose the options and accessories that are best suited for your evolving data center so that you can personalize a cabinet to meet your specific thermal and cable management needs.

F-Series TeraFrame Gen 3 Cabinet

Highly functional, highly configurable and highly advanced

The F-Series TeraFrame Cabinet is a distinct, attractive and highly functional cabinet that offers the perfect solution for both present and future needs.

- Premium solution for server, network and mixed-used applications
- Maximum thermal performance when combined with CPI patented Vertical Exhaust Ducts
- Patented door hinge design allows for quick and easy removal and installation
- · Various sizes and configurations, including 52U height available as standard size
- Fully compatible with CPI Passive Cooling® Solutions, eConnect® Power Distribution Units (PDUs), eConnect Electronic Access Control (EAC) and Remote Infrastructure Management (RIM-1000) System
- Industry-leading load rating of 3000 lb (1360 kg); UL® 2416 listed
- Available with many accessories already installed to save installation and deployment time
- · Preinstallation of eConnect PDUs for easy ordering and deployment
- Includes Clik-Nut® cage nuts for easy equipment mounting





N-Series TeraFrame Gen 3 Cabinet

The ultimate network cabinet, providing complete airflow isolation

The N-Series TeraFrame provides optimal performance and configurability for any equipment, regardless of size, model or airflow requirements. Deploy devices of different sizes within one cabinet, without the need for additional accessory kits, while achieving complete airflow isolation.

- Ultimate flexibility for any switch size, model and airflow requirement
- Patented Vertical Exhaust Duct and Side Air Dam provide complete airflow isolation and support multiple airflow requirements
- · Side Air Dam works with all switch models
- Unique frame design has provision for high-density cable and power management accessories
- Enhanced cable management features include large, full-depth cable entry points on the top panel, provision for overhead cable pathway and T-shaped cable guides on front mounting rails
- Various sizes and configurations, including 52U height available as standard size
- Fully compatible with CPI Passive Cooling Solutions, eConnect PDUs, and RIM-1000 System
- Industry-leading load rating of 2500 lb (1134 kg); UL 2416 listed
- Seamless deployment alongside the F-Series TeraFrame and GF-Series GlobalFrame Cabinets
- Preinstallation of eConnect PDUs for easy ordering and deployment
- Includes Clik-Nut cage nuts for easy equipment mounting

GlobalFrame® Cabinet System

CPI's GlobalFrame® Cabinet System is a functional, highly adaptable storage solution available in 30 popular frame sizes and many configurations. The GlobalFrame Cabinet System features a durable design that supports up to 3000 lb (1360 kg) of equipment. Select the Vertical Exhaust Duct configuration with perforated metal front door and solid metal rear door to support front-to-top airflow, and isolate hot exhaust air as it exits the cabinet for optimal airflow management.

GF-Series GlobalFrame Cabinet

Industry-standard solution with maximum result

The GF-Series GlobalFrame Gen 2 cabinet is a reliable data center cabinet that offers a variety of features to address thermal management, equipment support and future growth.

- Standard solution for server, network or mixed-used applications
- Maximum thermal performance when combined with CPI patented Vertical Exhaust Ducts
- · Various sizes and configurations, including 52U height available as standard size
- Fully compatible with CPI Passive Cooling Solutions, eConnect PDUs, eConnect EAC and RIM-1000 System
- Industry-leading load rating of 3000 lb (1360 kg); UL 2416 listed
- Available with many accessories already installed to save installation and deployment time
- Preinstallation of eConnect PDUs for easy ordering and deployment
- · Includes Clik-Nut cage nuts for easy equipment mounting



Specialty Cabinets



Z4-Series Seismic Frame® Cabinet

Rugged design protects equipment when the earth shakes

CPI's Z4-Series Seismic Frame® Cabinet is engineered and tested to maintain functionality even after the most severe earthquakes. The Z4-Series Seismic Frame was tested to meet stringent physical shaker table tests while fully loaded.

- Heavy-duty steel frame construction for high performance in seismically active locations
- Industry-leading seismic load rating of 1500 lb (680 kg)
- Increased range of cabinet sizes to support deeper equipment and more unobstructed interior space along the sides for thermal and cable management accessories
- Designed and tested to protect and ensure equipment remains operable during an earthquake according to Telcordia Technologies GR-63-CORE requirements
- California Office of Statewide Health Planning and Development (OSHPD) Pre-Approval of Manufacturer's Certification (OPM) simplifies approvals for healthcare facilities
- UL 2416 Listed

M-Series MegaFrame® Cabinet

Partially assembled and light—ideal for complex installations

The M-Series MegaFrame® Cabinet is a multipurpose, lightweight aluminum cabinet featuring several styles of doors to match thermal and security requirements.

- Ships fully assembled or knocked down for areas with small receiving docks or entryways
- Wide variety of sizes, mounting rails, locking and security features
- Integrated vertical cable management with 3" (80 mm) of cable capacity





RMR® Modular Enclosure

Innovative sealing technology for Edge computing and industrial environments

The RMR® Modular Enclosure is an advanced industrial enclosure engineered to protect equipment with cutting-edge sealing technology and certified ingress protection ratings. Multiple equipment mounting options support IT equipment, automation electronics, electrical controls and instrumentation in nonhazardous indoor locations.

- Provides equipment with UL listed NEMA Type 12 and IP 55 protection ratings
- Supports airflow and cooling options that are specially certified for industrial applications
- Quick and secure mounting of plates, rails and accessories at any point along the frame
- Allows a complete enclosure solution to be configured under a single part number

Airflow Management – CPI Passive Cooling®

CPI Passive Cooling®, CPI's view of airflow management, maximizes your cooling efficiencies without the need for additional cooling units, in-row air conditioners or liquid cooling solutions. The ability to isolate, redirect and recycle hot exhaust air revolutionized the concepts of high density, energy efficiency and "free cooling" within the data center.

From small applications with heat loads of 2 kW per cabinet, to large data center applications with heat densities beyond 30 kW, CPI Passive Cooling provides advanced thermal management with zero points of failure, thus providing no impediments to Tier IV availability.

Our Approach to Containment

CPI's Aisle Containment Solutions use a total design approach that optimizes cooling efficiencies in data centers. Developed with built-in flexibility and advanced engineering, CPI solutions easily adapt to challenges, such as limited ceiling height and complex overhead pathways. This makes Aisle Containment Solutions an excellent choice for both Brownfield and Greenfield applications.

To reach full potential of these efficiencies, CPI recommends a comprehensive approach that includes containment at these levels:

Device Level

Use filler panels and air dams to seal the space around and between equipment within the rack/cabinet to prevent mixing of hot and cold air within the cabinet.

Cabinet Level

Use patented Vertical Exhaust Ducts to isolate and remove hot exhaust air through the top of the cabinet, and Aisle Containment Cabinet to Floor Seal Kits to seal the space between and under cabinets.

Aisle Level

Use CPI's Hot Aisle Containment (HAC) or Cold Aisle Containment (CAC) with sliding doors that automatically close to seal the aisle between rack rows for a unique and versatile approach to containment.

CPI Passive Cooling Benefits:

- · Reduces cost
- Eliminates hot spots
- Supports heat and power densities above 30 kW per cabinet
- Effectively uses 100% of supplied air
- · Reduces waste of chilled bypass air
- Improves cooling efficiencies due to higher supply-to-return temperature differences (Delta T)
- Allows increased room temperature and higher set points on cooling equipment







Cable Management

CPI Cable Management Solutions define specific pathways that organize and separate network, power and cabling within the cabinet. There are specific cable managers for each cabinet system.

- Wide variety of cable management accessories specifically designed to help you meet best practices without sacrificing airflow within the cabinets
- Engineered to enable clean and organized adds, moves and changes
- All cabinets feature top panel cable access ports and support overhead cable pathways
- Vertical managers feature patented T-shaped cable fingers and openings that align with each rack-mount unit (U) space in the cabinet to organize cables
- High-density vertical pathways inside cabinets have capacity for Cat 6A and other cables that support 10/40/100-Gigabit

Accessories

To truly make the most of your Cabinet System Solution, CPI provides a variety of value-added accessories to complement its functionality and ease of use. When bundled together, these accessories give you an all-in-one cabinet solution that ensures a proper fit, easy moves, adds and changes, and provides a strong framework for future growth.

- The Raised Floor Grommet features a dual-brush with an integrated EPDM membrane that forms a superior seal around cable bundles
- Snap-In Filler Panels block airflow through open U spaces to help keep hot air at the back of the cabinet
- Vertical Exhaust Duct attaches to the top of the cabinet to provide a sealed pathway
 for hot air from the top of the cabinet to an overhead drop ceiling as part of a closed
 hot air return
- Clik-Nut Hardware Kit features a tool-less design that reduces labor and installation by 70%
- Power Strips, In-Line Meters and PowerWedge provide simple and reliable power management



Power Management

As the Internet of Things (IoT) continues to evolve and Edge computing becomes more common, managing assets and white space remotely becomes more challenging. A comprehensive and reliable solution that works together to simplify operation, costs and labor, as well as allows for network expansion is key.

CPI's lines of eConnect PDUs, eConnect EAC and Power IQ^{\circledast} for eConnect software transform the role of the equipment cabinet into a cohesive system that simplifies the complexities of ongoing power monitoring and access control.

Full Cabinet Integration

eConnect technology combines intelligent power, access control and environmental monitoring into a single PDU-based platform.

eConnect PDUs

eConnect PDUs come in six progressive models ranging from basic to highly intelligent models, allowing you to remotely monitor and switch power at the cabinet or outlet level. Patented Click Secure technology prevents accidental disconnections.

Additionally, eConnect offers quick, low-cost deployment, with preinstallation in cabinets and the ability to network up to 32 PDUs into a single IP address through Secure ArrayTM IP Consolidation Technology. Provisions for environmental probes give you proper thermal visibility within the cabinet.

Electronic Access Control

Make overall management of the entire cabinet much simpler programming, monitoring and controlling cabinet access remotely through the eConnect web interface. eConnect is a simple solution to protect your IT assets and ensure regulatory compliance.

Power IQ® for eConnect

Our highly intuitive DCIM solution has full compatibility with eConnect PDUs and EAC, giving you real-time data and reporting so you can make informed decisions.

Don't forget, preinstallation options are available.
Add power. Make it easy.



Visit our configurator to add power to your cabinet.

www.chatsworth.com/configurators





Power IQ for eConnect



Select a CPI Cabinet

The best way to select a CPI cabinet that matches your exact needs is to configure the cabinet using CPI's free online configurators. The Product Configurator allows you to create custom configurations and systems, including preinstallation of power strips and PDUs. Once built, the Product Configurator will present a total list price, rendered drawings and offer a selection of distributors or global resellers. In many cases, accessories can be installed prior to shipping.

To get started, review the tables below to identify which cabinet system best matches your requirements, then log onto the Product Configurator to create your solution.

Cabinet Feature Comparison

Cabinet System	F-Series TeraFrame Cabinet	N-Series TeraFrame Network Cabinet	GF-Series GlobalFrame Cabinet	M-Series MegaFrame Cabinet	Z4-Series Seismic Frame Cabinet	RMR Modular Enclosure
Metric Footprint for International Use	✓	√	✓		✓	✓
Perforated Doors Support Front-to-Rear Airflow	✓	✓	✓	\checkmark	\checkmark	
Optional Side-Mounted Duct Supports Side-to-Side Airflow		✓				
Optional Top-Mounted Duct Supports CPI Passive Cooling	✓	✓	✓			
Environmentally sealed						\checkmark
Optional Top-Mounted Fans				✓		✓
Optional Filter Fans/ Cooling Units				✓		✓
Cabinet Doors Have Swing Handle Latches	✓	✓	✓		✓	✓
Door Latches Upgrade to Electronic Access Control	✓	✓	✓			
Rated for Seismic Locations					\checkmark	
Cabinet Ships Partially Assembled				✓		
Shock Pallet Option			✓			

Optional Compatible Accessories

Cabinet System	F-Series TeraFrame Cabinet	N-Series TeraFrame Network Cabinet	GF-Series GlobalFrame Cabinet	M-Series MegaFrame Cabinet	Z4-Series Seismic Frame Cabinet	RMR Modular Enclosure
Vertical Exhaust Duct	✓	\checkmark	\checkmark			
Network Switch Exhaust Duct		\checkmark				
Cable Management for Preterminated fiber	✓	✓				
Cable Managers with T-Shaped Cable Fingers	✓	√	✓	✓		\checkmark
Full-Height Support for Vertical PDUs	✓	\checkmark	✓		✓	\checkmark
Compatibility with RIM-750 and RIM-1000	✓	✓	✓	✓	✓	✓
Compatible with Electronic Access Control	✓	✓	✓			
NEMA-rated Filter Fan and Cooling Units						✓
NEMA-rated Sealing Grommets						✓

CPI Resources & Tools

CPI offers complete product information, design tools and other resources to help you easily and efficiently plan, and design projects to meet your deadlines and requirements.

A great deal of precision and thought goes into the design of today's networks and security systems, but plans can change in an instant. As these environments change, infrastructure systems must be able to change too. Take advantage of CPI's free online tools to meet these challenges with confidence.

- The **CPI Online Catalog** allows you to filter and compare more than 15,000 products, as well as zoom in on product detail, view documentation, create a shopping cart and send items. Go to catalog.chatsworth.com to access.
- CPI's Mobile App Suite for iPhone and Android mobile phones includes a series of tools that lets you quickly select cabinet and PDU part numbers while in the field. It also has a cable fill table, runway bill of material (BOM) builder and distributor locator.
- The CPI Mini Catalog App can be downloaded from the Apple Store to your iPad and allows you to quickly search for and select products, create a BOM list, and link to more detailed product documentation.
- The Product Configurator will guide you through the steps and selections
 necessary to create personalized Racks, Cabinets and Enclosure Systems, Power
 Products and Wall-Mount Systems. Once built, the Product Configurator will
 present a total list price, rendered drawings and offer a selection of distributors or
 global resellers. Access this tool at www.chatsworth.com/configurator.
- CPI Product Designer creates unique industrial enclosures quickly and easily by allowing you to select the size, features and accessories needed for a specific application. Go to www.chatsworth.com/product designer to try it now.
- Visio Shapes help you plan your next project, and CAD Blocks (dwg files) help you quickly and accurately develop a room layout. BIM Drawings are also available and allow you to explore a project's key physical building characteristics before construction. For more information about these free tools, visit www.chatsworth.com/downloads.
- Use CPI Cable Fill Table at www.chatsworth.com/cablefill to get recommended and maximum cable fill values for all of CPI's cable management and runway products.
- MasterFormat® CSI Specifications document general product specifications and general installation practices for all CPI products included in Division 27 of the commercial construction project manual. Go to www.chatsworth.com/specs/ to access.



CPI Online Catalog



CPI's Mobile Apps



CPI Product Designer



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Find more information about CPI solutions at: chatsworth.com

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Manufacturing Capability and Global Availability

Headquartered in the United States, CPI operates from multiple sites worldwide, including offices in Mexico, Canada, China, the Middle East and the United Kingdom. CPI's manufacturing facilities are located in the United States, Asia and Europe.

Standard products are readily available through a global network of industry-leading distributors. With stock availability, and CPI's consistently short factory lead times, you can be assured that CPI solutions will be accessible to meet your project scheduling needs.

How to Buy

CPI sales are conducted in partnership with a network of electrical distributors and industrial sales representatives that specialize in control automation, electrification and instrumentation. Visit chatsworth.com/power to find quick links for your buying preference.

About CPI

CPI, a 100% employee-owned company, was founded in June 1991, when 90 workers joined together and purchased the Dracon Division of Harris Corporation using an Employee Stock Ownership Plan (ESOP). Employee ownership is central to the success of CPI. Employee owners are committed to a philosophy of quality through teamwork, caring and commitment, which are extended to customers through our solutions and services.



CHATSWORTH PRODUCTS

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