

Signature
solutions ...



Freestanding Cabinets

Strength, Security,
Stability and Style >>>



CHATSWORTH
PRODUCTS, INC.

Helping you

Organize. Store. Secure.SM

technology equipment ...



System Components



A Equipment Support: Rack-mount spaces (RMU) are marked and numbered on every mounting rail for exact positioning of equipment. A depth scale on the cabinet frame eases alignment of mounting rails.

B Cable Management Space: Space is provided along both sides of the cabinet for cable management and power distribution. Cable managers and power strips adjust in depth to align with equipment and require no rack-mount space.

C Quick Release Doors: Available in four styles, doors are reversible to open right or left and interchangeable front-to-rear. Electronic locks can be added to all doors. A space-saving double door is also available.

D C-Series SlimFrame™ Cabinet System: The SlimFrame Cabinet is 24" wide to match the dimensions of a raised-floor tile in a data center. SlimFrame is shown with the solid metal door.

Continued on page 3 >>>

Solution Overview

CPI Cabinets — Strength, Security, Stability and Style

Freestanding four-post cabinets, or server racks, provide security for rack-mount computer and data storage equipment. CPI's products feature high-quality construction and have been continually enhanced to meet your changing needs. Different height, width, and depth configurations are available to suit your requirements and budgets.

Benefits of all CPI cabinets include:

- Up to 2,000 lb load rating
- Aesthetic appeal
- Integrated cable management space
- Aluminum or steel construction
- RMU-marked, adjustable-depth mounting rails
- Removable doors and panels

Beyond their exceptional capabilities to secure your valuable equipment, CPI systems also help your devices run effectively. The total CPI Cabinet Solution integrates equipment support with physical security, remote user access monitoring, cable management, thermal management and power distribution, so you improve lifespan, decrease downtime and increase long-term returns.

Why Choose CPI?

CPI is the leading provider of structural support systems. Benefits of CPI Cabinet Systems include:

E M-Series MegaFrame® Cabinet System: The award-winning MegaFrame Cabinet is CPI's most feature-rich system. It provides an extra 3" of cable management space along both sides of the cabinet and offers the most accessories. Seismic Frame, a NEBS-compliant MegaFrame for Zone 4 use, is also available.

F E-Series ISP Co-Location Cabinet System: The ISP Co-Location Cabinet has three secure compartments with separate cable management raceways, power strips and optional fans. Three users can share a single cabinet. ISP Cabinet is shown with the vented plexiglass door.

G T-Series SteelFrame Cabinet System: The SteelFrame Cabinet is a cost-effective solution, which shares the essential functions of other CPI cabinets, but has a simple monochromatic, steel finish and ships fully assembled.

H M-Series 48" MegaFrame Cabinet: The 4'-high MegaFrame Cabinet has a solid top panel that can be used to support a monitor and keyboard. 48" Cabinet is shown with a solid plexiglass door.

I M-Series Mini Data Network Cabinet: Mini Cabinet is a 28"-high MegaFrame Cabinet that includes casters and is ideal for under the counter use. Mini Cabinet is shown with a high-flow perforated metal door.

Industry Leadership

CPI cabinets have superior specifications, ensuring that your installation meets or exceeds industry standards.

- CPI's award-winning systems are perfect for high-profile installations. At the same time, CPI offers a cost-effective solution for everyday projects.
- Many CPI cabinets are UL Listed.
- All cabinets have integrated space (up to 3" per side) for cable management and include one vertical cable manager. Additional managers are available. Cable managers, which use either rings or composite fingers, have rounded edges to protect cables from tears and stretching.
- RMU markings are clearly printed on all cabinet rails, simplifying installation of components. In addition rails can be easily adjusted to fit the depth of any device.



High Quality

CPI products are sturdy, strong and durable.

- Most CPI cabinet systems are now rated to hold up to 2,000 pounds with or without casters. This unsurpassed strength results in less deflection under loaded conditions than competitors' offerings.
- Frames are constructed of anodized extruded aluminum or welded steel. Aluminum material provides high strength at a lighter weight.
- Each product has uniquely designed packaging that undergoes a rigorous drop test. First-rate packaging prevents dings and scratches, so your product arrives in perfect condition.

Reliable Service & Information

CPI will respond to your needs quickly.

- Knowledgeable salespeople will perform a site survey and provide recommendations or on-site product evaluations.
- Customer Service, toll-free at 800-834-4969, will answer your questions and assist with ordering.
- The CPI Website offers comprehensive product and company information. Visit www.chatsworth.com.



Technical Support

You don't need to be a product expert.

- CPI Technical Support offers free layout services to help you configure your installation based on your equipment list and room dimensions. You will receive drawings and a Bill of Materials to explain the proposal.
- The same design tools are available for your use on the CPI Website, www.chatsworth.com/designtools.
- Contact Technical Support at techsupport@chatsworth.com.

Fast Availability

CPI products are available through local, national and international stocking distributors.

- To find a CPI Authorized Distributor or other purchasing options, call Customer Service at 800-834-4969 or visit the CPI Website, www.chatsworth.com/howtobuy.

Fast Fact

Custom Products

New products often begin as customer requests. CPI can customize a solution based on your needs and requirements. Simply call CPI Technical Support at 800-834-4969

Applications



Data Center

An organization's data center houses a variety of technological equipment to operate telephony, data and security systems. Four-post cabinet systems, or server racks, are used to secure servers and other heavy equipment. Because of the sensitive data and information stored on these devices, companies often choose enclosed cabinets with tops, sides and doors for greatest security. Properly deployed cabinets improve the total cooling efficiency of most data centers over open racks. Those who desire a clean, closed aesthetic appearance also decide to use cabinets instead of open systems.

CPI cabinets provide strength, security, stability and style. Almost all full-length freestanding cabinets feature 2,000 lb load rating, integrated cable management and a choice of doors. In addition, the MegaFrame® Family of Cabinet Systems is constructed of aluminum for a high-strength, lightweight, appealing design.

With heat-producing devices stored inside enclosures, data centers also require thermal management. Extreme temperatures can cause damage and reduce the lifespan of expensive servers, switches and other active components. CPI offers cooling options such as fans, integrated airflow baffles, blowers and perforated doors.

Furthermore, CPI's complete cabinet solution includes equipment support, remote user access monitoring, power distribution, grounding and bonding, seismic bracing and cable pathway — all necessary for an effective data center.



Co-Location

Small businesses, such as service firms and retail stores, often have limited square footage or little need for a dedicated data center. With only a few servers and small amounts of equipment to operate their networks, small businesses may share space with others or hire an ISP to host their technological needs off-site.

Regardless of the scenario, co-location environments have unique needs. Physical security — both into and within the facility — poses the greatest concern. The infrastructure and devices used by every company must be uniquely segregated and secured from each other in order to avoid damage, compromised access or transmission interference caused by people or nearby equipment.

CPI offers the E-Series ISP Co-Location Cabinet, which features three secure compartments in a 7'H cabinet. Each 14 RMU section includes a vertical power strip, optional rear door-mounted fan and lockable doors. In addition, the Co-Location Cabinet features a patented three-channel raceway on each side of the cabinet to separate power and data cables for each compartment. Therefore, three tenants or companies within a co-location center or shared data center can use the same cabinet without mingling devices or cables.

In addition, CPI offers electronic locking systems that ensure the greatest security because of their ability to monitor each entry and exit into the cabinet.



Seismic

In areas prone to seismic activity, earthquake design criteria specify that equipment should remain operational when subjected to tremors. Excessive motion that may cause undue strain on cable or conduit interconnections is not permissible in this environment. State, city and county governments often supplement design and building codes with additional requirements. Also, a licensed structural engineer must certify each installation.

Therefore, special equipment and procedures must often be used in areas of high seismic activity, often labeled Zone 4. CPI offers an assortment of products to stiffen, brace and stabilize racks, cabinets and rack-mounted equipment.

For example, the Seismic Frame® Cabinet has a reinforced steel inner frame to provide structural rigidity. It can withstand an 8.3 Richter scale earthquake, complies with Zone 4 Bellcore GR-63-CORE for Network Equipment Building Systems (NEBS), Section 4.4.1.1, and has a seismic load rating of 800 lb.

Other seismic equipment from CPI includes installation kits to secure your rack or cabinet to the floor, bracing kits to bolt the top of a cabinet to the wall, monitor straps and equipment tie-down kits.

Fast Fact

White Papers

For more information about thermal and power management, read CPI's White Papers at www.chatsworth.com/whitepapers

Success Story Maximize Data Center Cooling

APT wanted a solution that would lower CPU temperatures in a densely packed server environment and provide adequate cooling for additional servers.

Company: Bend, Ore.-based Advanced Power Technology (APT) designs, manufactures and markets high-performance power semiconductors for electrical power conversion, control and amplification.

Situation: As APT's data center grew, overheating in existing cabinets became a concern and the company was forced to find alternate cooling sources to lower critical server temperatures.

"We sought a cabinet solution that would remain relatively constant into the future as our data center continued to expand," says Gary Colton, director of information systems at APT. "Any new cabinet needed to fit easily into the configuration, while maintaining the clean appearance of the data center, and also provide additional functionality like directed cooling."

Trying to Stay Cool

Integrator Accord Telecom & Cable (Accord), selected by APT to drive the project, determined that directing the coldest air available to the most critical point of use would result in a higher heat transfer rate, better cooling and lower CPU temperatures while minimizing any major forklift upgrade to the existing HVAC systems in the main server room. In addition, Accord identified housing equipment at

APT that had become obsolete and needed replacement or retrofitting.

Existing MegaFrame® cabinets from Chatsworth Products, Inc. (CPI) had 400 CFM fans mounted on top with a large five-ton Liebert HVAC unit installed in the server room. The server room consisted of four 30"-deep cabinets.

As the center expanded, many servers were added to the MegaFrame cabinets, surpassing the capability of the fans. The heat load was recalculated, taking into account both current usage and potential expansion.

APT wanted a solution that would lower CPU temperatures in a densely packed server environment and provide adequate cooling for additional servers as it continued to grow. In addition, the company preferred a solution that would allow the existing cabinets to be utilized — with minor modifications, if necessary.

"Often, IT decision makers view cabinets and racks as simple boxes. This can be a costly mistake.

Making careful decisions ... can save significant money in terms of performance, longevity and expansion."

Todd Hurt, principal of Accord Telecom

Why CPI: Once the new heat load was established and an expansion plan designed, APT examined solutions from five vendors.

During the process, CPI introduced its Delphi ECS Enclosure Blower and demonstrated its ability to integrate completely with existing CPI (and other) cabinets. The blower, developed in conjunction with Delphi Corp., lowers cabinet hot spots by delivering cold air from the floor to the server fronts. **Continued on page 12**

Featured Product Dramatically Increase Cabinet Cooling With New Air Dam & Diverter

Deliver More Cooling

The Air Diverter allows air to enter directly into the cabinet from under the raised floor and be directed to the most critical point of use — the fan intakes for servers and other mission-critical rack-mounted equipment. This air is typically 7°F cooler than air delivered through a perforated floor tile in the aisle. This temperature difference can produce up to a 28% higher heat transfer rate across heat sinks attached to microprocessors in that equipment.

Receive More Cooling Benefit

Both the Air Diverter and the Air Dam will seal the front area of the cabinet from the rear to prevent mixing of heated exhaust air with cool air being delivered at the front of the cabinet. In addition, both will prevent rear door-mounted fans from overdrawing the server fans and pulling the cold air around the equipment.

Reduce Vertical Hot Spots

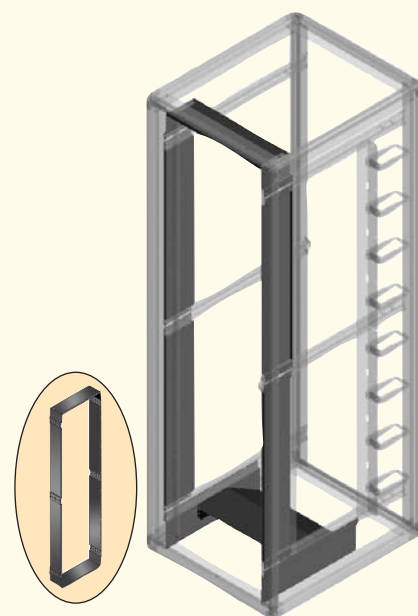
Top-mounted cabinet fans create hot spots in the center of the cabinet or starve small servers toward the top of the cabinets

by creating air velocity too high for smaller server fans to capture and pull through the equipment. The Air Dam and Air Diverter, by sealing off the front of the cabinet from the rear of the cabinet, will eliminate the need for top mounted fans in many applications and will maximize the effectiveness of rear door-mounted fans in higher heat-density applications.

Maximize Your Total Cooling Solution

Increase the benefits of the Air Dam and the Air Diverter by assuring that bayed cabinets share a side panel and by installing filler panels on the front mounting rails on all unused RMU. CPI's ECS Enclosure Blower will assist in directing under-floor chilled air into the cold air chimney space in the front of the cabinet. Sealing off cable access ports in floor tiles toward the rear of cabinets will optimize the air delivery capacity throughout the room and improve the overall CRAC efficiency in the room.

For more product information visit, www.chatsworth.com/cabinets



Air Diverter shown on a cabinet frame. Air Diverter consists of a bottom diverter tray, top and side baffles. Air Dam (inset) does not include the bottom diverter tray.

Build Your Own System:

Choose a Four-Post Platform



E-Series ISP

Co-Location Cabinet

(shown without side panel)
The E-Series provides three separate compartments within one unit, ideal for Internet Service Providers or in other environments that need separate, secure equipment compartments for multiple users while maximizing floor space.

- Constructed of high-strength, lightweight aluminum
- 2,000 lb load rating
- Accommodates 19" EIA or 23" rack-mounted equipment
- Available in 84" height and 30" or 36" depths

Seismic Frame® Cabinet

(shown as frame only)

Comply with Zone 4 seismic requirements to withstand the stress of an 8.3 Richter scale earthquake. These steel-reinforced cabinets may be necessary to meet building codes in certain geographic areas.

- Constructed of high-strength, lightweight aluminum with steel reinforcement
- 800 lb seismic load rating
- Accommodates 19" EIA rack-mounted equipment
- Available in 84" height and 36" depth



T-Series SteelFrame Cabinet

(shown as frame only)

The T-Series is CPI's most affordable freestanding enclosed system. Made of steel instead of aluminum, the T-Series provides an economical solution with the same CPI quality, design, construction and workmanship. The T-Series offers many of the same features as the MegaFrame, making the unit a high-value system for cost-sensitive projects.

- Constructed of welded steel
- 2,000 lb load rating
- Accommodates 19" EIA rack-mounted equipment
- Available in 78" or 84" heights and 23", 30", 36" or 39" depths

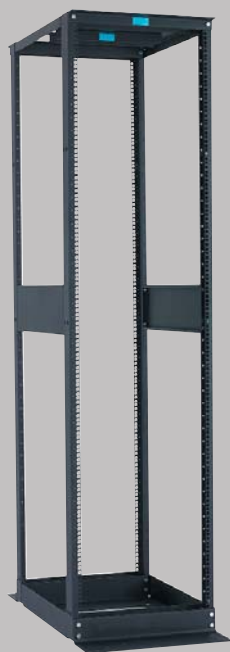


M-Series MegaFrame®

Cabinet

CPI's most popular and award-winning freestanding enclosure offers the most cable management capacity and greatest flexibility — with a variety of options in mounting rails, security and monitoring measures, thermal management and power distribution.

- Constructed of high-strength, lightweight aluminum
- 2,000 lb load rating
- Accommodates 19" EIA or 23" rack-mounted equipment
- Available in a wide range of heights and depths



QuadraRack™ Server Frame

If security is not an issue, an open four-post mounting system may be an option. The QuadraRack is a cost-effective solution that offers the strength and stability of a cabinet and the easy accessibility of a rack.

- Constructed of high-strength, lightweight aluminum with 14-gauge steel channels
- 1,000 lb load rating
- Square-punched rails
- Accommodates 19" EIA rack-mounted equipment
- Available in 7' height and 29" depth

C-Series SlimFrame™ Cabinet

(shown without side panel)

The SlimFrame provides the same features as the MegaFrame Cabinet in a smaller 24"-wide footprint. This thinner cabinet matches the typical dimensions of raised-floor tiles for strategic layouts and optimum use of floor space.

- Constructed of high-strength, lightweight aluminum
- 2,000 lb load rating
- Accommodates 19" EIA rack-mounted equipment
- Available in 72", 78" or 84" heights and 22", 30" or 36" depths



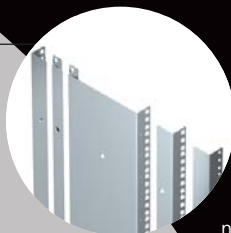
See Page 13
For Cabinet
Options

Build Your Own System:

Support Your Equipment

>> Vertical Mounting Rails

Every CPI Cabinet includes one set of four vertical equipment mounting rails to provide front and rear support for rack-mount equipment. Choose between five styles of mounting rails, which can be easily added or changed at a later time. A scale on the side of the cabinet assists with vertical alignment when adjusting the depth of the rails. Each rack-mount space (RMU) is marked and numbered on the rail, so equipment is placed precisely.



>> LCD Monitor+Shelf

The retractable 2 RMU LCD Monitor+Shelf saves rack space for other equipment. It can be left in the viewable position with the cabinet door closed, which cannot be done with similar combination monitor and keyboard shelves.



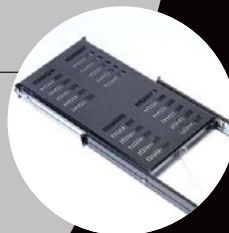
>> Keyboard+Tray

The retractable 1 RMU Keyboard+Tray can be positioned separately at a more comfortable user height and includes a touch pad, a separate mouse is not required.



>> Sliding Shelf

Use the 2 RMU, 32" deep, 160 lb capacity Sliding Shelf for equipment that does not mount directly to the rack. The entire shelf extends in front of the mounting rails and cables travel in a hidden flexible cable manager under the shelf.



>> 2,000 lb Caster Kit (MegaFrame® Kit Shown)

Most CPI Cabinets can support 2,000 lb of equipment on or off casters. Caster Kits allow cabinets to be quickly repositioned in the data center or lab. Retractable Stabilizer Kits (not shown) provide anti-tip protection for cabinets on casters.



Build Your Own System:

Provide Cable Management

>> Vertical Cable Manager

CPI Cabinets have integrated cable management space along both sides of the rack-mount space. One Vertical Cable Manager is included with every CPI Cabinet. Adjust the depth of the cable manager to align with equipment and add additional cable managers if required.



>> Horizontal Cable Tray

Horizontal Cable Tray allows side-to-side transition of cable within the cabinet and between adjacent bayed cabinets. Horizontal Cable Tray is attached to the cabinet frame and does not use any rack-mount space. It attaches at the top, middle or bottom depth rail and can be adjusted in depth to match the position of vertical cable managers. Sold in pairs.



>> Narrow Enhanced Vertical Cable Manager

Narrow Enhanced Vertical Cable Manager uses 1 RMU high cable fingers to guide patch and equipment cords into each rack-mount space. A snap-on hinged cover protects cables within the managers. A wide version is also available.



>> Front-to-Back Cable Manager

Route equipment cords front-to-back between two Narrow Enhanced Vertical Cable Managers to interconnect computers and routers with network switches. A wide version is also available.



>> 19" Horizontal Wire Management Panel

Place above or below patch panels and network switches to organize patch cords and equipment cords. Use with the Vertical Cable Manager. Cable spools provide a smooth horizontal-to-vertical transition.



>> Universal Horizontal Cable Manager

Place above or below patch panels and network switches. Cable fingers guide patch cords and equipment cords to their connections. A snap-on hinged cover protects cables within the manager. Use with the Narrow Enhanced Vertical Cable Manager.



Build Your Own System:

Select Power & Security

>> Vertical Power Strip

Distribute power to multiple pieces of equipment from a single power connection. Vertical Power Strips attach to the side of cabinets using no rack-mount space (0 RMU) and adjust front-to-rear to align with equipment. Available surge-protected and with twist-lock plugs. High-voltage, multi-input and three-phase models are also available.



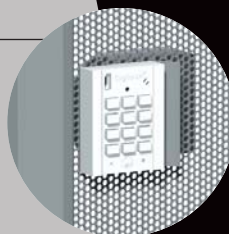
>> 19" Rack-Mount Power Strip

Distribute power to multiple pieces of equipment using only one rack-mount space (1 RMU). Available surge-protected and with twist-lock plugs. High-voltage, multi-input, and three-phase models are also available.



>> Digilock® Electronic Keypad Lock

The Digilock is a completely self-contained, fully-programmable keypad lock. Each lock can be opened with either a User Code and /or an electronic key. Locks are battery operated, no need for wiring. Optional software provides audit trails and programming options.



>> Power Distribution Unit

Power Distribution Unit (PDU) divides a single high power connection into multiple circuits. Connect multiple power strips or high-power equipment to the PDU.



>> External Battery Pack For Enterprise UPS

Extend the runtime of equipment in the event of a power failure by adding External Battery Packs to the Enterprise UPS. Batteries have independent chargers to reduce recharge time.



>> Enterprise UPS by MINUTEMAN®

UPSes are an essential component of every power solution because they correct power problems and provide battery power in the event of a power failure. The Enterprise UPSes can be monitored through a serial connection to a server using the included software or made network addressable with an optional SNMP card.



Build Your Own System:

Provide Thermal Management

>> Intelligent Fan Door

Rack-mount computer and data storage equipment exhaust heated air into the rear of the cabinet. Replace the High-Flow Perforated Metal Door with Intelligent Fan Door to actively remove heated air from the cabinet. Intelligent Fan Door uses temperature sensing variable speed fans that increase airflow as the temperature of the air rises.



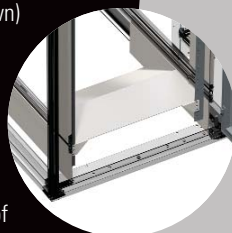
>> Delphi® ECS Enclosure Blower

Use in combination with Air Dam Kit or Air Diverter Kit to increase airflow at the front of the cabinet. Delphi ECS Enclosure Blower pushes air from the bottom of the cabinet or the plenum space below the raised floor up the front of the cabinet.



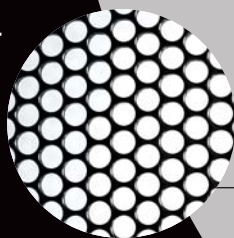
>> Air Diverter Kit (not shown)

Air Diverter Kit seals the space between the front door and the front of equipment within the cabinet and directs cool air from the base of the cabinet to the space between the door and equipment. Use Air Diverter Kit to improve cooling efficiency when cool air is delivered through a raised floor directly into the bottom of the cabinet. Use filler panels in open rack-mount spaces and a solid front door.



>> High-Flow Perforated Metal Door

High-Flow Perforated Metal Door provides the security of a solid metal door with 63% airflow. Use High-Flow Perforated Metal Door on the front or rear of cabinets to encourage front-to-rear airflow through rack-mount equipment.



>> Air Dam Kit

Air Dam Kit seals the space between the front door and the front of equipment within the cabinet. Use Air Dam Kit to improve cooling efficiency when cool air is delivered through a raised floor into a cool aisle at the front of the cabinet. Use filler panels in open rack-mount spaces and a High-Flow Perforated Door.



Part Numbers
On Pages 11-12



Ordering Information

On this page, you can find part numbers for all the solutions you've seen in this brochure; however, this page does not provide a complete list. For example, all part numbers indicate black products. Other colors and choices are available. Please refer to the CPI Mini-Catalog, call Technical Support at 800-834-4969 or visit www.chatsworth.com for complete ordering information.

Build Your Own System: Choose a Four-Post Platform (Page 6)

FOUR-POST PLATFORMS	
M-Series MegaFrame® Cabinet System (2,000 Load Rating)	
M1030-712	19W x 84"H x 30D, 45 RMU, #12-24 Tapped Rails, Includes Top and Sides, Plexiglass Front Door/Metal Rear Door, Assembled
M1054-732	19W x 84"H x 36D, 45 RMU, Square-Punch Rails, Includes Top, No Sides, Vented Plexiglass Front Door/Perforated Metal Rear Door, Assembled
M1043-742	19W x 84"H x 39D, 45 RMU, Square-Punch Rails, Includes Top and Sides, Perforated Metal Front Door/Perforated Metal Rear Door, Assembled
M1032-702	19W x 84"H x 30D, 45 RMU, #12-24 Tapped Rails, No Doors, Top or Sides, Assembled
C-Series SlimFrame Cabinet System (2,000 Load Rating)	
C1053-732	19W x 84"H x 36D, 45 RMU, Square-Punched Rails, Includes Top and Sides, Vented Plexiglass Front/Perforated Metal Rear
C1053-742	19W x 84"H x 36D, 45 RMU, Square-Punched Rails, Includes Top and Sides, Perforated Metal Front Door/Perforated Metal Rear Door
C1054-742	19W x 84"H x 36D, 45 RMU, Square-Punched Rails, Includes Top, No Sides, Perforated Metal Front Door/Perforated Metal Rear Door
T-Series SteelFrame Cabinet System (2,000 Load Rating)	
T2033-732	19"W x 84"H x 30"D, 45 RMU, Square-Punched Rails, Includes Top and Sides, Vented Plexiglass Front Door/Perforated Metal Rear Door, Assembled
T2033-742	19"W x 84"H x 30"D, 45 RMU, Square-Punched Rails, Includes Top and Sides, Perforated Metal Front Door/Perforated Metal Rear Door, Assembled
T2032-702	19"W x 84"H x 30"D, 45 RMU, #12-24 Tapped Rails, No Top, Sides or Doors
E-Series ISP Co-Location Cabinet System (1,600 Load Rating)	
E3053-732	19W x 7H x 36D, 3 x 13 RMU, Includes Two Side Panels, Fan and Custom-Keyed Locks, Vented Plexiglass Front Doors/Perforated Metal Rear Door, Assembled
E3055-732	19W x 7H x 36D, 3 x 13 RMU, Includes One Side Panel Custom-keyed Locks, Vented Plexiglass Front Doors/Perforated Metal Rear Door, Assembled
Seismic Frame® Cabinet System (800 Seismic Load Rating)	
11972-712	19"W x 7"H x 36"D, 43 RMU, Includes Top and Sides, Plexiglass Front Door/Metal Rear Door
11973-712	19"W x 7"H x 36"D, 43 RMU, Includes Top, No Sides, Plexiglass Front Door/Metal Rear Door
11973-702	19"W x 7"H x 36"D, 43 RMU, Includes Top, No Sides, No Doors
11974-702	19"W x 7"H x 36"D, 43 RMU, No Top, No Sides, No Doors
QuadraRack Server Frame (1,000 Load Rating)	
15053-703	QuadraRack Server Frame, 19"W x 7"H x 29"D, 45 RMU

Build Your Own System: Support Your Equipment (Page 7)

EQUIPMENT SUPPORT	
Upgraded Caster Kits	
13203-001	Caster Kit, MegaFrame Cabinet, 2000 lb Load Rating
13204-001	Caster Kit, SlimFrame Cabinet, 2000 lb Load Rating
13205-001	Caster Kit, SteelFrame Cabinet, 2000 lb Load Rating
Shelves	
13380-719	LCD Monitor+Shelf, 4-Post, 19"W x 2 RMU, Includes Monitor
13480-719	Keyboard+ Tray, 4-Post, 19"W x 1 RMU, Includes Keyboard
11914-719	Sliding Shelf, 19"W x 2 RMU x 32"D, 160 lb Load Rating, For Cabinets 36" or 39"D
11913-719	Sliding Vented Shelf, 19"W x 2 RMU, 32"D, 160 lb Load Rating, For Cabinets 36" or 39"D
12610-719	Fixed Vented Shelf, 19"W x 1 RMU x 20"- 36"D (telescoping depth), 100 lb Load Rating
Vertical Mounting Rails (One set of four included with each cabinet)	
12630-707	Multi-Mount Square-Punched Rails, 84"H Cabinet
12460-707	Tapped 12-24 Rails, 84"H Cabinet
11812-701	Sun® Equipment Mounting Rails, 84"H Cabinet
11953-700	IBM® eServer pSeries Server Mounting Rails, 84"H Cabinet
12468-700	HP® Servers Mounting Rails, 84"H Cabinet

Build Your Own System: Provide Cable Management (Page 8)

VERTICAL CABLE MANAGEMENT	
Vertical Cable Manager	
12465-707	Wide Vertical Cabling Ring Section, 7'H (one included with each MegaFrame, Seismic Frame and T2 SteelFrame Cabinet)
11809-700	Narrow Vertical Cabling Ring Section, 7'H (one included with each SlimFrame and T1 SteelFrame)
Vertical Cabling Ring Accessory Kit	
14068-701	Eight Additional 5.5"D x 2.3"W Cable Rings for Use With Wide Vertical Cable Manager
Wide Enhanced Vertical Cable Manager	
13170-700	4.75"W x 84"H x 8.77"D
Narrow Enhanced Vertical Cable Manager	
13171-700	3.50"W x 84"H x 5.23"D
HORIZONTAL CABLE MANAGEMENT	
19" Horizontal Wire Management Panel	
13070-719	19"W x 1 RMU x 6"D
13075-719	19"W x 2 RMU x 6"D
Rack Cabling Manager	
11752-719	Small Rings, 19"W x 1.59"L x 1.25"D
11753-719	Medium Rings, 19"W x 3.0"L x 1.6"D
Universal Horizontal Cable Manager	
30130-719	19"W x 2 RMU Manager with Cable Guides and Snap-on Cover
Horizontal Cable Tray	
10365-719	19"W x 2"H x 6"D
Large Horizontal Ring Panel	
11564-719	6"W x 2.8"H Heavy Duty Aluminum Rings on Panel for 19" Rack
Front-To-Back Cable Manager	
13169-701	1.74"W x 2.38"H, For Use With Enhanced Narrow Vertical Cable Manager (Includes 2)
13168-701	3.77"W x 2.38"H, For Use With Enhanced Wide Vertical Cable Manager (Includes 2)
CABLE MANAGEMENT ACCESSORIES	
23"-19" Rail Adapter Kit	
10587-701	Kit Includes 12 Adapters for Converting 23" Rail to 19"
Saf-T-Grip® Reusable Cable Management Strap	
02006-201	Saf-T-Grip Strap, Open Loop Series, Pack of 25, 6"L
02009-201	Saf-T-Grip Strap, Open Loop Series, Pack of 25, 9"L
02012-201	Saf-T-Grip Strap, Open Loop Series, Pack of 25, 12"L

Build Your Own System: Select Power & Security (Page 9)

POWER							
19" Rack-Mount Power Strips							
<i>Additional plug options, 20 & 30 Amp ratings, 250V ratings and IEC receptacles available.</i>							
Part Number	Volt/Amp	# of Outlets	Amp Meter	Surge Protected	Circuit Breaker	Plug Style	Shipping Weight
12816-702	125/15	8	No	No	Yes	Twist-Lock	5 lb
12816-704	125/15	8	No	Yes	Yes	Twist-Lock	5 lb
13239-752	125/15	10	Yes	No	Yes	Twist-Lock	7 lb
Vertical Mount Power Strips							
<i>Additional plug options, 20 & 30 Amp ratings, 250V ratings and IEC receptacles available.</i>							
Part Number	Volt/Amp	# of Outlets	Amp Meter	Surge Protected	Circuit Breaker	Plug Style	Shipping Weight
12848-703	125/15	20	No	No	Yes	Twist-Lock	12 lb
12848-704	125/15	20	No	Yes	Yes	Twist-Lock	12 lb
12848-753	125/15	20	Yes	No	Yes	Twist-Lock	12 lb

Continued on next page.

Cabinet Options

Below are M-Series MegaFrame® selections. Most of these are available on many of our cabinets. For more details or for ordering information, visit www.chatsworth.com or call 800-834-4969.

Prefix	1st Digit	2nd Digit	3rd Digit	4th Digit	-	5th Digit	6th Digit	7th Digit	
M	1	0	3	3	-	7	3	2	Example Part Number: M1033-732

1st Digit

How **wide** is your equipment mounting requirement?

1st Digit	EIA Width
1	19 in.
2	23 in.

2nd Digit

How **tall** of a cabinet do you require? 48" available in 24", 30" & 36" depth. Also, it is not available in reusable shipping carton.

2nd Digit	Cabinet Height	Rack-Mount Unit	
0	84 in. (7 ft)	45	
1	78 in. (6 ft 6 in.)	42	
2	72 in. (6 ft)	38	Note: 1 RMU=1.75 in.
5	48 in. (4 ft)	25	

3rd Digit

How **deep** is your equipment mounting requirement?

3rd Digit	Cabinet Depth (usable depth)
2	24 in.
3	30 in.
4	39 in.
5	36 in.

4th Digit

What type of **cabinet style** and **mounting rails** does your equipment require?

4th Digit	Rail Style	Side Panels	Top Panel
0	Tapped 12-24	Yes	Yes
1	Tapped 12-24	No	Yes
2	Tapped 12-24	No	No
3	Square-punched	Yes	Yes
4	Square-punched	No	Yes
5	Square-punched	No	No
A	HP® Rails	Yes	Yes
B	HP® Rails	No	Yes
C	HP® Rails	No	No
D	Sun® Rails	Yes	Yes
E	Sun® Rails	No	Yes
F	Sun® Rails	No	No
G	IBM® Rails	Yes	Yes
H	IBM® Rails	No	Yes
J	IBM® Rails	No	No

5th Digit

What **color** panels? Mounting rails and cable managers will be the same color as your panels.

5th Digit	Color
1	Gray
2	Computer White
7	Black

6th Digit

What kind of **doors** best fit your application?

Plexiglass doors allow you to view equipment. Solid doors offer no ventilation but hide equipment. High-flow perforated metal doors provide maximum ventilation — ideal for ambient cooling using a room-based air conditioner.

6th Digit	Door Style
0	No Doors
1	Front Door = Plexiglass Rear Door = Metal
2	Front Door = Metal Rear Door = Metal
3	Front Door = Vented Plexiglass Rear Door = Perforated Metal
4	Front Door = Perforated Metal Rear Door = Perforated Metal

7th Digit

How do you want the cabinet **packaged** for shipping?

7th Digit	Shipping
1	Partially Assembled (Knocked Down)
2	Fully Assembled
3	Assembled With Casters and Reusable Carton

Multi-Mount™ (Square-Punched) Mounting Rails

Ideal for mounting servers, these rails accommodate all types of cage nuts as well as traditional #12-24 screws for switches and patch panels giving you ultimate mounting flexibility. You keep the same cabinet and mounting system even if you change servers in the future. Available for all CPI cabinets. Rails include (25) #12-24 cage nuts and screws plus (16) M6 cage nuts and screws.



A variety of mounting rail styles are available

Tapped 12-24 Rails

Tapped 12-24 rails provide the easiest installation of patch panels, shelves, cable managers and other products that use simple through-holes in their mounting flanges. Rails include (50) #12-24 pilot-point screws.

HP® Rails

HP rails support any HP server but are required for "L"- and "N"-class servers. Not available for Seismic Frame, T-Series SteelFrame or E-Series ISP Co-Location Cabinets. HP Rails include (25) M-5 cage nuts and screws and (8) 5/16 - 18 hex nuts.

Sun® Rails

This three-piece system for Sun's unique side-mounting servers features a pair of Z-shaped rails. Not available for Seismic Frame, T-Series SteelFrame or E-Series ISP Co-Location Cabinets. Mounting hardware sold separately.

IBM® Rails

These specialty rails feature round mounting holes to accommodate the bullet-shaped pegs of the IBM® eServer pSeries. Not available for T-Series SteelFrame or E-Series ISP Co-Location Cabinets. Mounting hardware sold separately.



Double Doors (optional)

Double Doors use less aisle space when open, allowing technicians and equipment carts easy access to rack space being serviced. Also, narrower aisles can be planned since the doors are half as wide as standard doors. In small telecommunications rooms, Double Doors and casters can be combined to allow "roll-forward/roll-backward" access to equipment. Available individually or preinstalled on new MegaFrame® and SlimFrame™ Cabinets.



Electronic Locking Systems (optional)

Enhance equipment security with two types of electronic locking systems: one for simple, standalone use and the other with networking capabilities to open multiple cabinets simultaneously with a single lock. Available preinstalled on MegaFrame® Family of Cabinet Systems. To order, you must call Technical Support at 800-834-4969.



Ordering Information continued

Build Your Own System: Select Power & Security (Page 9) continued

UNINTERRUPTIBLE POWER SUPPLIES									
Enterprise UPS By Minuteman									
<i>120 Volt - 15 Amp UPS (Additional plug options, Amp ratings, 250V ratings and IEC receptacles available.)</i>									
Part Number	Load		Runtime (min.)		Internal Batteries		# of Outlets		Shipping Weight
	VA	Watts	Full Load	Half Load	Qty	Type	UPS	Surge	
13450-050	500	300	12.3	29.1	2	12VDC 4.5Ah	3	1	49 lb
13450-075	750	450	11.5	27.6	2	12VDC 7.2Ah	3	1	58 lb
<i>230 Volt - 30 Amp UPS (Additional plug options, Amp ratings, 250V ratings and IEC receptacles available.)</i>									
13451-230	2300	1380	9.6	23.5	4	12VDC 12Ah	7	1	94 lb
13451-320	3200	1920	5.4	13.9	4	12VDC 12Ah	7	1	101 lb
External Battery Pack For Enterprise UPS									
13460-001	External Battery Pack for 500-1500 VA Load UPS, 2 RMU								51 lb
13460-002	External Battery Pack for 2300-3200 VA Load UPS, 3 RMU								65 lb
13460-003	Extra Capacity External Battery Pack for 500-1500 VA Load UPS, 2 RMU								81 lb
13460-004	Extra Capacity External Battery Pack for 2300-3200 VA Load UPS, 3 RMU								112 lb
MN Series UPS By Minuteman									
Part Number	Maximum Load			Voltage	Internal Batteries		# of Outlets		Shipping Weight
	VA	Watts	Amps		Qty	Type	UPS	Surge	
13466-032	325	185	10 A	120	1	12VDC 3Ah	2	2	9 lb
13465-052	525	275	12 A	120	1	12VDC 7Ah	3	3	14 lb
POWER DISTRIBUTION UNIT									
PDU									
<i>Additional plug options, Amp ratings, Voltage ratings and IEC receptacles available.</i>									
Part Number	Overall Height	Volt/Amp	# of Outlets	Plug Type	Surge Protected	Circuit Breaker	Shipping Weight		
13099-005	1 RMU	120/24	12	Twist-Lock	Yes	Yes	11 lb		
13099-002	1 RMU	240/24	12	Twist-Lock	Yes	Yes	11 lb		

SECURITY	
Electronic Locks	
L-001	2 Digilock Keypad Locks, 1 Instant Programming Key

Build Your Own System: Provide Thermal Management (Page 10)

THERMAL	
Delphi ECS Enclosure Blower	
12900-001	Delphi ECS Enclosure Blower, 19" Rack-Mount, 2 RMU, 29"D, 250 CFM
12919-001	Filter Kit For Delphi ECS Enclosure Blower
12729-001	Foam Gasket Kit For Delphi ECS Enclosure Blower
12728-001	Blower Duct For Delphi ECS Enclosure Blower
Cabinet Airflow Baffles	
13336-710	Air Dam Kit, 5"D, Includes Top, Bottom and Side baffles
13337-710	Air Diverter Kit, 5"D Baffles, Includes Top, Bottom, Side Baffles and Bottom Diverter Tray
Intelligent Fan Doors	
13212-710	Fan Door, MegaFrame, 19"W x 7"H, 8 Fans, 12 VDC, .72 Amp (Max), Solid State Temperature Controls
13222-710	Fan Door, MegaFrame, 19"W x 7"H, 8 Fans 100 CFM each, 115 VAC, .19Amp at 60 Hz
Top-Mounted Fan Kit	
12480-701	Fan Kit, 115 VAC, 15 Amp, Black Only (use with solid door options)
Filler Panels	
30024-702	Filler Panel, 3/16" Thick x 19"W x 2 RMU
30024-703	Filler Panel, 3/16" Thick x 19"W x 3 RMU
Doors	
14032-710	High-Flow Perforated Metal Door for MegaFrame and Seismic Frame Cabinets
12882-710	High-Flow Perforated Metal Door for SlimFrame Cabinets
12684-710	High-Flow Perforated Metal Door for SteelFrame Cabinets
30372-710	Double Doors, High-Flow Perforated Metal Door for MegaFrame and Seismic Cabinets
30382-710	Double Doors, High-Flow Perforated Metal Door for SlimFrame Cabinets

Success Story continued



Delphi ECS Enclosure Blower

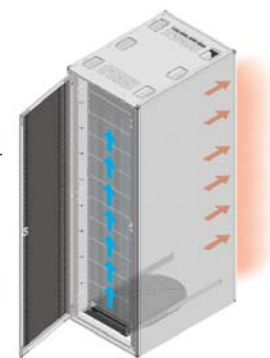
APT purchased four Delphi ECS Enclosure Blowers and filler panels to close cabinet fronts and maximize cooling, and three MegaFrame cabinets. During the installation, Accord retrofitted existing cabinets with the blowers. The installation required a slight modification to the enclosure blowers, so they would fit in the 30"-deep cabinets.

When the storage area network and a new blade server were installed, however, the 30"-deep cabinet was being stretched to capacity. CPI provided 7"-deep cabinet extensions, which avoided the need to replace the cabinets and allowed APT to standardize on the 30"-deep cabinets to maintain a symmetrical footprint in the data center.

In the APT data center, structural wiring is separated from the server cabinets. The enclosed CPI cabinets with the blowers house the servers, and two CPI relay racks are used for wiring. The cabling includes CAT 3, UTP voice, CAT 5 legacy, and AMP CAT 5e 350-MHz UPT/62.5/125, 10/125 optical cable and 200-pair CAT 3. A 4,000-foot underground fiber/copper backbone infrastructure (single mode and multimode)

connects the remaining campus with the data center. The network serves about 400 users.

The entire process, from research to installation, took about six weeks to complete. The approximate cost of the cabinets, enclosure blowers, special orders and installation was less than \$25,000. APT's HVAC system, combined with CPI's enclosure blower and high-flow perforated metal doors, created a 14-degree centigrade reduction in CPU temperatures. With the blower solution, APT has been able to extend CPU life through consistent cooling, and, at the same time, prevent system failures due to overheating.



Out of the Box

"Often, IT decision makers view cabinets and racks as simple boxes," says Todd Hurt, principal of Accord Telecom. "This can be a costly mistake. Making careful decisions when selecting cabinet hardware can save significant money in terms of performance, longevity and expansion."

Cabinets are often the most important component in the design of a data center and must be selected with growth in mind, Colton adds. A cabinet/rack solution must be able to adapt and meet the changing environment of an evolving server room in order to preserve symmetry, consistency and longevity of the ROI on the original purchase.

As the leading provider of structural support systems, CPI delights you with :

Quality Products

- A Total System Solution
- Standards-Compliant
- UL Listing and Certification
- Numerous Patent Awards
- Heavy-Duty Packaging

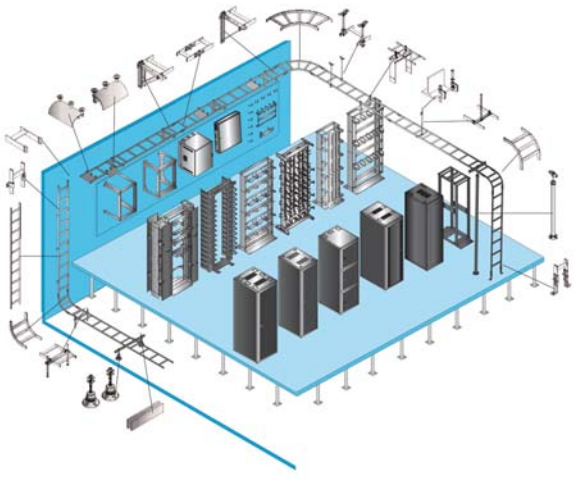
Quality Services

- Free Layout Services
- Detailed Drawings
- Bill of Materials
- Custom Products
- Online Design Tools

Quality People

- Motivated Employee-Owners
- Knowledgeable Salespeople
- Customer Service & Technical Support
- Distributor and Contractor Partners

The CPI Total Solution Includes:



- Equipment Support
- Cable Management
- Cable Pathways
- Grounding & Bonding

- Security & Monitoring
- Thermal Management
- Power Distribution
- Seismic Bracing

Find more information about CPI Freestanding Cabinets at

www.chatsworth.com/cabinets

800-834-4969

techsupport@chatsworth.com



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