Product Brochure

Paramount Enclosure System Optimized for Efficiency



Switch@N to Eaton.

Keeping Pace with Technology

Optimized solutions

The new PMT Paramount series provides optimized solutions balancing the requirements of airflow management, greater power demands and higher density cabling. From a seal between hot and cold air environments to flexible brushed network tops, to dual rear PDU mounting with no additional bracket - the PMT family of Paramount enclosures can help you solve your most demanding data center challenges.

Today's data center

Today's enclosures go well beyond simple cabinets that solely house servers; essentially they are mini data centers that reside within the company's physical data center. In an effort to regain control of increased energy costs to run the company's data center, IT managers and their colleagues need to consider the IT rack as an integral and necessary component of the airflow plenum design. While legacy data center design factors are still relevant, the ability to use the rack as a plenum provides IT managers with a new weapon in their arsenal.

Each rack can be designed and implemented as an isolated environment. Managers now have the freedom to set the airflow requirements of individual racks as they relate to the larger plenum system.

Rack hygiene

The concept of Rack Hygiene is a term that encompasses the identification, analysis and repair of hot air leakage areas/infusion paths and cold air bypass routes within and around individual data center racks.

Rack Hygiene is a newly coined term used to describe the care in which the rack envelope is designed, controlled and maintained. The rack envelope consists of the entire volume of space from the floor to top of the rack itself, and perhaps a measurement of rise above the floor to include empty space above the rack that would rise to the "heat deck."

Regardless of the rack's dimensions, it is incumbent upon the data center professional to employ solutions that provide an impenetrable barrier around the front plane of the rack in a front-to-back dominated airflow environment.

The tighter the seal provided around the front of the rack – exclusive of a thorough blanking panel strategy – the closer one can come to achieving rack hygiene.

Enclosure integration

Eaton's Paramount Enclosure System supports the integration of a wide range of accessory products including ePDUs for power distribution, UPS products for power backup, airflow management elements including chimneys and compatibility with end-ofrow doors and other Eaton containment solutions, cable management and a full range of monitoring and management products. With a focus on energy efficiency, a solution that provides a holistic and integrated approach is critical.

Additionally, the enclosure solution must interface seamlessly with the surrounding data center environment. Key considerations in a solutions approach include cable egress and ingress, interface of air management elements with the thermal/cooling infrastructure, aligning the ePDU and UPS requirements with the anticipated workload in the enclosure and ensuring that all necessary grounding and ESD factors are addressed. Eaton's Application Engineers are here to assist you in determining the solution that best matches your data center needs.



Energy Efficient Solutions for High-density Equipment

Integrating key design elements

Energy efficient designs require attention to a wide range of enclosure elements including cable management, airflow, heat containment, power distribution and management and environment monitoring/management. The Paramount PMT design addresses each of these elements. Cable management is critical for ensuring air intake/exhaust paths are clear to maximize equipment cooling. Top panels with brushes provide airflow management while facilitating overhead cabling. Blanking panels are key to maintaining cold/hot aisle configurations and minimizing any recirculation of air. Chimneys provide a cost effective yet high performance option for hot air exhaust – up to 30KW! Eaton's extensive offering of managed and monitored ePDUs – which mount directly to the PMT frame – provide a wide range of sensor and communication options for managing an installation. The bottom line – Paramount offers integrated energy efficient options.

Cable management features are built into the frame.

Top panels include brush strips and cableways.



Eaton's Telescopic Chimney solution channels hot air from IT equipment, through the chimney, to the return plenum, for increased CRAC efficiency.



Integrated power distribution mounting is built into the frame.



Monitor and manage system energy with Eaton Smart ePDUs.



Frames feature grommet holes to allow cable pass through while managing airflow.



Blanking panels are available to seal open U spaces.

Divider panels feature grommet holes with covers to manage airflow while providing side-to-side cabling.

Paramount Configurations with Integrated Airflow Management

Preconfigured Paramount solutions provide a full complement of rack hygiene, cable management, and ePDU mounting features. These include high flow doors, air seals to ensure minimal leakage between hot/cold aisles, and optimized ePDU mounting to minimize interference with the rackmounting space. Best of all, this turnkey solution is ordered as a single product number, making the ordering process quick and easy.

Rack Hygiene configuration features:

- Enhanced frame ensures minimal leakage around the front perimeter and also features oval grommets in front frame verticals for cable pass-thru between racks
- High flow single front door with 75 percent open perforation pattern
- High flow split rear door with 75 percent open perforation pattern
- Top panel with two six-inch wide brushed openings for cable egress
- Divider panel with cable pass-thru installed on left side; grommets included on cable pass through to manage airflow
- 19 inch EIA-310 vertical mounting rails (quantity four) with U-markings
- Vertical blanking panels (quantity two) with grommeted cable pass-thru for 30 inch wide models
- 2U cable management rings (quantity four) pre-installed in rear right frame vertical
- Grounding pre-installed
- Color: Black

PRECONFIGURED PARAMOUNT ENCLOSURES					
Part Number	RU	Height	Width	Depth*	Typical Application
PMT422442H	42U	81"	24"	42"	Server
PMT422448H	42U	81"	24"	48"	Server
PMT423042H	42U	81"	30"	42"	Server/Network
PMT423048H	42U	81"	30"	48"	Server/Network
PMT442442H	44U	84"	24"	42"	Server
PMT442448H	44U	84"	24"	48"	Server
PMT443042H	44U	84"	30"	42"	Server/Network
PMT443048H	44U	84"	30"	48"	Server/Network
PMT482442H	48U	91"	24"	42"	Server
PMT482448H	48U	91"	24"	48"	Server
PMT483042H	48U	91"	30"	42"	Server/Network
PMT483048H	48U	91"	30"	48"	Server/Network
PMT512442H	51U	96"	24"	42"	Server
PMT512448H	51U	96"	24"	48"	Server
PMT513042H	51U	96"	30"	42"	Server/Network
PMT513048H	51U	96"	30"	48"	Server/Network

* Overall depth includes doors.

High Flow Split Door	D-ring Kit	Top Panel

OPTIONAL SPLIT SIDE PANELS

Part Number	Description
JSPS8140	42U x 40D Solid Side Panel
JSPS8145	42U x 45D Solid Side Panel
JSPS8440	44U x 40D Solid Side Panel
JSPS8445	44U x 45D Solid Side Panel
JSPS9140	48U x 40D Solid Side Panel
JSPS9145	48U x 45D Solid Side Panel
JSPS9640	51U x 40D Solid Side Panel
JSPS9645	51U x 45D Solid Side Panel

Paramount Conversion Kits for Cisco Switches

For Cisco switches

Standard Paramount configurations with Rack Hygiene can be converted to accommodate Cisco switch applications.

Features

- Integrated air seal panels to convert side-to-side into front-to-back airflow
- Vertical lacing bars for managing large bundles of data cables
- Pre-installed adjustable chassis support brackets for supporting heavy switches



* Cisco Compatible



CONVERSION KITS FOR CISCO SWITCHES

Part Number	Cisco Model	Converts Paramount Model	
6509CVK42UPM	Catalyst 6509-E	PMT423042H and PMT423048H	
6509CVK44UPM	Catalyst 6509-E	PMT443042H and PMT443048H	
6509CVK48UPM	Catalyst 6509-E	PMT483042H and PMT423048H	
6509CVK51UPM	Catalyst 6509-E	PMT513042H and PMT513048H	
6513CVK42UPM	Catalyst 6513	PMT423042H and PMT423048H	
6513CVK44UPM	Catalyst 6513	PMT443042H and PMT443048H	
6513CVK48UPM	Catalyst 6513	PMT483042H and PMT423048H	
6513CVK51UPM	Catalyst 6513	PMT513042H and PMT513048H	
*7010CVK42UPM	Nexus 7010	PMT423048H	
*7010CVK44UPM	Nexus 7010	PMT443048H	
*7010CVK48UPM	Nexus 7010	PMT483048H	
*7010CVK51UPM	Nexus 7010	PMT513048H	
9513CVK42UPM	MDS 9513	PMT423042H and PMT423048H	
9513CVK44UPM	MDS 9513	PMT443042H and PMT443048H	
9513CVK48UPM	MDS 9513	PMT483042H and PMT483048H	
9513CVK51UPM	MDS 9513	PMT513042H and PMT513048H	
* 0: 0	·		

* Cisco Compatible

Cisco 7018 switch enclosure

Eaton's Cisco 7018 switch enclosure is designed specifically to store, cool and power the Cisco Nexus 7018 switch. Based on Eaton's Paramount PMT frame, our turnkey enclosure has a 40" or 42" wide footprint. This consists of a standard 24" wide frame with 6" or 8" side extensions which support the 7018 airflow requirements and also provides additional cable management.

Features

- Specialized airflow containment design that is compliant with the Cisco switch support chassis brackets
- Integrated cable management
- Available in two heights: 44U and 51U

PARAMOUNT FOR CISCO NEXUS 7018 SWITCH

Part Number	RU	Height	Width	Depth
*PMT7018SW444048	44U	84"	40"	48"
*PMT7018SW444248	44U	84"	42"	48"
*PMT7018SW514048	51U	96"	40"	48"

Note: The 44U version is available in two widths to support enhanced cable management options

* Cisco Compatible

Airflow Management Solutions

Managing airflow within a data center is a critical element of an energy-efficient solution. Eaton offers the broadest range of solutions including:

- Aisle containment solutions to support hot and cold aisle configurations
- · Enclosure chimneys to manage/enhance heat exhaust
- Blanking panels and conversion kits to manage airflow within the enclosure

All three solutions can be utilized individually or integrated together.



Rack-based containment

The off-set chimney design of the Heat Containment System[®] (HCS) accommodates existing cable management without re-routing or disconnecting cables and power.

Aisle containment solutions

Industry studies indicate that an estimated 40 percent of the cool air supplied to traditional data centers is wasted because it bypasses the intended IT equipment and returns directly to the hot air intake of the CRAC.

Adopting a cold or hot aisle containment strategy increases air efficiencies, allowing a significant reduction of cold air supply, translating to longer hardware life and valuable energy savings.

Eaton's solutions can be equally effective for both hot and cold aisles in the data center.



Vertical Overhead Containment Ideal for long rows of hot aisle or cold aisle containment for improved data center efficiency. Contact your local account manager for a quote and layout.

Chimney solutions

Chimneys combine flexibility and performance in a cost effective solution for managing heat exhaust in the data center. As your applications grow or you consolidate servers, cooling capacity of the enclosure can be increased significantly via a chimney solution. Flexibility is achieved by enabling upgrades on specific enclosures or on a complete row. Additionally, the chimneys may be used with aisle containment for even greater efficiency.



Total Aisle Containment

Gain total control of your airflow dynamics by utilizing Eaton's aisle containment ceiling, aisle containment duct and end of row doors which complete the total aisle containment solution. For details on Eaton's extensive range of containment options, visit: www.eaton.com/airflowmanagement.



Heat Containment System Eaton's Paramount Enclosure with integrated HCS (offset duct).



Telescopic Chimney Eaton's Paramount Enclosure with the Telescopic Chimney (straight duct).

Chimney Solutions



CFD analysis

Computational Fluid Dynamics (CFD) model showing airflow through a passive telescopic chimney. Contact your local representative for a CFD analysis at your site.

PARAMOUNT COOLING SCALABILITY solid side and top panels

Load (kW)	Rear Door
Up to 3.5 kW	Perforated Door
Up to 26 kW	Solid Door with HCS Chimney and Optional 2600 CFM Fans
Up to 30 kW	Solid Door with Passive HCS Chimney

HEAT CONTAINMENT SYSTEM BASE (OFFSET)

Part Number	Base Height (in.)
HCS240001B	14.85
HCS30001B	14.85



Optional fans Available upon request.

TELESCOPIC CHIMNEY (STRAIGHT)

		Height Adjustment (in.)	
Part Number	Width (in.)	Min.	Max.
EXTTC1219	23	12	19
EXTTC1728	23	17	28
EXTTC2645	23	26	45
EXTTC4376	23	43	76

Chimney solutions

With Eaton's chimney solutions, you can achieve close-coupled heat containment up to 30 kW. Our rack containment solutions ensure that hot air created by your IT equipment is channeled from the enclosures through the chimney and returned to the data center's air conditioning units. This virtually eliminates air remixing and stratification and drives higher efficiencies with your air conditioning units.

HEAT CONTAINMENT (OFFSET) CHIMNEY

		Height Adjı	ıstment (in.)
Part Number	Width (in.)	Min.	Max.
HCSCHM241	24	0	1
HCSCHM242	24	0	2
HCSCHM2435	24	3	5
HCSCHM2459	24	5	9
HCSCHM241014	24	10	14.99
HCSCHM241519	24	15	19.99
HCSCHM242024	24	20	24.99
HCSCHM242529	24	25	29.99
HCSCHM243034	24	30	34.99
HCSCHM243539	24	35	39.99
HCSCHM244044	24	40	44.99
HCSCHM244548	24	45	48.99
HCSCHM301	30	0	1
HCSCHM302	30	0	2
HCSCHM3035	30	3	5
HCSCHM3059	30	5	9
HCSCHM301014	30	10	14.99
HCSCHM301519	30	15	19.99
HCSCHM302024	30	20	24.99
HCSCHM302529	30	25	29.99
HCSCHM303034	30	30	34.99
HCSCHM303539	30	35	39.99
HCSCHM304044	30	40	44.99
HCSCHM304548	30	45	48.99

Note: A base is required for the Offset Chimney. No base needed for the Telescopic Chimney.

Integrated Power **Management Solutions**



Check out Eaton's new high performance G3 ePDU offering at: www.eaton.com/ePDUG3

What was once a simple task of mounting 15-20 Amp power strips has evolved into a calculated strategy to manage powerintensive servers in densely packed enclosures. Eaton provides the widest variety of power and power management capabilities through its basic, monitored and switched power distribution offering with solutions ranging from .5 kVA up to 15+ kVA.

Three-phase power distribution

Running three-phase power directly to the rack reduces the required number of feeds/ whips/drops, resulting in lower installation costs. In addition, three-phase power offers the flexibility of providing 120V and 208V receptacles on a single unit. Eaton offers a broad range of three-phase power distribution solutions and also offers a 400V solution.

Basic/monitored/switched power

Eaton's broad ePDU product line offers a reliable solution to your every day power distribution needs. From basic solutions, to monitoring at the outlet level, Eaton provides horizontal and vertical rackmounted solutions from 1-15+ kVA. The plugand-play architecture, industry leading software and spacesaving mounting options make these units the perfect solution for your IT environment.



Optimized rear PDU mounting solutions

The Paramount "H" style Rack Hygiene frame features optimized rear PDU mounting. The rear upright is wider and can mount up to two typical 0U ePDUs side-by-side with no additional bracket. Because the ePDUs are mounted on the upright, there is no interference between the PDU and the equipment mounting space between the rails.

Space-saving mounting

Installing your new ePDU is

in minimal rack space (1U or

2U), or vertically in rack side

space for IT equipment.

hardware included, ready

to install. Some units use a

models that mount horizontally

pockets or rear channels or on a

wall or floor, saving traditional U

The units come with mounting

button-mount system and can

be mounted in keyhole-type openings in popular racks, with no tools required. Depending on rack size, some units may

require additional brackets.

quick and easy. There are

options



Bracket mount with clip feet

Benefits of vertical mounts

Eaton ePDUs can be mounted vertically, allowing you to save valuable space. You can mount them vertically in rack side pockets, rear channels, or on a wall, which allows you to save traditional U space for IT equipment.



LCD Display The G3 ePDU's LCD pixel display allows viewing of power and total input.

Total Input Energy 9.702 kWh since 12/09/2013 00:32:22

IEC Outlet Grip

Eaton's new patented IEC outlet grip secures plugs in place with a lever-activated grip that is integrated into each outlet.

Integrated Power Management Solutions



Power Xpert[®] Software

An ideal facility enterprise solution, Power Xpert supports the full offering of Eaton's electrical products and offers support for third party products. Power Xpert monitors alarms, logs current readings and environmental sensors on an ePDU. There is a web-based dashboard view that allows you to drill down to a specific ePDU. Using the optional reporting package, it can generate customized power utilization reports.

Power Xpert also allows you to customize the conditions under which alarms are triggered and can run deployment validation tools during installation so all key setup requirements are automatically validated. To learn more, please visit eaton.com/pxs.

Temperature Sensors

Eaton Monitored ePDUs allow remote monitoring of the current draw of the unit and individual sections. Equipped with these 10' temperature sensors, you can monitor the temperature inside your enclosure.



Environmental Monitoring

You can utilize the Environmental Monitoring Probe to track internal and external temperatures, humidity and contact closure. This information allows you to operate the ePDU up to 50°C (122° F), in turn reducing cooling costs. (Part number EMP001).

Uninterruptible power supply

Eaton helps protect critical equipment by providing uninterruptible power, backup power systems and power management through rackbased UPSs. Eaton delivers clean and efficient backup power from the desktop to the data center, protecting your critical IT systems. These units are integrated with ABM® technology, which increases battery service life up to an additional 50 percent.



BladeUPS

The scalable and modular BladeUPS expands power protection from 12 to 60 kW in a single 19" rack. Key solution for blade server and data center environments.



9130 Rack UPS

The 9130 UPS delivers premium performance with a 0.9 power factor and with greater than 95 percent efficiency. Key solution for small to medium business data centers and networking solutions.



5PX Rack/Tower UPS

The 5PX UPS offers integrated power management with 99 percent efficiency and up to 28 percent more power available. Key solution for networking and server applications, as well as virtual environments.

Cable Management Made Simple

Paramount takes a unique approach by addressing cable and access management concurrently. From a structural standpoint, Paramount's frame design efficiently accommodates large quantities of cables and provides unmatched enclosure–to– enclosure, raised floor and overhead cable access. This approach is not only crucial to safeguarding cabling, but it is required to maximize airflow and provide clear, easy access to equipment.



Vertical Blanking Panels The vertical blanking panels combine cable management from front to back with airflow management – ensuring minimal leakage between the hot and cold regions of the enclosure.



High-density Cable Organizer Organize and manage large amounts of cables front-to-rear in compliance with TIA/EIA-568-A bend radiuses.



Grommets Grommets on cableways and divider panels ensure access between enclosures, protect cables from damage and provide

an additional air seal.





Waterfalls Provide the optimal bend radius for CAT 5e/6 and fiber cables as specified in TIA/EIA-568-A.



Vertical cable manager Creates a vertical trough in the side channel that allows up to 300 CAT 5e/6 fiber cables.



Vertical cable distribution spools Manage surplus power cords or network cables (available in Side Cable Chase only).



Brush Strips Brushes enable egress of cables through the top panel while providing airflow management within the enclosure.

Cable Management Made Simple





Side Cable Chase

Provides 8" (203mm) or 12" (305mm) plenum for management of network cables, power strips and power cords. Routing cables away from the back of equipment optimizes airflow and reduces heat build-up by allowing air to exhaust from the enclosure.



Overhead cable management system Allows users to route cables on top of the enclosure and offers separate trays for power and data.



Active equipment cable managers Provide bend radius support for patch cables.



Rear upright

The rear upright provides integral cable management features with keyholes provided. Add additional lacing bars as needed (available in multiple widths).

Seismic Enclosure Solutions

Seismic

Seismic enclosures are the solution of choice for installations where shock and vibration are factors. This includes earthquake zones, transportation (railway and shipboard) and high vibration environments such as power plants and airports. Seismic enclosures protect your electronics by providing enhanced frame strength and rigidity.

PARAMOUNT NEBS FRAMES

Item Number	Size	Description
JW772434Z4	38U x 24"W x 34.5"D	Welded Seismic Paramount Frame
JW772440Z4	38U x 24"W x 40"D	Welded Seismic Paramount Frame
JW773034Z4	38U x 30"W x 34.5"D	Welded Seismic Paramount Frame
JW773040Z4	38U x 30"W x 40"D	Welded Seismic Paramount Frame
JW842434Z4	42U x 24"W x 34.5"D	Welded Seismic Paramount Frame
JW842440Z4	42U x 24"W x 40"D	Welded Seismic Paramount Frame
JW843034Z4	42U x 30"W x 34.5"D	Welded Seismic Paramount Frame
JW843040Z4	42U x 30"W x 40"D	Welded Seismic Paramount Frame

Note: U Height is 'usable rack mounting space'

PARAMOUNT NEBS SIDE PANELS

Item Number	Size	Description
JSPS7734Z4	38U x 34"D	Solid Side Panel - Seismic
JSPS7740Z4	38U x 40"D	Solid Side Panel - Seismic
JSPS8434Z4	42U x 34"D	Solid Side Panel - Seismic
JSPS8440Z4	42U x 40"D	Solid Side Panel - Seismic

PARAMOUNT NEBS TRIM KITS

Item Number	Size	Description
JFTK24Z4	24"	Seismic Paramount Frame Trim Kit
JFTK30Z4	30"	Seismic Paramount Frame Trim Kit

PARAMOUNT RAILS

Item Number Size		Description
JRM10000	44U	Four Rail Kit375" Square Holes (for use in JW84 frames)
JRM10003	40U	Four Rail Kit375" Square Holes (for use in JW77 frames)

PARAMOUNT NEBS DOORS (FULL DOORS ONLY)

Item Number	Size	Description	
JDF7724Z4L	77"H x 24"W	Seismic Door Frame - Left Hinged	
JDF7724Z4R	77"H x 24"W	Seismic Door Frame - Right Hinged	
JDF7730Z4L	77"H x 30"W	Seismic Door Frame - Left Hinged	
JDF7730Z4R	77"H x 30"W	Seismic Door Frame - Right Hinged	
JDF8424Z4L	84"H x 24"W	Seismic Door Frame - Left Hinged	
JDF8424Z4R	84"H x 24"W	Seismic Door Frame - Right Hinged	
JDF8430Z4L	84"H x 30"W	Seismic Door Frame - Left Hinged	
JDF8430Z4R	84"H x 30"W	Seismic Door Frame - Right Hinged	

PARAMOUNT NEBS DOOR INSERTS

Item Number Size		Description
JDP77242	77"H x 24"W	Seismic Door Insert - Perf
JDP77302	77"H x 30"W	Seismic Door Insert - Perf
JDP84242	84"H x 24"W	Seismic Door Insert - Perf
JDP84302	84"H x 30"W	Seismic Door Insert - Perf

Features

- Tested to NEBS Zone 4 via Telecordia GR-63-CORE
- Weight loads up to 1300 lbs. (590 kg)
- Welded 12 gauge steel enclosures
- Range of enclosure sizes offering 38U to 42U of usable space
- 24" and 30" enclosure widths
- Overall heights: 77" and 84"





Flexible front-to-back mounting for vertical rails

Seismic bracing ensures stability.



Reinforced corners

PARAMOUNT TOP PANELS

Item Number	Size	Description
JTPS2434	24" x 34.5"D	Solid Top Cover
JTPS2440	24" x 40"D	Solid Top Cover
JTPS3034	30" x 34.5"D	Solid Top Cover
JTPS3040	30" x 40"D	Solid Top Cover
JTP10000	24" x 34.5"D	Networking Top Cover - Solid with Side Cutouts
JTP10001	24" x 40"D	Networking Top Cover - Solid with Side Cutouts
JTPPNW2434	24" x 34.5"D	Networking Top Cover - Perfed with Side Cutouts
JTPPNW2440	24" x 40"D	Networking Top Cover - Perfed with Side Cutouts
JTPPNW3034	30" x 34.5"D	Networking Top Cover - Perfed with Side Cutouts
JTPPNW3040	30" x 40"D	Networking Top Cover - Perfed with Side Cutouts

PARAMOUNT NEBS DIVIDER PANELS

Item Number	Size	Description
JVD7734SZ4	38U x 34.5"	Vertical Cab. Divider - Solid, Seismic
JVD7740SZ4	38U x 40"	Vertical Cab. Divider - Solid, Seismic
JVD8434SZ4	42U x 34.5"	Vertical Cab. Divider - Solid, Seismic
JVD8440SZ4	42U x 40"	Vertical Cab. Divider - Solid, Seismic

Paramount – Configured to Order

Paramount's modular, flexible design enables you to configure a solution which best meets your application requirements. The four-step process is simple.



2

DOORS Part Number

JDHF8124L JDHF8130L

JDHF8424L

JDHF8430L

JDHF9124L

JDHF9130L

JDHF9624L

JDHF9630L JDDHF8124

JDDHF8130

JDDHF8424

JDDHF8430

JDDHF9124

JDDHF9130

JDDHF9624

JDDHF9630

Select your frame from Paramount's extensive range of sizes – from 42U to 51U – in multiple widths and depths.

FRAMES

Part Number	Description
PMTFRM422440	42U Frame – 81H x 24W x 40D
PMTFRM422445	42U Frame – 81H x 24W x 45D
PMTFRM423040	42U Frame – 81H x 30W x 40D
PMTFRM423045	42U Frame – 81H x 30W x 45D
PMTFRM442440	44U Frame – 84H x 24W x 40D
PMTFRM442445	44U Frame – 84H x 24W x 45D
PMTFRM443040	44U Frame – 84H x 30W x 40D
PMTFRM443045	44U Frame – 84H x 30W x 45D
PMTFRM482440	48U Frame – 91H x 24W x 40D
PMTFRM482445	48U Frame – 91H x 24W x 45D
PMTFRM483040	48U Frame – 91H x 30W x 40D
PMTFRM483045	48U Frame – 91H x 30W x 45D
PMTFRM512440	51U Frame – 96H x 24W x 40D
PMTFRM512445	51U Frame – 96H x 24W x 45D
PMTFRM513040	51U Frame – 96H x 30W x 40D
PMTFRM513045	51U Frame – 96H x 30W x 45D

Select your doors; high flow (75% perf) doors are

Description High flow door, left hand – 42U x 24W

High flow door, left hand - 42U x 30W

High flow door, left hand - 44U x 24W

High flow door, left hand - 44U x 30W

High flow door, left hand - 48U x 24W

High flow door, left hand - 48U x 30W

High flow door, left hand – 51U x 24W High flow door, left hand – 51U x 30W

High flow split door - 42U x 24W

High flow split door - 42U x 30W

High flow split door - 44U x 24W

High flow split door - 44U x 30W

High flow split door - 48U x 24W

High flow split door - 48U x 30W

High flow split door – 51U x 24W High flow split door – 51U x 30W

Note: Right-hinged option available upon request.

available in full or split configurations.





Select either side panels or divider panels (for bayed cabinets).

DIVIDER / SIDE PANELS

Part Number	Description
PMTJVD4242S	Solid divider panel – 42U x 42D
PMTJVD4248S	Solid divider panel — 42U x 48D
PMTJVD4442S	Solid divider panel – 44U x 42D
PMTJVD4448S	Solid divider panel — 44U x 48D
PMTJVD4842S	Solid divider panel – 48U x 42D
PMTJVD4848S	Solid divider panel – 48U x 48D
PMTJVD5142S	Solid divider panel – 51U x 42D
PMTJVD5148S	Solid divider panel – 51U x 48D
JSPS8140	Solid side panel – 42U x 42D
JSPS8145	Solid side panel – 42U x 48D
JSPS8440	Solid side panel – 44U x 42D
JSPS8445	Solid side panel – 44U x 48D
JSPS9140	Solid side panel – 48U x 42D
JSPS9145	Solid side panel – 48U x 48D
JSPS9640	Solid side panel – 51U x 42D
JSPS9645	Solid side panel – 51U x 48D







TOPS

Part Number	Width (in.)	Depth (in.)
PMTNWTP2442	24	42
PMTNWTP2448	24	48
PMTNWTP3042	30	42
PMTNWTP3048	30	48

TRIM KITS

Part Number	Description
JFTK24	24"W Plastic trim kit
JFTK30	30"W Plastic trim kit
JTRIM24HC	24"W Hinged trim kit
JTRIM30HC	30"W Hinged trim kit

19" EIA, SQUARE HOLE RAILS

Part Number	Height	24W	30W
JRM4200	42U	Х	
JRM10000	44U	Х	
JRM4800	48U	Х	
JRM10006	51U	Х	
JRR42CMSQ	42U		Х
JRR44CMSQ	44U		Х
JRR51CMSQ	51U		Х

Note: Galvanized rails available upon request.







EATON CORPORATION Product Brochure

Protecting your Investment

Cages

Security remains a growing concern in today's data center environments. After all, the life-blood of your business is running on the equipment that is stored and monitored within your enclosures. In addition to security at the rack level, Eaton's cages offer an added layer of security.

Eaton's cage offering now includes mounting provisions for 1-, 2- and 3-sided cage configurations for all your data center and colocation layouts.

With security appliances and accessories ranging from standard key locks to electronic access control and graphical management tools, you can rest assured that we're completely focused on the deployment and reliability of your systems.



Cages

Provide the ultimate level of security for your valuable information systems. The cage system is the perfect solution for data center environments requiring subdivision or a higher level of security.

Cage Attributes

- Construction: Sheet steel
- Height options: 7', 8', 9' and 10'
- Door: Left and right-hand sliding
- Lock options: Medeco® mechanical key lock
- Perforation: 3/8 optional for ventilation while maintaining secure structure
- Ceiling structure: Optional 3'W and 4'W panels
- Anchoring: Concrete floor anchors
- Finish: Black
- Layout: CAD layout provided for each Cage project with dimensions and bill of materials

Applications

- Colocation facilities customer management
- Electronic Medical Records (EMR) addressing the security issues associated with managing EMRs
- Web Hosting customer management
- Security managing classified and restricted information



Medeco security locks provide unique keys for customer separation.

Cable Management



Part Number	Depth	Height
CMFP19032U	3.5"	2U
CMFP19052U	5.0"	2U



Part Number	Depth	Height
CMLT19032U	3.5"	2U
CMLT19052U	5.0"	2U



Part Number	Width	Height
JLB42	2.5"	42"
JLB77	2.5"	77"
JLB84	2.5"	84"





Part Number	Height	Depth	Qty	
CMDRNR031U	1U	3.25"	4	
CMDRNR032U	2U	3.25"	4	

Upper Transition Tray

Provides upper bend radius control for copper and fiber cables

- Meets TIA/EIA 568-A bend radius standards
- Tool-less width adjustment of waterfall from 19" to 29"
- Two-point mounting

Lower Transition Tray

radius standards

Two-point mounting

Paramount Lacing Bars

Velcro straps

 Flexible mounting to multiple points

CAT 5 cablesFour per kit

Mounts with a self-tapping

screw in multiple positions

Accommodates up to 129

cables

Provides lower bend radius control for copper and fiber

• Meets TIA/EIA 568-A bend

Tool-less width adjustment

of waterfall from 19" to 29"

 Flexible management bar for attaching/mounting cables and power strips

 Vertical slots provide areas for standard and buckle

 Tool-less adjustment allows for quick placement



Active Equipment Cable Manager

- Bend radius control fingers support cables as they transition to the vertical pathway
- Finger spacing aligns with rack units
- Can be attached to equipment mounting rails or to the 30" wide enclosure
- One per kit

Part Number	Height	Depth	Qty	Compatibility
JCMVM3	5U	3.3"	1	30"W enclosure



Diameter	Uty
3"	4
	3"

Cable Ring Kit

- Allows for vertical cable management
- Rounded edges provide smooth surfaces for cables
- Accommodates up to 113
 CAT 5 cables
- Four per kit

Take-up Spool



•	Provides a means to manage
	excess network or power
	cables with integrated bend
	radius support

• One per kit

Part Number	Diameter	Depth	Qty	Compatibility
CMTUNR02	2.0	2.5"	1	30"W enclosure
CMTUNR05	2.0	5.0"	1	30"W enclosure

Hallen	

Part Number	Height	Width	Qty
CMSRB001	1.72" (1U)	21.45"	1

Horizontal Lacing Bar

- Provides robust attach points for horizontal cable management
- Cost effective method for horizontal cable management
- One per kit



Part Number	Length	Width	Qty
CMVBCKL	9"	.5"	10
CMVBCKL12	12"	.5"	10
BX45V8	8"	.5"	50
BX45V11	10"	.5"	50

Velcro Buckle Straps

- Velcro buckle straps allow for mechanical fastening of strap to multiple points in the enclosure
- Velcro offers superior reusability versus tie wraps
- 50 straps per kit (Standard Velcro Straps) and 10 straps per kit (Velcro Buckle Straps)



Part NumberHeightJNWDM14.5"JNWDM29.0"

Cable Management for Side Cable Chase

Waterfall – Network or High- Density Top Panels

- Provides optimal bend radius support for cables entering or exiting enclosure
- Integrated standard velcro strap slots
- Meets TIA/EIA 568-A bend radius standards



Part Number	Height	Depth	Qty
CMPD19031U	1U	3.25"	4 rings
CMPD19032U	2U	3.25"	4 rings



Part Number	Height	Depth	Qty
CMRB19022U	2U	2"	1
CMRB19042U	2U	4"	1
CMRB19062U	2U	6"	1
CMRB19082U	2U	8"	1



Part Number	Height
CMFD19041U	1U
CMFD19042U	2U

19" Horizontal Ring Manager

- Horizontal management of cables from network equipment
- Open rings allow for easy access to network cables
- Accommodates up to 129 CAT 5 cables in a single panel
- 19" rail mount
- Four cable rings per manager

Cable Strain Relief Bars

- Provides strain relief for cables in patch cable racks
- Multiple depths allow for transitioning of cables

Horizontal PatchLink Cable

- 19" rail mount
- One per kit

• 19" rail mount

management

One per kit

High volume cable

Manager



Part Number	Depth
JCCDM34	34"
JCCDM40	39"
JCCDM45	45"







Part Number	Width	Depth	Height
JCCVM771	2.4"	2.6"	77"
JCCVM841	2.4"	2.6"	84"

Waterfall – Side Cable Chase

- Provides optimal bend radius support for cables entering or exiting Side Cable Chase
- Meets TIA/EIA 568-A bend radius standards

Take-up Spool – Side Cable Chase

- Manages excess network or power cables with integrated bend radius support
- Cable Chase Vertical Manager only
- One per kit

Vertical Manager – Side Cable Chase

- Provides full-height vertical cable management inside the Side Cable Chase
- Tool-less adjustment along the full depth of the Side Cable Chase
- Includes provisions for Standard and buckle Velcro Straps
- Four cable rings provided per Vertical Manager (additional rings sold separately)

Overhead Cable Management System



Overhead Cable Management

- Overhead distribution of power and network cables reduces raised floor obstructions
- Mounting holes located every 1.5" from front to back on top of racks
- Add as many partitions as you need to manage copper, fiber and power
- Data cable partitions feature large openings to route cables into enclosure

Airflow Management

Qty

10

100

500

10

100

500

10

100

500

Height

1U

1U

1U

2U

2U

2U

8U

8U

8U

Plastic Blanking Panels

- Tapped/square holes
- Cost effective, tool-less, aesthetic solution for airflow management requirements.

Part Number	Description	Width	Qty
JCMT24SP	Solid cable partition	24"	1
JCMT24PP	Cable partition with pass through opening	24"	1
JCMT30SP	Solid cable partition	30"	1
JCMT30PP	Cable partition with pass through opening	30"	1
JCMT24PT	Power Cable	24"	1
JCMT30PT	Power Cable	30"	1

Steel Blanking Panels

- Steel panels are the perfect solution when you need to add silkscreening, cutouts or connectors.
- Available in a tool-less or fastened version.

Part Number	Description
JCMTLDRPD	Perpendicular bracket kit
JCMTLDRPR	Parallel ladder kit

Overhead Cable Management System Ladder Brackets

- Allows for cables to transition from one row to another
- Parallel and perpendicular options available
- Works with most ladder systems
- Two per kit

Note: Cable ladder not included

TOOL-LESS

Part Number

PBP1U10

PBP1U100

PBP1U500

PBP2U10

PBP2U100

PBP2U500

PBP8U10

PBP8U100

PBP8U500

Part Number	Height	Qty
FP1901U10BLK	1U	10
FP1901UBLK	1U	50
FP1901U100BLK	1U	100
FP1902U10BLK	2U	10
FP1902U100BLK	2U	100
FP1905U10BLK	5U	10
FP1905U100BLK	5U	100



Part Number	Height	Qty
CMBPBRSH1U	1U	1
CMBPBRSH2U	2U	1

MECHANICALLY FASTENED

Part Number	Height	Qty
V319F01U10BLK	1U	10
V319F01UBLK	1U	50
V319F01U100BLK	1U	100
V319F02U10BLK	2U	10
V319F02U100BLK	2U	100
V319F05U10BLK	5U	10
V319F05U100BLK	5U	100

Cable Pass-thru Blanking Panels with Brush Strip

 Cable pass-thru panels provide cable access while managing airflow and maintaining rack hygiene.

Airflow Management



Height

12-22U

12-22U

7-12U

7-12U

Mounting

Fits square hole rails

Fits tapped hole rails

Fits square hole rails

Fits tapped hole rails

Part Number

SBP1222USQ

SBP1222UTPD

SBP712USQ

SBP712UTPD

Adjustable Blanking Panels

Adjustable blanking panels are the perfect solution when frequent reconfiguration is required or large U spaces require coverage.



Part Number	Height (in.)	Qty
PMTGROM8	4.4"H x 1.96"W	8
PMTGROM12	4.4"H X 1.96"W	12



Part Number	art Number Height						
FG76	7.5"W x 6.5"D	1					
FG7610	7.5"W x 6.5"D	10					
FG118	11.0"W x 8.25"D	1					
FG11810	11.0"W x 8.25"D	10					

Shelf Products

Height

2U

Width

17.2"

Part Number

EAUS192U1605

Utility Shelf

Depth

16.6"

- Utility shelf supports peripherals such as monitors, modems, routers, etc.
- 50 lbs. weight capacity

Standard-Duty Fixed Shelf

- Supports non-rackmounted legacy equipment
- Less than 1U profile optimizes space
- 200 lbs. weight capacity
- 19" rail mount

Part Number	Height	Width	Depth	Mounting Range
EAFS19201U20	1U	17.4"	20.2"	20" to 26"
EAFS19241U20	1U	17.4"	23.2"	24" to 29"
EAFS19281U20	1U	17.4"	28.2"	28" to 35"



Vertical Blanking Panels

- Seal the gap between the 19" EIA rails and the side of a 30"W enclosure, preventing cold air bypass
- Panels come with 12 or 16 easily scored grommets for cable pass through
- For use with 30"W PMT frames and JW frames

Part Number	RU height	Width (in.)	Depth (in.)	# Pass-Through Grommets
PMTVDP4030	40	4.11	0.5	12
PMTVDP4230	42	4.11	0.5	12
PMTVDP4430	44	4.11	0.5	12
PMTVDP4830	48	4.11	0.5	16
PMTVDP5130	51	4.11	0.5	16

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Part Number	Height	Length	Qty
WLTEMPSTRIP	1"	8"	100

Temperature Strip

- Easily assess inlet temperatures throughout the data center by applying to blanking panels in your enclosures
- Temperature range: 50° – 104° F
- Durable adhesive backing
- 100 per kit



19" rail mount

Oval Grommet

· Seal cable pass-through openings in enclosure frame

hot aisle/cold aisle

Raised Floor Grommet

bypass airflow

openings in floor

 Optimize the effectiveness of raised floor cold air

delivery by eliminating

Seal cable pass-through

Zero downtime - the split design allows for installation

in live environments

grommets outperform

competitive brush strip and

membrane-based solutions by 20-50% depending on

Eaton's raised floor

application

containment integrity

Easily score and pass cables through while maintaining

18



Heavy Duty Fixed Shelf

- Supports non-rackmounted legacy equipment
- 400 pound weight capacity
- 19" rail mount

Part Number	Height	Width	Depth	Mounting Range
EAFS19201U40	1U	17.7"	20.2"	20" to 26"
EAFS19241U40	1U	17.7"	24.2"	24" to 29"
EAFS19281U40	1U	17.7"	28.2"	28" to 35"



Standard-Duty Roll-out Shelf

- Supports non-rackmounted legacy equipment where access to the rear is required
- Full width space utilization on shelf platform
- 100 pound weight capacity
- Extends 100 percent of its useable depth plus one inch
- 19" rail mount

Part Number	Height	Width	Depth	Mounting Range
EARS19241U10	1U	17.5"	23.7"	24" to 29"
EARS19281U10	1U	17.5"	27.7"	28" to 34"



Part Number	Mounting Range
V3CHAS25	20" to 24"
V3CHAS30	26" to 29.5"
V3CHAS36	31.5" to 34.5"



Part Number	Mounting Range
ADJCHAS2032	20" to 32"

Chassis Brackets

- Provides additional support for two-point mounted equipment
- Device width must be no less than 14"
- Mounts to side facing holes in the vertical mounting rails
- 150 pound weight capacity

Adjustable Chassis Brackets

 Provides added flexibility when mounting equipment in enclosures

Handles & Locks



PULL HANDLE & LOCK

Part Number	Description	Qty
WLCRK100	Cylinder core removal key	1
WLMMK100	Master key for all numbers	2



SWING HANDLES

Part Number	Description
Contact Eaton	Swing handles are available in a wide variety of options including key lock, combination lock, and HFID lock.



FRICTION LOCK

Part Number	Description
Contact Eaton	Options for 40U to 51U Paramount

Hardware



Part Number Rack Size Oty JCSTR40 42" deep 4 JCSTR45 48" deep 4

Note: 2,000 pound static load capacity; for higher weights, consult the factory.

ANCHOR BRACKET

Part Number	Length	Qty
JANCHOR1	8"	4
JANCHOR2	4" (for use with Cable Chase)	4
JANCHOR1CSTR	8" (for use with casters)	4

CAGE NUTS

Part Number	Description	Туре	Qty
LB71M6	M6 Cage nut screw kit	M6	20
JHM6BULK	M6 Cage nut screw kit	M6	500
V3CAGEE	#10-32 Cage nut	10-32	20
JHBLKCG1032	Screw kit	10-32	500

RACK GROUNDING KIT

Part Number	Description	Qty	
GRNDPMT	Rack grounding kit	14 wires per kit	
Note: Preconfigured enclosures have grounding pre-installed			



RACK PDU MOUNTING BRACKET

Part Number	Description	Qty
PDUBRCKTPMT	For PMT frames	2 per kit

To contact an Eaton salesperson or local distributor, please visit www.eaton.com/wrightline or call 800-225-7348



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