Enclosure Solutions

EAT•N

Powering Business Worldwide

Eaton Enclosures

IT availability and reliability are critical corporate issues in today's demanding, mission-critical environments. For this reason, it is important to ensure stable conditions for your complex server and software system architecture.

Eaton Enclosure Solutions represent the first critical step in planning an ideal data center and complement our comprehensive power management offering. The industry leader in power quality is now the single source for your data center requirements – from planning and turnkey installation to services for the life of your data center.

Whatever your application, Eaton delivers the right solution with all the required components and systems to meet your needs and save you time and money.

Applications

Our Enclosures are deployed in a variety of applications including data centers, wiring closets, office environments, and warehouse spaces.

Data center
Built to house, support, and run mission-critical applications, the data center is the cornerstone of today's business. As more processing power is packed into each enclosure, it must not only meet the structural stability demands to house the equipment, but address the thermal, power and security requirements to maximize the efficiency and life expectancy of the electronic equipment.

Wiring closet
Typically located separately from the data center and houses network, telco, and termination type equipment. This room may also hold electronic equipment. Security, aesthetics, climate control and functionality are commonly considered in the selection process and must be part of the standard design of the enclosure.

Office environment
There is often a need for networking equipment to be deployed in an office environment. This can be in addition to or in replacement of the wiring closet. Aesthetics, security and functionality play major roles in the decision process.

Warehouse
The warehouse is experiencing additional distributed processing with the increased deployment of more sophisticated inventory/ package tracking systems. Physical protection, security, and functionality are important considerations when choosing an enclosure.
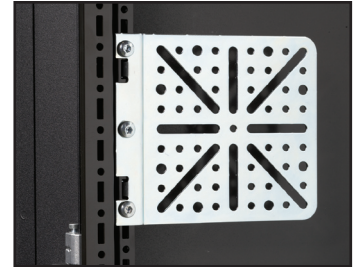
Eaton Enclosures

Designed specifically for IT applications, this 42U x 600 mm (w) x 1050 mm (d) modern enclosure offers strength, stability and a vendor-neutral environment to house any IT equipment.
The Enclosure allows for ultimate baying flexibility to create additional space in any situation.
The 16-fold unique frame design delivers the highest dimensional stability and load bearing capability. The enclosure is complemented with a range of cable management, cooling and power distribution accessories to enable you to tailor your enclosures to your specific application.

Applications:
- Universal server enclosures
- Multiple-vendor environments
- Storage equipment
- Termination equipment
- Network equipment

Environments:
- Data centers
- MDC/IDC
- Wiring closets
- Office environments
- Central offices
- Co-location and application environments

Features:
- Contemporary, sleek appearance
- Multiple-vendor equipment compatibility
- Full line of accessories
- Excellent heat dissipation
- Strong frame structure
- Highly functional and stylish, value packed and competitively priced

Specifications:
- Frame system – multi-fold steel frame design for strength and rigidity
- No horizontal or vertical supports, keeping entire structure open for equipment and cable management
- Perforated roof with four 4.5 inch holes with grommets for overhead cable management
- Torsion-free structure
- Multiple internal surfaces and mounting points
- Maximum internal volume for footprint

- External access to all installation points for doors and walls
- Maximum load bearing capacity – 1450 kg (3,200 lbs)

External surfaces – doors and walls:
- Doors can be easily removed or reversed
- Sidewalls can be screwed on or locked in place
- Internal door hinge and lock points offer maximum security
- Door stiffener stabilizes door and provides additional mounting surfaces
- Maximum perforated door area meets or exceeds server manufacturer specifications for air flow
- Ground studs on all surfaces
- External surfaces do not affect load bearing capacity – same ratings with or without side walls
- Door handle provides customized locking solutions and simple ID tag capability
- Split rear doors to maximize floor space availability

Vertical mounting rails:
- Designed to meet EIA-310-D standards
- Fully depth-adjustable to maintain load capacity regardless of rail positioning
- Floating isolation system – vertical rails are not secured to frame members or lateral support channels

– can be adjusted independently
- "Z"-shaped, multi-fold profile offers high load-bearing capacity and multiple mounting surfaces
- "U" markings on front and rear near surfaces of each rail for ease of installation

Key accessories:
- Sidewalls - for security and thermal control
- Door-mount fans - for heat exhaust and thermal management
- Baying kits - for universal flexibility in joining enclosures together
- Tool-less shelves – (19 inch) 150 lb and 250 lb capacities
- Casters - for ease of movement on flat surfaces
- Tool-less Cable management hardware D-claws, Velcro straps - reduces installation time and costs
- Bolt-down kits - for securing cabinets in place
- Tool-less blanking panels - to control airflow and improve cooling efficiency
- Universal mounting plates for mounting additional equipment and accessories in zero U spaces

Design: The Powerware Enclosure features modern, attractive aesthetics perfect for highly functional server applications.

Descriptions	Dimensions H x W x D (in)	Weight	Shipping Dimensions H x W x D (in)	Shipping Weight	Part Number
No Sides or Casters	80" X 24" x 42"	219 lbs	85" x 32" x 48"	257 lbs	PWENC9970935
With Sides, no Casters	80" X 24" x 42"	257 lbs	85" x 32" x 48"	295 lbs	PWENC9970936
No Sides, with Casters	80" X 24" x 42"	229 lbs	85" x 32" x 48"	267 lbs	PWENC9970939
With Sides and Casters	80" X 24" x 42"	267 lbs	85" x 32" x 48"	305 lbs	PWENC9970940

Enclosure Accessories – Cable Management

Proper cable management ensures optimum data transmission, cost savings and cable protection. The enclosure design provides for fully open sides and bottom to maximize cable management access capability. The perforated roof houses four 4.5 inch diameter cable access holes with grommets and plugs for easy overhead cable management. Additional cable management accessories offer a simple, flexible, and cost-effective way to organize your cables and patch cords within the cabinet.

- Integral cable retention keeps cable bundles in place
- Accommodates a variety of tool-less cable management accessories to further separate, organize, and protect cable
- Tool-less cable management mounts anywhere within the enclosure
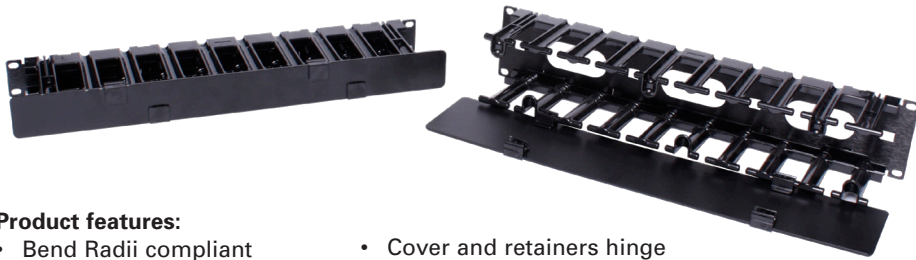
Product features:

- Bend Radii compliant per ANSI/TIA EIA, round edges prevent performance degradation and damaged cables
- Front and rear cable management capabilities allow separation of distribution cables and patch cords
- Easy assembly reduces installation time
- Modular 9U vertical sections allow for custom configurations
- 1U cable guides align to enclosures U spacing for ease of installation and maintenance

- Cover and retainers hinge left or right and can be removed for easy access
- Pass-through ports for front/rear cable routing
- Large pathways offer greater capacity and flexibility when managing high-density patch cables
- Manager fingers align with U spacing of enclosures EIA rail
- Bend radius on all cable pathways provides added support for copper and fiber data cables

Descriptions	Part Number
1U enclosure mount manager with hingable/removable cover	PWACC9970953
2U enclosure mount manager with hingable/removable cover	PWACC9970954

Enclosure Accessories – Cable Management

9U vertical manager kit
This vertical cable management accessory is designed to install in the open space between bayed cabinets. Its 3.5"x 6" dimensions offer large cable management capacity for running both data and power cables. With a 9U height, they can be ganged together to run the full length of the enclosure, yet be flexible enough to terminate when full length is not required. Comes standard with two snap-on finger managers, or can be completely enclosed with optional cover.

Description	Part Number
3.5" wide x 9U vertical manager kit for 600 mm (23.62") bayed enclosures and 700-800 mm (27.56-31.50")	PWACC9970955
3.5" wide x 9U manager cover	PWACC9970956

Enclosure Accessories – Cable Management

Tool-less cable collection claw

This 1⁄4 turn, tool-less claw is ideal for cable routing and management of heavier cables (power) within the enclosure. Used in conjunction with the 25 mm hole patterns throughout the enclosure, a limitless combination of routing combinations and management can be created.

Dimensions	Packs of	Part Number
Tool-less cable collection claw	10	PWACC9970958

Tool-less velcro cable fastener

This 1⁄4 turn, tool-less bracket and Velcro strap provides excellent routing and cable management for lighter cables and cable bundles. Used in conjunction with the 25 mm hole patterns throughout the enclosure, a limitless combination of routing combinations and management can be created.

Dimensions	Packs of	Part Number
Tool-less velcro cable fastener	10	PWACC9970959

Cable guide rings

For flexible, system compatible cable routing at the side of the 482.6 mm (19 inch) mounting frame.

Dimensions	Packs of	Part Number
80 x 37 (3.14 x 1.45)	10	PWACC9970957

Material:
Sheet steel, zinc-plated, passivated
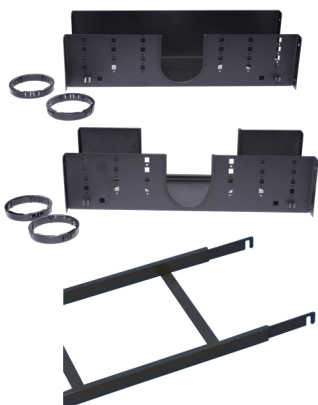
Roof mount cable management

Mounts to rack roof and provides fixation points for cable access, each with two, 4.5 inch access holes.

Description	Part Number
Roof Mount Cable Manager	PWACC9961554
Roof Mount Cable Manager Ladder Rack	PWACC9961555
Ladder Rack	PWACC9962150

Enclosure Accessories – Rack, Base & Sidewall Configuration

Tool-less blanking panels

To place in unused or vacant rack space, to block off airflow and prevent recirculation. Improves cooling efficiency within the enclosure. Installs without the need for additional hardware or tools.

Description	Packs of	Color	Part Number
1U	10	Black	PWACC9970948
3U	5	Black	PWACC9970949

Caster kit

Casters help simple movement on level floors. Easy to install. Kit includes hardware, left and right rigid casters and two swivel casters.

Description	Part Number
4 casters / 1 wrench	PWACC9970942

Load capacity:
825 lbs

Sidewalls

To complete individual enclosures or bayed racks at the sides. The beading increases the rigidity of the walls while adding a special design touch. The lightweight design allows for easy handling by one person.

Dimensions	Packs Of	Part Number
424 x 1050D	2	PWACC9970941

Material:
Sheet steel, electrophoretic dipcoat-primed, powder-coated
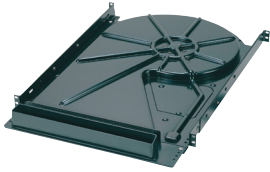Color: black

Includes:
Two side panels

Partition wall for bayed enclosure

Create secure separation between bayed enclosures while still allowing cable pass-through.

Description	Part Number
Partition wall	PWACC9962621

Enclosure Accessories – Ventilation

Enclosure blower

Improve airflow in your cabinets with the Enclosure Blower. The Blower features a durable, lightweight polymer housing and fits in the bottom of server cabinets where it draws cool air from beneath the floor and boosts delivery of the coldest available air directly to server fronts.

Description	Volts*	Total CFM	Number
Enclosure blower	115V	250	PWACC9970963
Blower filter assembly			PWACC9970964
Enclosure blower filters			PWACC9970965

* 6 foot cord with 5-15 plug

Benefits:
- Filter up to 80% efficient for two micron particles, providing clean cool air to your servers
- Improves air distribution reducing cabinet hotspots up to 15°F, extending server life and minimizing downtime
- Requires only 2U of mounting space
- Fits any EIA-310 compliant cabinet
- Five-year life
- Adjustable attachment brackets install easily
- UL listed
- Optional filter assembly provides cleaner air

Rear door fan

This split rear door fan takes advantage of the front-to-rear airflow of most servers and allows the user to position the fan assembly in the most critical location within the cabinet. Two high-pressure fans, 105 cfm each, feature a shallow depth chassis design and provide the ability to exhaust hot air out the rear of the enclosure at a dramatically higher rate than traditional roof-mount fan trays. The result is cooler operating equipment, even with very high enclosure heat loads.

Volts	Total CFM	Color	Part Number
115	210	Black	PWACC9970960
230	210	Black	PWACC9970961

Configuration:
- Two fans per assembly (210 cfm total)
- Includes 10 foot cord/plug, mounting hardware
- Order in quantities of two for split rail doors

Enclosure Accessories – Shelves and Mounting
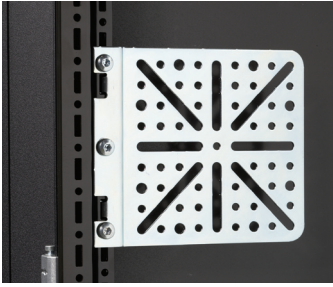
Mounting plate
For mounting of accessories on the vertical enclosure section or punched section with mounting flange 17 x 73 mm (.66 x 2.87 inch) on the inner and outer mounting level.
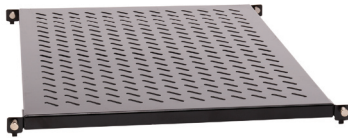
Description	Packs of	Part Number
Mounting Plate	4	PWACC9970946

Material:
Sheet steel, zinc-plated, passivated

Supply includes:
Assembly screws

Tool-less shelves for 482.6 mm (19 inch) rack mounting
These 482.6 mm (19 inch) enclosure mount shelves are designed for your ease – the tool-less advantage allows quick and simple assembly.

Mounting	Color	Part Number
Fixed	Black	PWACC9970950

Load capacity:
68 kg (150 lbs)
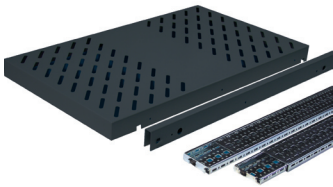
Heavy-duty tool-less shelves for 482.6 mm (19 inch) rack mounting
These 482.6 mm (19 inch) heavy duty enclosure mount shelves are designed for your ease. The tool-less advantage allows quick and simple assembly.

Mounting	Color	Part Number
Fixed	Black	PWACC9970980
Telescopic	Black	PWACC9970951

Load capacity:
113 kg (250 lbs)
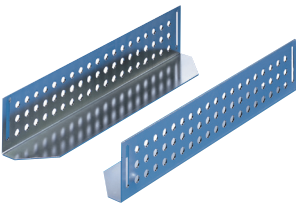
Heavy-duty support rails
Designed to support components from underneath.

Description	Part Number
Telescopic slides	PWACC9970952

Load capacity:
90 kg (200 lbs)

Heavy-duty support rails
Designed to support components from underneath.

Description	Packs of	Part Number
Tool-less mounting bracket (single)	2	PWACC9962618
Tool-less mounting bracket (double)	2	PWACC9962619

Enclosure Accessories – Hardware

Baying connectors, external

For mounting on the vertical enclosure sections. Simply position on the outside and screw. Fasten either from the inside or outside.
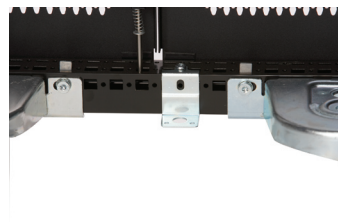
Description	Packs of	Part Number
Baying connectors	6	PWACC9970945

Material:
Sheet steel, zinc-plated, passivated or stainless steel 1.4301

Includes:
Assembly parts

Bolt down kits

For anchoring the enclosure at any position of the base frame, particularly in cases where the existing holes in the frame or base tray cannot be used due to the installed equipment or because the substructure prevents them from being used.

Description	Packs of	Part Number
Anchoring bracket	4	PWACC9970947

Note:
Additional holes in the base are required for mounting

Material:
Sheet steel, zinc-plated, passivated

Assembly screws M6 x 16 mm

For captive nuts, 482.6 mm (19 inch) enclosure mount components. Plastic washers included.

Description	Packs of	Part Number
Phillips screw M6	100	PWACC9970944
Captive nuts	50	PWACC9970943

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