

MERO - TSK

Intelligent Server Rack / Cold Aisle Containment

Your best choice on Data Center

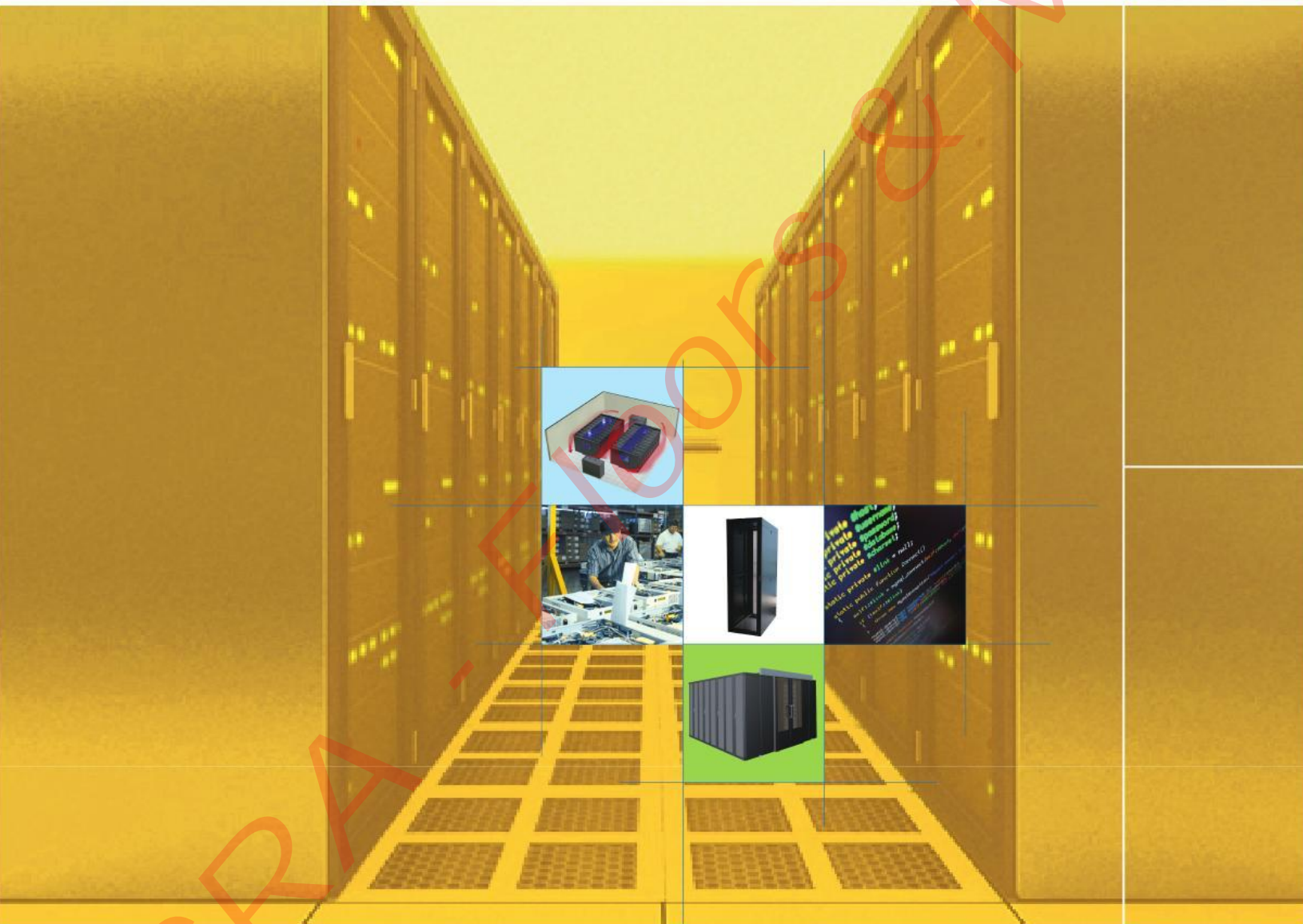
ACRA – Floors & More

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MERO®  **TSK**



MERO-TSK International GmbH & Co. KG

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Introduction



MERO was founded in 1949 by Dr. Ing. Max Mengerlinghausen, the pioneer of the modular construction and the derived space frame. In 2004, MERO was integrated in the worldwide active Tröster Group (TSK = systems and components).

MERO-TSK has 32,000 sqm production space in modern manufacturing facilities available where access floor and hollow floor systems of wood, calcium sulfate, steel or aluminum are manufactured on specified production lines. Our business activities include development consulting service, design, manufacture and installation of access and hollow floors, application of floor coverings as well as access floor renovation. We are able to offer innovative complete solutions from one sources.

In recent years, the MERO-TSK has also made significant product developments in the field of data center infrastructure. As an expert in a number of areas, MERO is committed to the continuous development and manufacture of innovative products in order to satisfy the requirements of our customers and the environment.

Boasting more than 50 years of experience, MERO continues to explore new ideas and develop new products, ensuring our brand will always retain its position as an industry leader.

With their professional quality and excellent reliability, MERO products have been sold in more than 70 countries and regions, becoming the name of choice for modern offices, equipment rooms, data centers and medical facilities throughout the world.





MERO-TSK Turnkey Equipment (Shanghai) Co.,Ltd. is the MERO-TSK Group's China subsidiary, founded in 2010 with regional headquarter in Shanghai.

The company has other branch offices located in Beijing, Shenyang, Wuhan, Chongqing, Xian, Chengdu and Shenzhen, our core business focus in the domestic market of flooring for offices and data centers turnkey solution. Group Headquarters further expanded its operations here by setting up a product line in China, dedicated to the manufacture of data center infrastructure products. This diversified production base is located in Suzhou ,and is capable of providing intelligent Power Management Module(PMM), Intelligent Server Rack, Battery Management System(BMS) and other customized equipments.



All production processes and quality control mechanisms are Certified by ISO and the relevant Chinese authorities. All members of staff and management boast many years experience in the industry, and are committed to providing total data center solutions, including all aspects of design, production, installation and after-sales service. The result achievement today with the praise and recognition received from our customers. We firmly believe that MERO-TSK products are the best choice for you!



Technical Design Expertise

We have an expert team of more than 20 designer engineers with nearly a decade of experience in the industry. Their expertise in high-end network cabinet design has contributed to our outstanding capabilities in all areas of design, processing, R&D and manufacturing. We also employ the most rigorous production and quality processes to ensure that all of our high-end electrical cabinet products are designed and manufactured to the highest technical standards.



Production Capabilities

We now have a front-line staff of more than a hundred staff, more than 30% of whom hold undergraduate degrees or higher qualifications. We can thus provide customers with the best quality products and technical support.

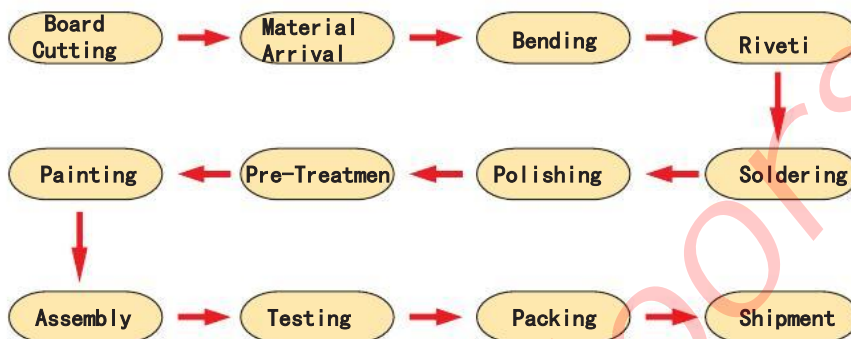
Our advanced processing equipment is all first rate, featuring a total of 3 nos of Bystronic laser cutting machines, 6 CNC punch presses, 15 nos of Amada bending machines, a Panasonic welding robot, and a Koyo flatbed spot welder.

Our high-quality coating line can meet all manner of customer sizing requirements, with a maximum processing size up to 3 meters in length.





Basic Production Flow



Quality Certification

- ISO9001: 2000
- ISO14001
- ISO4064(EN15085)





MERO Intelligent Rack

Product Description

In today's environmentally-conscious society, energy conservation is a very important issue. As a result, MERO-TSK has developed this efficient, energy-saving cabinet in order to meet the most demanding of customer needs. The product features a number of innovative precision enclosures, to provide customers with a new platform in data center equipment design. Rack depth can be adjusted via the vertically-mounted column, and a number of options are available for the roof, front and feet.

An attractive design and excellent process control make this high-end cabinet system the best choice for our customers' data center construction needs.

- Significantly improved data center space utilization
- Ventilation rate $\geq 70\%$, reducing occurrence of local hotspots
- Suitable for a variety of data center environments
- Modular design, easy to install

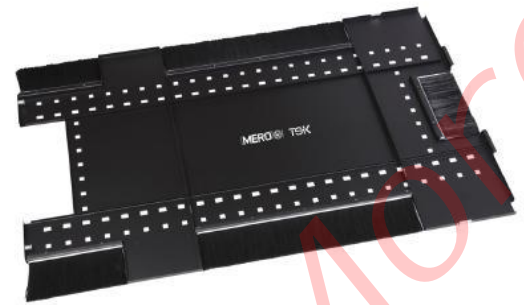
Safety Features

- Static Load 1500Kg, Dynamic Load 1200Kg
- IP20 Protection Degree
- Front and rear doors, side panels and roof securely grounded to cabinet
- Top and bottom of cabinet reserved for dedicated grounding nuts, for simple and reliable cabinet grounding
- Horizontally-adjustable feet for a more stable cabinet
- Lockable front and rear doors and side panels
- Fixed shockproof design



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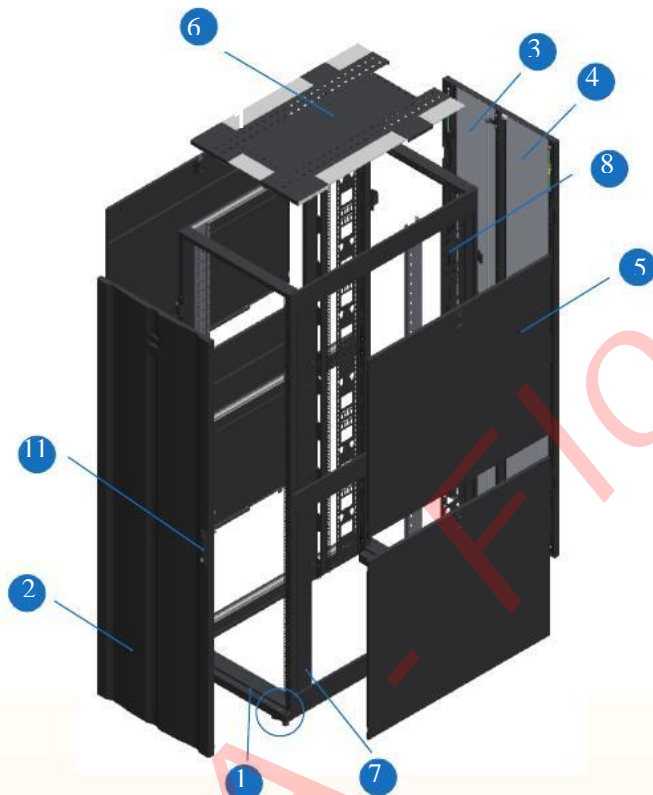
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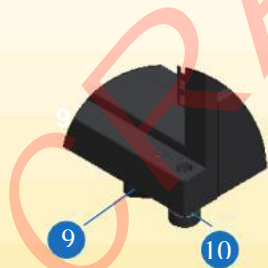
Product Characteristics

- Surface coating: rough texture with a metallic luster
- Front and rear doors can be removed without the need for tools. Front and rear doors, as well as side panels, are all freely interchangeable
- Front and rear door opening angle > 130 degrees; easy to install and maintain equipment
- Double rear door; hot aisle space remains small for easy maintenance
- Vertical mounting column and U mark at front and rear enable quick rack mounting
- Adjustable column for different cabinet depths; compatible with all major IT equipment manufacturers
- Multi-cable entry through the roof of the unit without the need for tools; easy access to a large number of cables.
- Open plugging holes effectively prevent foreign matter and dust from entering the cabinet
- Open design allows access from below through raised floor for large capacity cabling
- Optional sealing plate can be installed without the need for tools
- Standard bearing casters for easy mobility
- Cabinet angle can be quickly adjusted using a screwdriver or wrench
- Two-stage side panels for easy transport and removal
- Cabinet can be installed simply and quickly, keeping equipment room tidy
- Rear of cabinet comes with two mounting cables as standard, for easy installation of PDUs, cabling etc.
- Mounting holes left free for easy user access; depending on customer needs, additional contained aisles can be added. Suitable for all EIA-310 standard equipment racks
- CE certification





Item	Description	Quantity
1	Cabinet Frame	1
2	Front door meshing for additional ventilation	1
3	Right-hand double door at rear for additional ventilation	1
4	Left-hand double door at rear for additional ventilation	1
5	Side Panel	4
6	Roof	1
7	Vertical Mounting Column	4
8	Cabling Rack	2
9	Casters	4
10	Adjustable Foot	4
11	Lockable front and rear doors	2



Special Features

- Modular welded-frame design
- Light-weight, rugged and flexible
- Cabinets can be easily linked together
- Freely interchangeable front door, rear door, and side panels; power up angle >130 degrees
- Full set of options and accessories

Materials

- Frame: 1.5MM steel panel
- Installation bracket: 2.0MM steel panel
- Side panel: 1.2MM steel panel
- Front door: 1.5MM steel panel
- Rear door: 1.2MM steel panel

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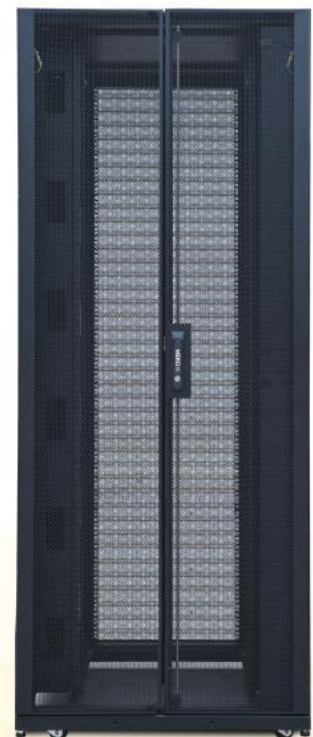


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Product Range – Table 1

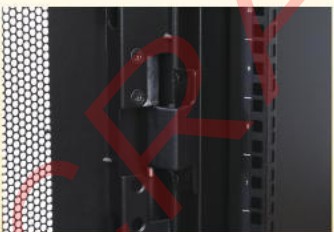
Product Code	Side Panel	Colors available			Dimensions (W*D*H)	Capacity
		Black	Grey	White		
ME62080	1/0	-BLK	-GRY	-WHT	600x800x1990	42U
ME62100	1/0	-BLK	-GRY	-WHT	600*1000*1990	42U
ME62107	1/0	-BLK	-GRY	-WHT	600*1070*1990	42U
ME62110	1/0	-BLK	-GRY	-WHT	600*1100*1990	42U
ME62120		-BLK	-GRY	-WHT	600*1200*1990	42U
	1/0					
ME65080	1/0	-BLK	-GRY	-WHT	600*800*2124	45U
ME65100	1/0	-BLK	-GRY	-WHT	600*1000*2124	45U
ME65107	1/0	-BLK	-GRY	-WHT	600*1070*2124	45U
ME65110	1/0	-BLK	-GRY	-WHT	600*1100*2124	45U
ME65120		-BLK	-GRY	-WHT	600*1200*2124	45U
	1/0					
ME68080	1/0	-BLK	-GRY	-WHT	600*800*2258	48U
ME68100	1/0	-BLK	-GRY	-WHT	600*1000*2258	48U
ME68107	1/0	-BLK	-GRY	-WHT	600*1070*2258	48U
ME68110	1/0	-BLK	-GRY	-WHT	600*1100*2258	48U
ME68120		-BLK	-GRY	-WHT	600*1200*2258	48U
	1/0					
ME72080	1/0	-BLK	-GRY	-WHT	750*800*1990	42U
ME72100	1/0	-BLK	-GRY	-WHT	750*1000*1990	42U
ME72107	1/0	-BLK	-GRY	-WHT	750*1070*1990	42U
ME72110	1/0	-BLK	-GRY	-WHT	750*1100*1990	42U
ME72120	1/0	-BLK	-GRY	-WHT	750*1200*1990	42U



Product Code Note:



Example: ME 62080 1 BLK: 600mm wide, 42U high, 800mm deep, black cabinet



Product Specification – Table 2

Product Code	Side Panel	Colors Available			Dimensions (W*D*H)	Capacity
		Black	Grey	White		
ME75080	1/0	-BLK	-GRY	-WHT	750*800*2124	45U
ME75100	1/0	-BLK	-GRY	-WHT	750*1000*2124	45U
ME75107	1/0	-BLK	-GRY	-WHT	750*1070*2124	45U
ME75110	1/0	-BLK	-GRY	-WHT	750*1100*2124	45U
ME75120	1/0	-BLK	-GRY	-WHT	750*1200*2124	45U
ME78080	1/0	-BLK	-GRY	-WHT	750*800*2258	48U
ME78100	1/0	-BLK	-GRY	-WHT	750*1000*2258	48U
ME78107	1/0	-BLK	-GRY	-WHT	750*1070*2258	48U
ME78110	1/0	-BLK	-GRY	-WHT	750*1100*2258	48U
ME78120	1/0	-BLK	-GRY	-WHT	750*1200*2258	48U
ME82080	1/0	-BLK	-GRY	-WHT	800*800*1990	42U
ME82100	1/0	-BLK	-GRY	-WHT	800*1000*1990	42U
ME82107	1/0	-BLK	-GRY	-WHT	800*1070*1990	42U
ME82110	1/0	-BLK	-GRY	-WHT	800*1100*1990	42U
ME82120	1/0	-BLK	-GRY	-WHT	800*1200*1990	42U
ME85080	1/0	-BLK	-GRY	-WHT	800*800*2124	45U
ME85100	1/0	-BLK	-GRY	-WHT	800*1000*2124	45U
ME85107	1/0	-BLK	-GRY	-WHT	800*1070*2124	45U
ME85110	1/0	-BLK	-GRY	-WHT	800*1100*2124	45U
ME85120	1/0	-BLK	-GRY	-WHT	800*1200*2124	45U
ME88080	1/0	-BLK	-GRY	-WHT	800*800*2258	48U
ME88100	1/0	-BLK	-GRY	-WHT	800*1000*2258	48U
ME88107	1/0	-BLK	-GRY	-WHT	800*1070*2258	48U
ME88120	1/0	-BLK	-GRY	-WHT	800*1100*2258	48U
ME88120	1/0	-BLK	-GRY	-WHT	800*1200*2258	48U

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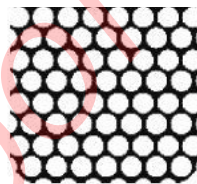


Outstanding Performance

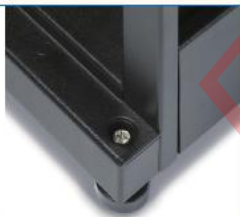


- Innovative roof cabling design, enabling direct installation

- Super-fine mesh design, suitable for a variety of cooling methods, to ensure system reliability at any level of equipment density



- Angle can be easily adjusted from the top of the feet for reduced installation time



- Side panel and roof do not require grounding cables; single side panel reduces weight by half – easy to remove and fix in place

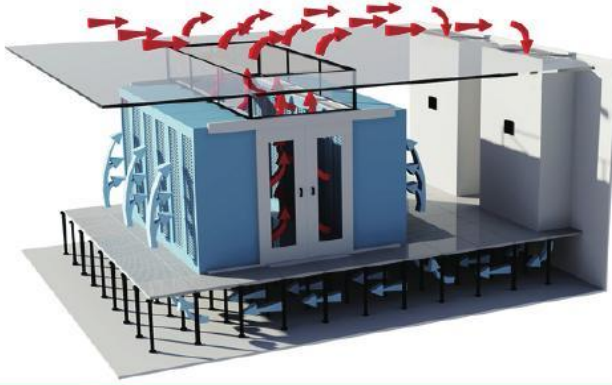


- Rack PDUs can be mounted without the need for tools



- Flexible, scalable design is fully compatible with IBM, HP, Dell, Sun, Cisco and other equipment

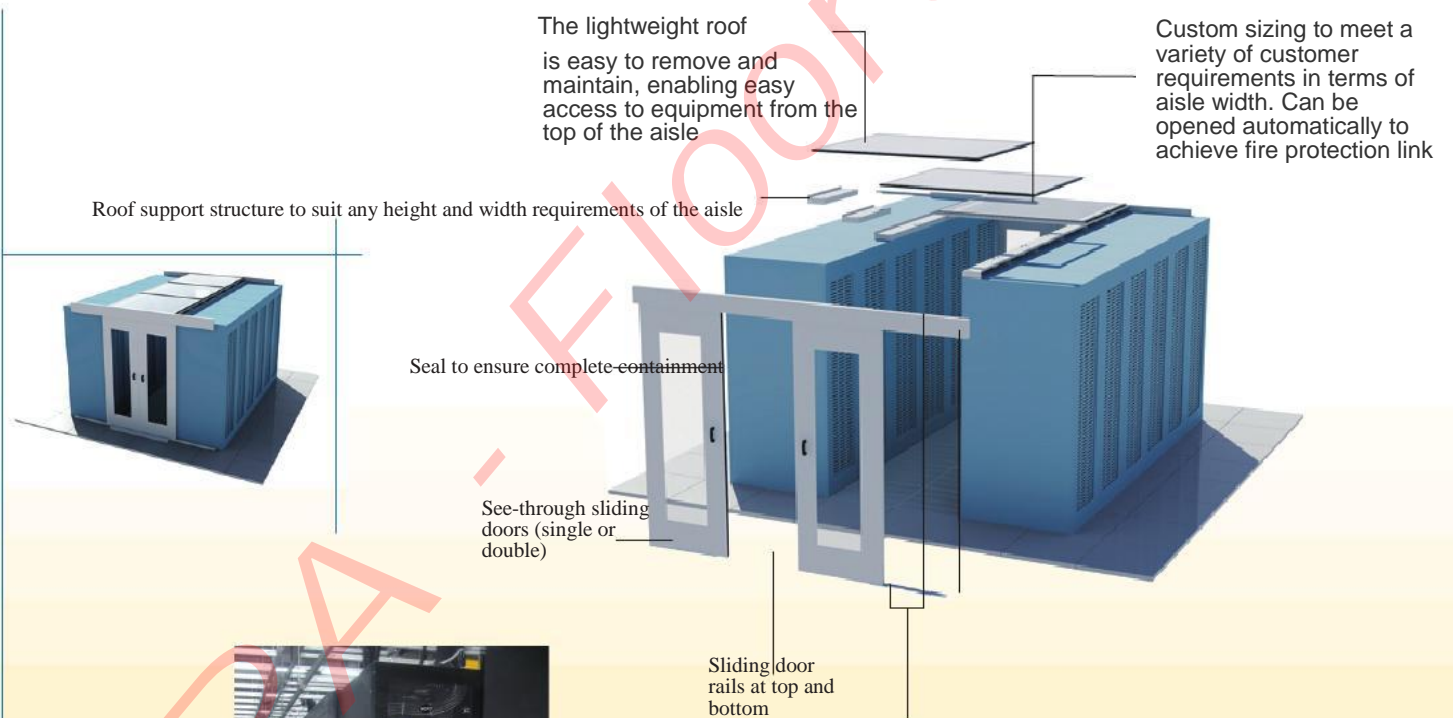




Aisle Containment System

Modern data center designs generally make use of a hot / cold aisle layout, with hot / cold aisle entrances through lockable doors at either end. The hot / cold aisles feature a closed roof, thus forming a fully contained hot / cold aisle area.

From a point of view of the airflow through the entire equipment room, this closed structure physically isolates the hot and cold air, effectively avoiding them mixing together, as was encountered when using traditional data center designs. This reduces the waste of both hot and cold air, and ultimately greatly improves cooling efficiency.



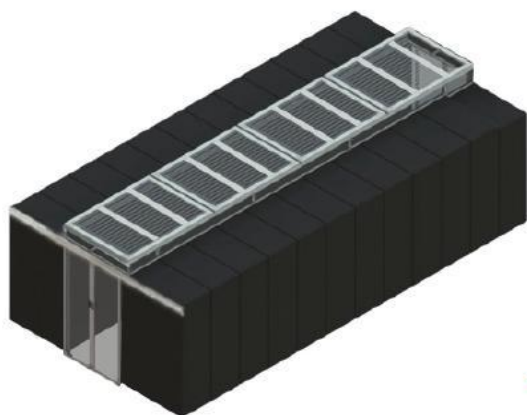
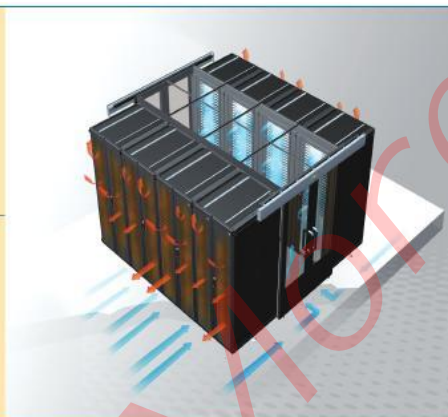
Double Aisle Doors



Sliding Aisle Doors



Fire protection link - sealed roof



Features

■ Modularized

Cold/hot channel sealed unit modularized design, with cold/hot corresponding dual channel machine units with every module. Each module can be separately installed, and are easily added to, removed from, or rearranged.

■ Intuitive

Each ceiling block can be connected directly to fire safety utilities. Upon confirmation of a fire code, the ceiling will automatically open, allowing fire repellent to enter the area and suppress the fire.

■ Convenience

Threshold-free design, and convenient transport tools including carts that allow for barrier-free entry and exit.

■ Elegance

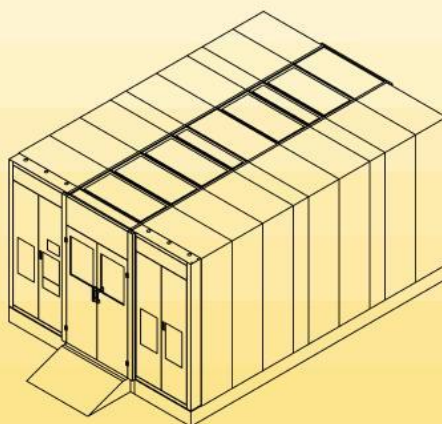
Sealed transparent window glass, with high mechanical strength, and good permeability. Black sprayed plastic cold rolled steel frame styled the same as the machine. Overall elegant design, with the machine room environment tailored to match the machinery.

■ Customized

Customized solutions can be tailored to specific client requirements.



Quickly deploy micro-modular products





Numerous Functional Accessories

Air Current Management Attachments

Blind Flanges

By installing blind flanges in the cabinet, hot air returning to the front of the cabinet can be reduced, thereby separating cold and hot air in the front and back ends.

Features:

Tool-free rapid installation and removal

Based on actual requirements, the cabinet equipment components can be easily added to or removed from as needed without need to alter existing equipment.

Suitable for use with any EIA310-D standard 19 inch cabinets.

Code Product	Description
MT 89007	1U, tool-free installation, plastic
MT 89010	1U/2U/4U, tool-free installation, plastic
MT 89003	1U, screw reinforced, metal
MT 89002	1U/2U/4U, screw reinforced, metal



Cable Management Attachments

Ceiling Power Supply Cable Racks

Cold pressed steel plates

Used for organization of ceiling cables

Cables are placed in the wire rack, with extra wire holes reserved for additional cables.

Tool-free installation in the cabinet ceiling

with ground bolts

Suitable for use with MERO 19 inch standard cabinets



Ceiling Data Cable Rack

Cold pressed steel plates

Used for organization of ceiling cables

Cables are placed in the wire rack, with extra wire holes

reserved for additional cables. Passageway widths are adjustable

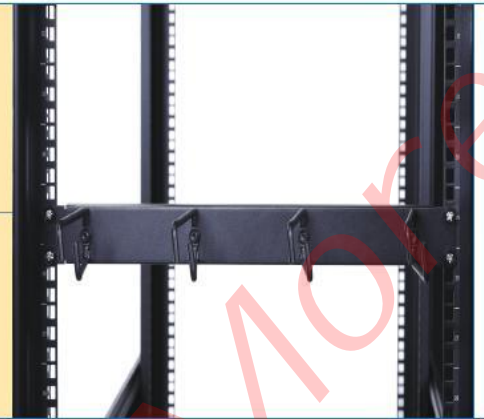
Comes with ground bolts

Suitable for use with MERO 19 inch standard cabinet



Product Code	Description
MT 87001	M Model, 600mm wide cabinet
MT 87003	H Model, 600mm wide cabinet

Product Code	Description
MT 85601	600mm wide cabinet
MT 85602	600mm wide cabinet



Stepped Racking

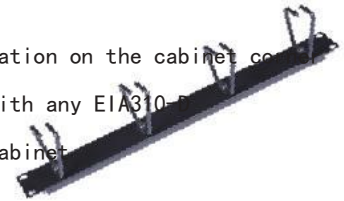
- Cold pressed steel
 - Used for bridged connection cabinets to organize cables
- Cables are placed on the stepped rack, with the two edges of the rack attached to the ceiling power supply cable rack or data cable rack.
- Come with connection bolts.
 - Suitable for use with Mero ceiling data / power supply cable racks.



Product Code	Description
MT 83001	150mm Width
MT 83003	300mm Width

Horizontal Cable Management Device

- Cold pressed steel.
- Used for management of back-side cabinet cables. Come with a C model conduit able to manage data cables as well as power supply cables.
- Horizontal installation on the cabinet cover
- Suitable for use with any EIA310-D standard 19 inch cabinet



Product Code	Description
MT 86005	Height of 1U
MT 86006	Height of 2U

Vertical Cable Management

- Cold pressed steel.
- Used for management of back-side cabinet cables. Come with a C model conduit for management of data cables as well as power supply cables.
- Vertical tool-free installation on both sides of the back of the cabinet hanging board. Does not occupy utilizable cabinet installation space
- Suitable for use with MERO 19 inch standard cabinets



Product Code	Description
MT 88014	Width of 55mm, 2 per unit

Vertical Cable Management Slots

- Cold pressed steel, plastic
- Used for cable management at the back of the cabinet. The front-facing cover can be removed, with two sides used for conduits and management of data and power supply cables
- Vertical tool-free installation on both sides of the back of the cabinet hanging board. Does not occupy utilizable cabinet installation space
- Suitable for use with MERO 19 inch standard cabinets



Product Code	Description
MT 88011	Height of 42U, comes with metal cover

Horizontal Cable Management Slots

- Cold pressed steel
- Used for cable management in the cabinet. The front-facing cover can be removed with two sides used for conduits and management of data and power supply cables
- Horizontal installation in the corner of the cabinet
- Suitable for use with any EIA310-D standard 19 inch cabinet



Product Code	Description
MT 86016	Height of 1U
MT 86017	Height of 2U



Equipment Installation Tray Attachments

Multipurpose Light Load Tray

- Cold pressed steel
- Used for placing of monitors, modems and other light equipment.
- Suitable for use with any EIA310-D19 inch standard cabinets



Product Code	Description
MT 84005	Load Capacity of 25Kg, Depth of 350mm

Light Load Attached Tray

- Cold pressed steel
- Used for placing relatively large and relatively light network and server equipment
- Suitable for use with MERO 19 inch standard cabinets



Product Code	Description
MT 84007	Load Capacity of 50Kg, Depth of 50mm

Rolling Light Load Tray

- Cold pressed steel
- Used for installation of non-mechanical shelving equipment, and includes rolling guide. It is thus possible to roll out the equipment from the cabinet for tasks such as installation and repair.
- Suitable for use with any EIA310-D standard 19 inch cabinet



Product Code	Description
MT 84003	Load Capacity of 50Kg

Heavy Load Attached Tray

- Cold pressed steel
- Used for installation of heavy non-mechanical equipment such servers, and switchboards.
- Comes with an adjustable depth guider
- Suitable for use with any EIA310-D standard 19 inch cabinet

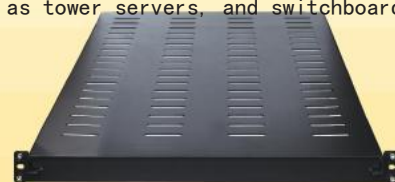


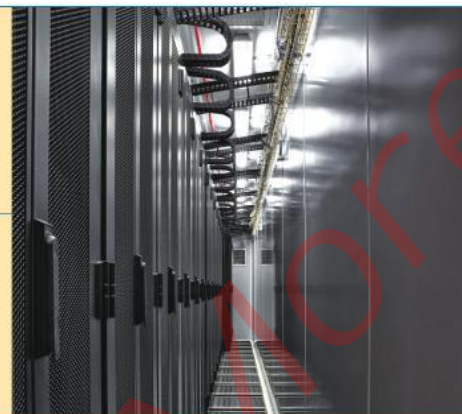
Product Code	Description
MT 84002	Load Capacity of 110Kg, Adjustable installation depth

Heavy Load Attached Tray

- Cold pressed steel
- Used for installation of heavy non-mechanical equipment such as tower servers, and switchboards.
- Comes with an adjustable depth guider
- Suitable for use with any EIA310-D standard 19 inch cabinet

Product Code	Description
MT 84006	Load Capacity of 110 Kg, Adjustable installation depth





Protective Safety Attachment

Cabinet Lock

- Black composite
- metal handle
- 90 degree key turn activation



Product Code	Description
MT 78001	Sprayed black plastic coating

Password Lock

- Black PA handle
- 90 degree turn
- Key activation, or password activation



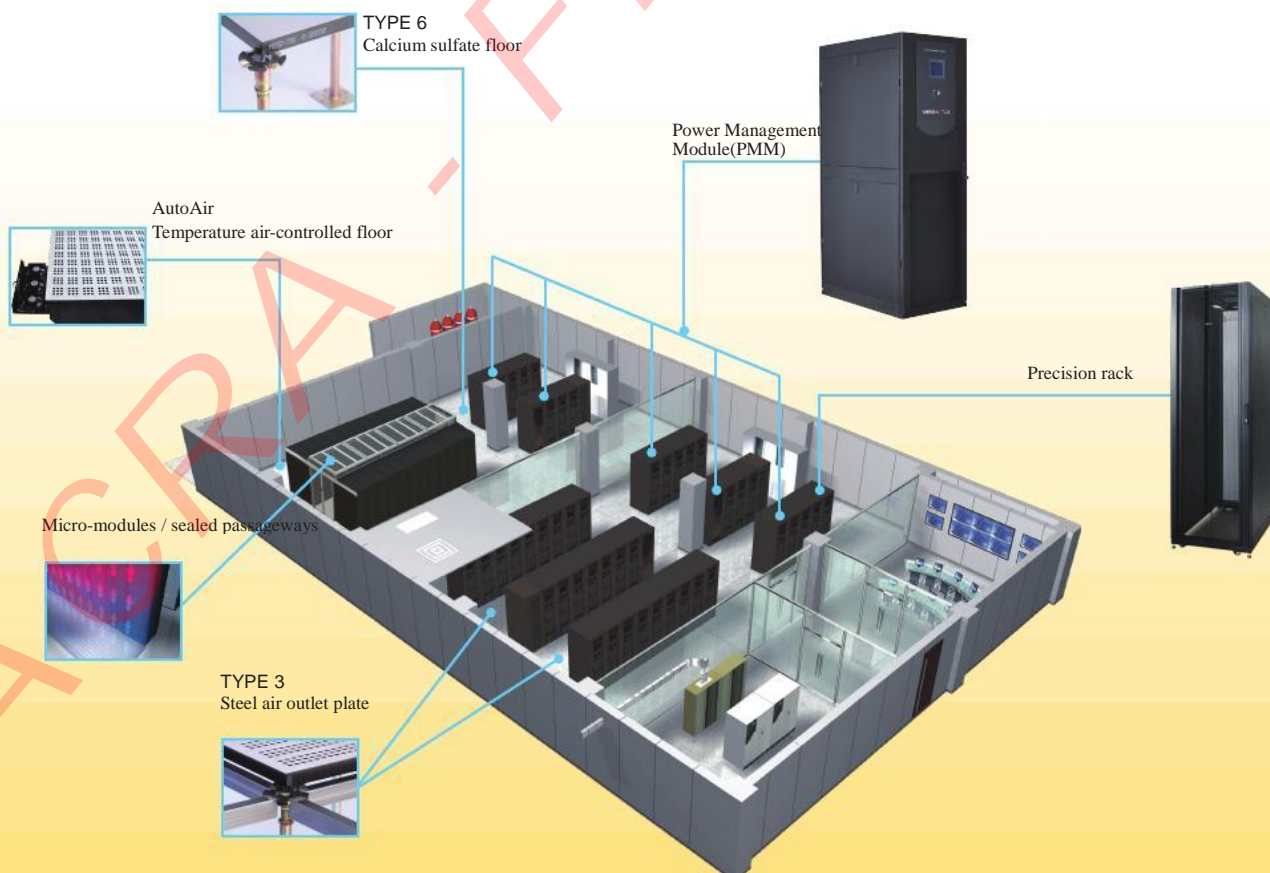
Product Code	Description
MT 78002	Sprayed black plastic coating

Electronic Lock

- Glass fiber filled nylon handle
- 90 degree turn
- Key activation, or electronic activation




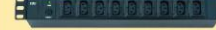


Product Code	Description
MT 78003	Remote locking and integrated sensor unlocking or handle status. Direct integration of network control testing and alerts with standard cabinet surveillance and door control. Handle status, convenient for network control.





PDU Product Technical Specifications

Name	2230 C19	2230C double circuit -1/-2	2230C double circuit breaker-2	2230 trip preventer 27
model	MEP2230E2-06AHNNMB	MEP2230C1-07AHGGMB	MEP2230E2-04AHZGMB	MEP2230C7-09AHZEMB
input characteristics				
rated input voltage	250VAC 50/60Hz	250VAC 50/60Hz	250VAC 50/60Hz	250VAC 50/60Hz
input terminal type	GB1002 16A national standard 3-prong plug	GB1002 16A national standard 3-prong plug	GB1002 16A national standard 3-prong plug	GB1002 16A national standard 3-prong plug
cable specifications	3×2.5mm ²	3×1.5mm ²	3×2.5mm ²	3×2.5mm ²
cable length	3M	3M	3M	3M
highest input voltage	16A	10A	16A	16A
output characteristics				
plug standard	IEC320 C19	IEC320 C13	IEC320 C19	IEC320 C13 (trip preventer)
output unit	6 gauge	7 gauge	4 gauge	9 gauge
rated output voltage	250VAC 50/60Hz	250VAC 50/60Hz	250VAC 50/60Hz	250VAC 50/60Hz
highest output voltage	16A	10A	16A	16A
power				
control functionality	none	10A bi-polar circuit breaker	16A bi-polar circuit breaker	overload protection and power supply indicator
Protection	none	none	none	none
dimensions (L×W×H) (19 inches)				
dimension specifications	483×68×44.4mm	483×68×44.4mm	483×68×44.4mm	483×68×44.4mm
Installed fixed hole central moment	456.5mm	456.5mm	456.5mm	456.5mm
Install				
regulatory method	horizontal installation	horizontal installation	horizontal installation	horizontal installation
Space occupied on machine shelf	1.0U	1.0U	1.0U	1.0U
				

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2260 C13 Long	2260 C13 national standard length	2270 22 gauge C13	080709 PDU front face/back face
MEP2260C1-76BVZRM	MEP2260Z2-54KVNNGB	MEP2270C1-22CVEGMB	MEP2290C1-14LHENLB
250VAC 50/60Hz	250VAC 50/60Hz	250VAC 50/60Hz	250VAC 50/60Hz
GB1002 16A national standard 3-prong plug×2	junction box input×2	IEC60309 16A industrial plug	IEC60309 16A industrial plug
3×2.5mm ²	3×2.5mm ²	3×2.5mm ²	3×2.5mm ²
3M×2	3M×2	3M	3M
16A×2	16A×2	16A	16A
IEC320 C13	GB1002 16A national standard 3-prong plug	IEC320 C13	IEC320 C13
76 gauge	54 gauge	22 gauge	14 gauge
250VAC 50/60Hz	250VAC 50/60Hz	250VAC 50/60Hz	250VAC 50/60Hz
16A×2	16A×2	16A	16A
16A single pole bi-polar circuit×2 Removable lightning arrester×2	none	master switch	replaceable lightning protection component
none	ammeter×2	none	Single supply indicator lamp
1635×88.8×44.4mm	1653×88.8×44.4mm	1123×45×93mm	483×116×44.4mm
1608.5mm	1626.5mm	1097.5mm	426.5mm
vertical installation	vertical installation	vertical installation	horizontal installation
			1.0U
