

CONTAINMENT

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The aisle containment system is a modular rowbased thermal containment solution, which separates cold and hot data center air streams to and from equipment. It manages airflow at the source, increases the cooling efficiency and significantly lowers down operating costs.

Row level thermal containment improves cooling efficiency and predictability to address zones and complete data center deployments. Most parts of the aisle containment components are designed by modular, which allows quick deployment on site and address changing needs or future expansion with pay-as-you grow architecture.

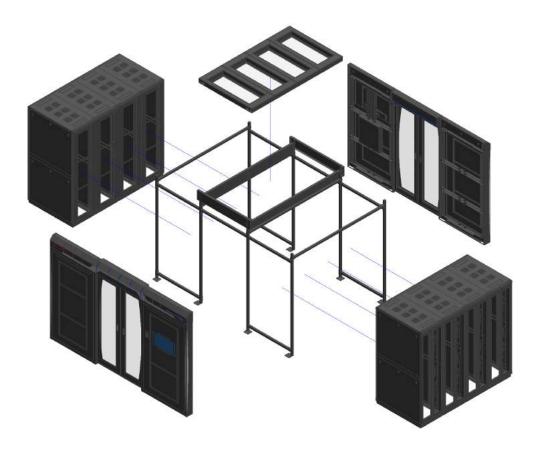
Provide the right combination of safety and security, dual mechanical doors or sliding doors are available.

Aisle containment in the data center requires that cabinets are aligned in a hot aisle/cold aisle layout. Containment panels or strips create a partition to isolate either the server supply air (cold aisle containment) or the exhaust air (hot aisle containment). Preventing the supply and exhaust air from mixing significantly increases the capacity and cooling efficiency of the cooling infrastructure.

Each site will be different due to the site conditions, cooling infrastructure, rack density and other factors. If properly installed you can expect 20-50% reduction in cooling costs. Efficiency is maximized if the cooling systems with variable speed fans and there is a good return air path.



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Containment in a data center refers to the practice of segregating the cold intake air from the hot exhaust air. This separation ensures that equipment is cooled more efficiently, leading to reduced energy costs and increased equipment lifespan.

Cooling System: This is an integral part of the containment strategy. The main objectives are:

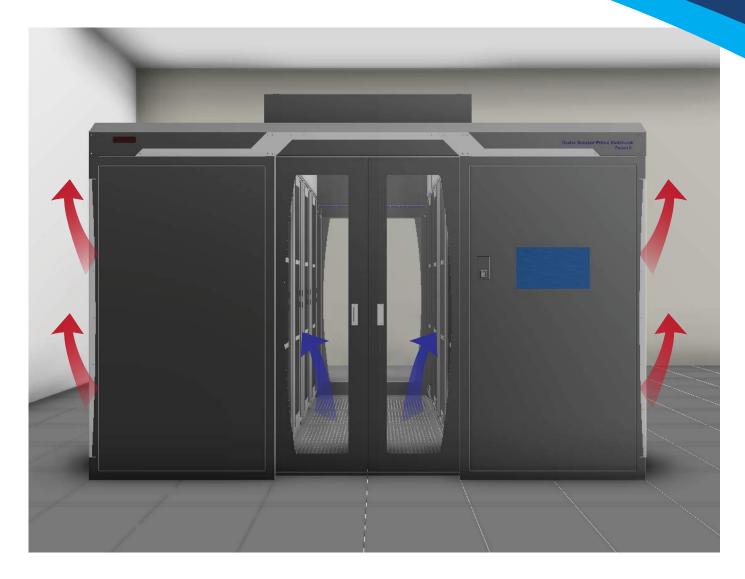
Temperature Control: Ensures that the data center operates within optimal temperature ranges. Too hot, and equipment can fail or get damaged; too cold, and you're wasting energy.

Humidity Control: Maintains the right level of humidity. Too much can cause condensation and equipment damage, while too little can cause static electricity.

Air Flow Management: Efficiently directs cool air to where it's needed and removes hot air.

Redundancy: In case one cooling system fails, a backup is ready to take over to ensure continuous cooling.

COLD AISLE CONTAINMENT



- Containment Top Panel Has Even Roof Structure, Top
 Panel Total Width Is 1400mm, Modular Frame
 Design, Easy To Installation.
- The Net Height Of Aisle Container Is Above 2 MetersWhen The Top Panel Dropped Away, So The Daily Maintenance Will Not Be Affected.
- Modular Designed Cold Aisle Containment Units,
 Every Unit Can Be Installed Independently And Easily Connected With The Units In Next.

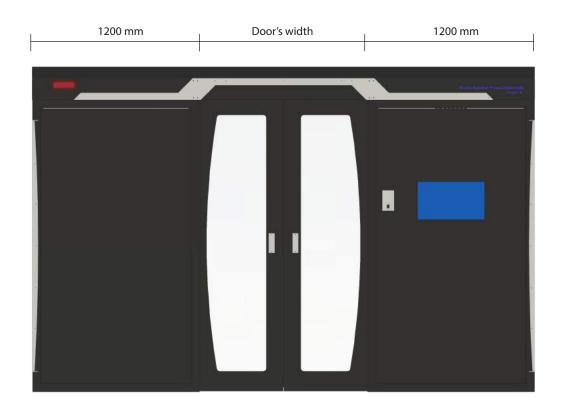
- Doors Should Be Installed At The Front And Rear To Prevents The Hot Airflow Enter Into The Equipment.
- Pre-Installed Terminal Block Is Connected With Fire

 Suppression Systems, The Active Containment Roof panel Will Open When There Is A Fire Alarm Signal



AUTOMATIC SLIDING DOOR

For Cold & Hot Aisle Containment



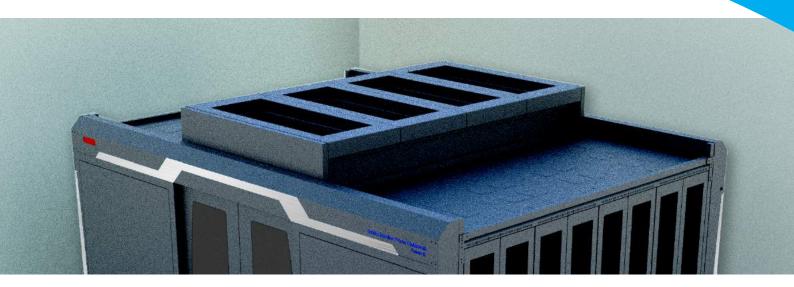
Features:

- Automatic sliding door with false cabinet on both sides with high-strength sliding hanging rail at the top.
- Made of metal frame with 5mm thickness transparent monitoring window.
- Size of sliding door: 1200mm & 1800mm
- Secure access by finger print or RFID.
- Optional touchscreen monitor for monitoring rack's temperature.



CONTAINMENT ROOF PANEL

For Cold Aisle Containment



Under normal operation time, the roof panels are in a horizontal position, in case there is a fire alarm, Roof panel's lock will be unlock, panel will open due to it's gravity to make sure the extinguish gas can enter into the cold aisle containment.

The roof panels are made from steel frame and polycarbonate glass, the thickness of steel frame is more than 1.5mm, thickness of polycarbonate glass is 5mm.

All the panels has depth size 600mm or 800mm base on width of server rack, each unit can be installed independently and connected to the next one. All the panels has width 1400mm or 2000mm base on width of door.

The roof 600mm panels can be installed up to 10 panels and the roof 800mm panels can be installed up to 7 panels.

The roof panels are completed with lamp for lighting area. The lamp will light up when motion detected by motion sensor device.



ROOF PANEL OPENED



ROOF PANEL LAMP