ERS® THE SMART CHOICE. THE BEST CHOICE.

ERS

The DC Solutions Company

The Smart Choice. The Best Choice.

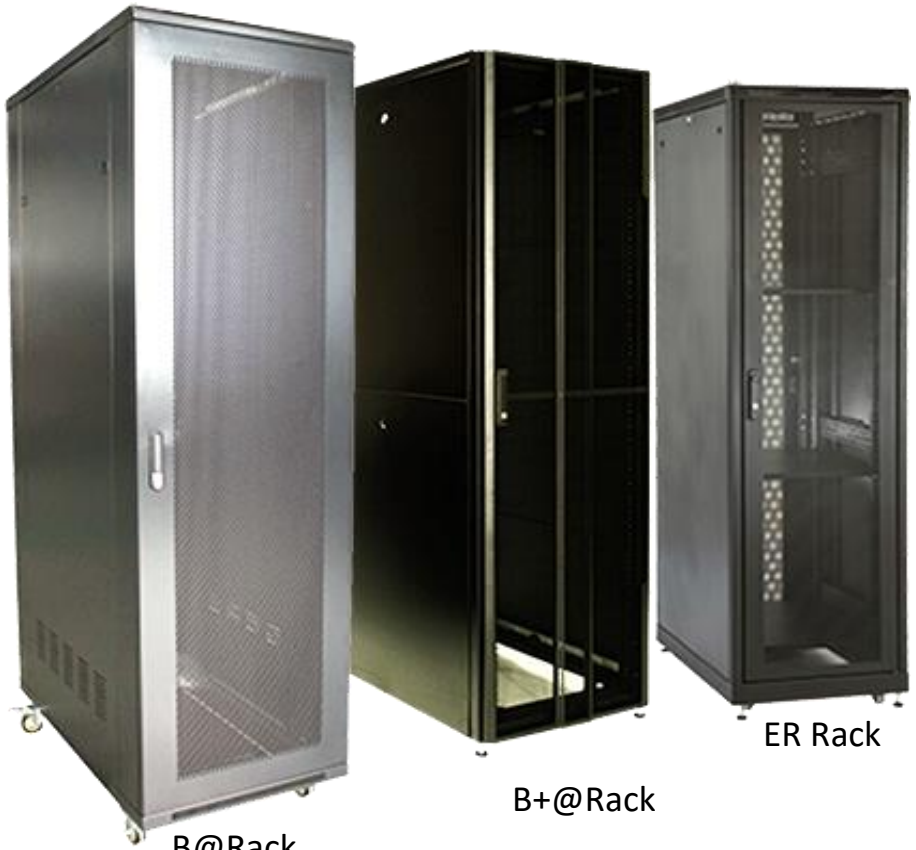
DC White Space Capacity Optimization

Rack/Containment/Enclosure Solutions

- **To facilitate better server and equipment housing**
  - Rack- and Enclosure-level
  - Containment level
- **Current Technology Used**
  - E-Space™ Aluminium Extrusion Technology
  - Computational Fluid Dynamics
  - Etc.
- **Rack Solutions**
  - Low Density Racks (B@Rack, B+@Rack, ER Rack)
  - Security Racks (SER, STR, SSR)
  - Engineered for DC E@Racks
  - Energy Savior Aisle Containment Solution

Racks
Containments

19” Server/Equipment Rack Solutions – Low Density



B@Rack B+@Rack ER Rack

- Ideal for small-business and/or low density requirements
- Designed to fit any vendor’s servers and equipment
- Conforms to EIA 310-E, IEC-60297-1 and -2, RS-310-D
- Knock-down and can easily be reassembled in 20 to 30 minutes
- OPTIONAL: Multi-Factor Authentication Access Control

	B@Rack	B+@Rack	ER Rack
Purpose	Entry Level	Entry Level	General
Main Structure Material	Steel Sheet	Steel Sheet	ER™ Aluminium Extrusion Vertical Frame
Load Capacity	800kg	1000kg	750kg
Tested Power Loading	1 to 3kW	3 to 5kW	3kW
Cooling	Passive Cooling	Passive Cooling	Passive Cooling
Notable	Budget Standard Offering Rack	Budget + Performance Standard Offering Rack	High Mix Low Volume Configurable on height, width, and depth

ER Security Racks

Secure Equipment Rack (SER)

Secure Twin Compartment Rack (STR)

Secure Server Rack (SSR)

- Complied, tested and used by Singapore MSD
- ER™ Aluminium Extrusion vertical structure
- Improved weight-to-strength ratio
- Conforms to EIA 310-E, IEC-60297-1 and -2, RS-310-D
- Designed to fit any vendor's servers and equipment
- Tested by TUV up to 750kg
- ABLOY locking system for Front and Rear doors
- Additional security with specially designed hook locking mechanism
- OPTIONAL: Multi-Factor Authentication Access Control

	SER	STR	SSR
Front metal door with reinforced steel mesh	Yes	Yes	Yes
Rear metal door integrated with reinforced steel mesh	Yes	Yes	Solid Metal Door
Power Loading	1 to 2kW	1 to 2kW	3kW
Cooling	4 fans at rear	2 fans per each compartment	Single Tachometer Centrifugal fan mounted on top of rack
Notables	Standard	Twin independent isolated section	Fully Louvered Front Door

E@Rack – The Choice for Data Centers

ERS Featured Product

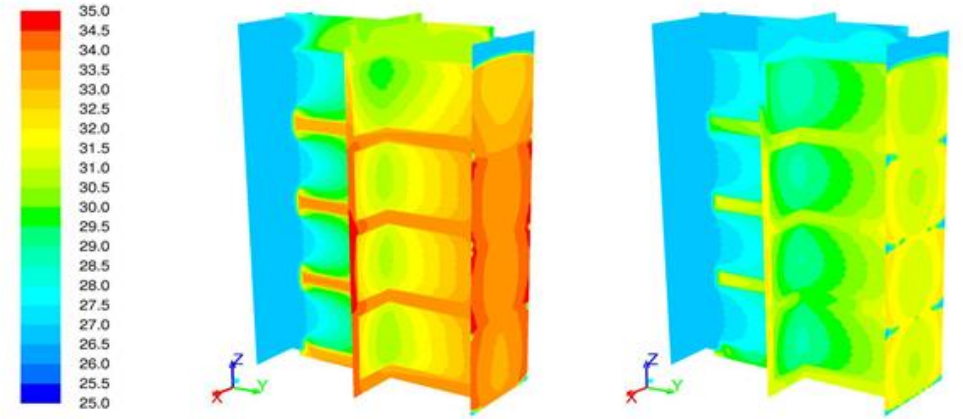
E@Rack

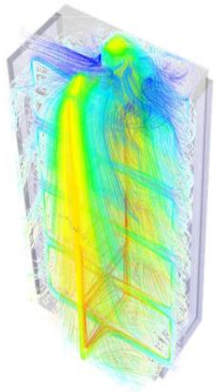
Engineered for Data Centers ROI
Scientifically Enhanced for Businesses TCO
Better Airflow • Higher Power Density •Improve DC Performance

- Design with aid from Computational Fluid Dynamics (CFD)
- Space-Frame Technology for lightweight design and improved weight-to-strength ratio
- Specially designed extendable power strip
- Improved cable management
- Fits any vendor's servers and equipment
- Support Static Loading up to 1500kg
- Support Power Loading > 5 kW
- Heat tested up to 16kW (under controlled condition)

- **OPTIONAL:** Multi-Factor Authentication Access Control (Up to 3FA)

E@Rack : CFD-Aided Design & Development





E@Rack Airflow Distribution

TEMPERATURE DISTRIBUTION WHILE TESTED AT 16KW HEAT LOAD UNDER CONTROLLED CONDITION

Temp.(in) 27 degC

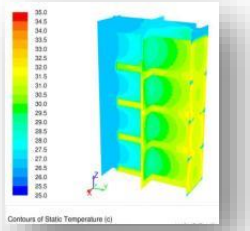
Findings at back of rack*
35 degC air (conventional)
32 degC air (E@Rack)

E@Rack Derived Benefits
Less energy required for cooling
Reduction of hot spots
Reduction of pressure points
Better performance
Longevity for racked equipment

Benefits to DC Businesses
More cost savings
Better value for money
Lessen CAPEX and OPEX
Lower TCO and Higher ROI
Easier Standardized Rack Deployment

*Findings by A*STAR IHPC: Institute of High Performance Computing*

E@Rack v2013 Features



R&D Thermal Management Design for peace of mind & resiliency

Space-Frame Technology reinforced strength, weigh less than 20kg, Load Tested 1500kg by independent test lab

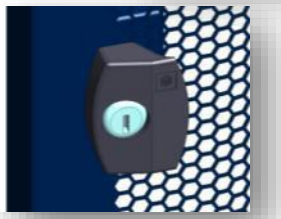
Add-on & Removable Side Panels

Bus Bar Design Power-Strip for superior Reliability in termination, Robust & Maintenance-free.

Automated Intelligent Solution allow Monitoring, Capacity & Performance Planning

Eco-friendly Mounting profile through-hole U positioning and mounting bay

Improved Cable Management- reduces footprint by 25% of cabinet space



Independent Locking and Unlocking Mechanism

AISLE CONTAINMENT SOLUTION

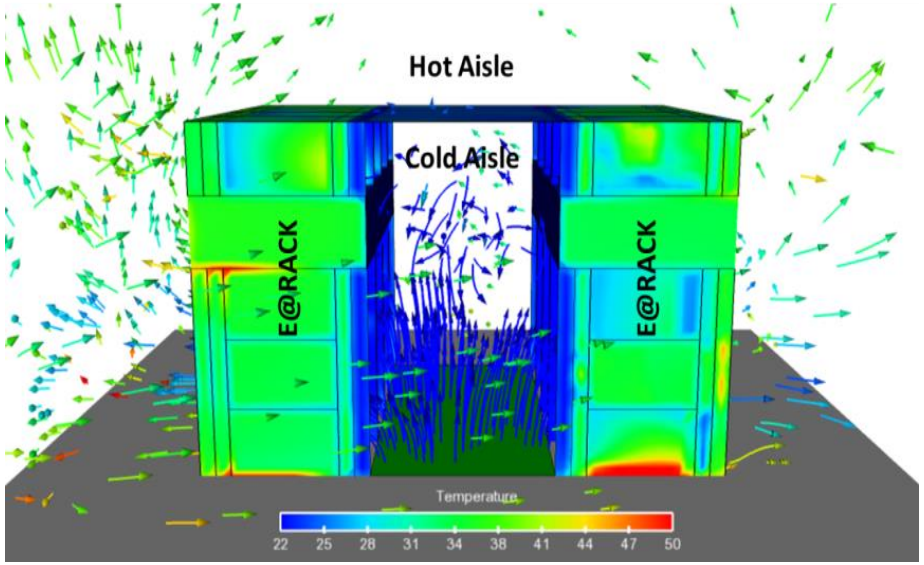
ERS Featured Product

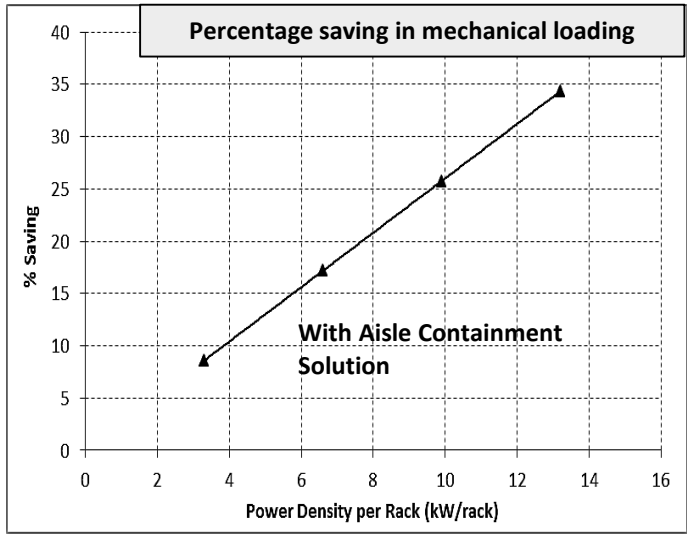
Hot/Cold Aisle Containment Solutions

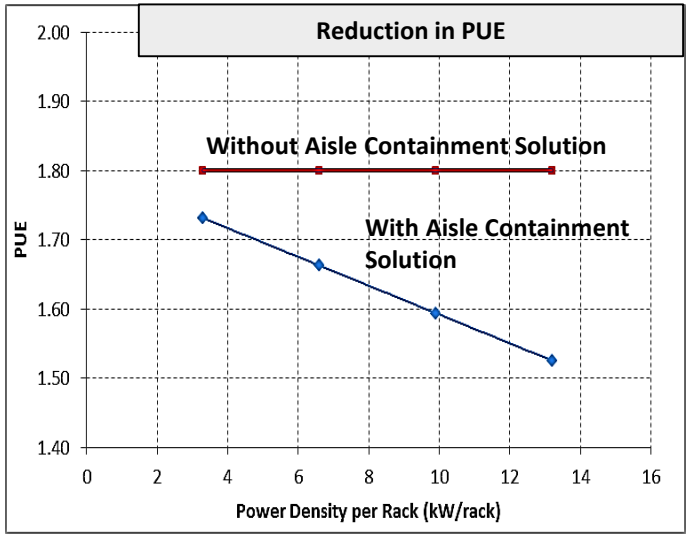
Engineered for Data Centers ROI
Scientifically Enhanced for Businesses TCO

- Works best with E@Rack(s)
- Increases longevity of racked equipment up to 35%
- Reduce cooling cost up to 20%
- Support Green Datacenter initiatives
- Options
  - In-row air-conditioning
  - Louvered tiles
  - Multi-Factor Authentication Access Control
  - Computational Fluid Dynamics (CFD) simulation and advisory
  - Site Survey and Product Customization

Aisle Containment: CFD-Aided Design & Development







YouTube

View YouTube Video

*Findings by A*STAR IHPC: Institute of High Performance Computing*