



Eaton SmartRack Modular Data Centers

Innovative modular data centers enable rapid configuration and deployment

The growth of edge computing and distributed artificial intelligence (DAI) in enterprises, warehouses and manufacturing facilities has increased demand for small data centers with shorter deployment cycles, lower costs, optimized capacity and scalable configurations. These data centers also need to withstand the physical and environmental challenges of light industrial environments and other non-traditional computing locations.

SmartRack® Modular Data Centers are composed of IT rack, cooling and service enclosures that together form a performance optimized data center, or POD. This innovative design enables easy configuration and maintenance. It also lowers costs by reducing the overall cycle time to deploy a data center from months or weeks to just days.

Set up small data centers in edge locations

Easy configuration and scalability

There are a variety of configurations to address the needs of diverse applications. As computing needs grow, more enclosures can be added.

- IT rack enclosures house up to 44U of rack-mounted equipment.
- Cooling enclosures house a slim 300 mm wide 12 kW or 25 kW cooling unit.
- Service enclosures are empty and ready for customization. Available in three widths (small, medium and large), the enclosures can house 3-phase UPS systems, power distribution panels, fire suppression systems or non-IT equipment that does not need thermal management.

Equipment protection

Designed to meet IP54 standards, the IT rack and cooling enclosures protect equipment from dust and splashing/dripping water as well as physical and environmental conditions found in factories, warehouses and other edge locations.

- IT rack enclosures have solid front and back doors with clear acrylic windows for monitoring equipment.
- Locking doors and panels help keep contents secure. Doors are compatible with access control systems for extra security and optional remote monitoring.
- Power cables, data cables and cooling lines have separate top or bottom entries.

Optimize thermal management

Efficient cooling

Eaton's slim 12 kW or 25 kW 3-phase 208V in-row precision cooling system includes an outdoor condenser.

- When the rack and cooling enclosures are connected, they form a temperature-regulated unit, helping prevent equipment malfunctions due to overheating or fluctuating temperatures.
- EC fans and a variable-speed inverter compressor adjust cooling output to match heat load and conserve energy during off-peak hours.
- User-friendly color touchscreen enables diagnostics and simplifies commissioning.
- Built-in network interface card supports remote management.

Simplify deployment

Hassle-free transport and positioning

The assembled enclosures are robust enough to be transported on a flatbed truck. The in-row cooling unit evaporator is pre-installed in the cooling enclosure, which is attached to an IT rack enclosure for added stability during transport. Casters aid in final positioning.

Simple maintenance access

Removable side panels on the enclosures enable access to equipment and facilitate configuration changes. Cooling units use standard hardware store filters that are easily accessible using the enclosure's back door.



Powering Business Worldwide

Feature focus

7-inch color touchscreen

Easy-to-navigate touchscreen facilitates local cooling management.

Service enclosure

Empty enclosure with vented doors supports customization.

IT rack enclosure

44U rack enclosure has clear acrylic windows, equipment mounting rails and cable management.

Cooling system with enclosure

Slim cooling system saves space and forms a closed-loop cooling environment with IT rack enclosures. Enclosure has top and bottom entries for power cables and refrigerant pipes.

Outdoor condenser

The condenser mounts on a rooftop or condenser yard and requires professional installation and connection to the indoor cooling unit.



Model: SRP-2R-C25-M

Casters and leveling feet

Rolling casters simplify final positioning.

Cable service entrance hood

Power and data cables create a drip loop, preventing water from running down them and entering the rack.

Cable management plenum

A top plenum allows easy cable routing from side to side.

Locking doors

Enclosures lock and are compatible with access control systems for extra security and optional remote monitoring.



Removable side panels

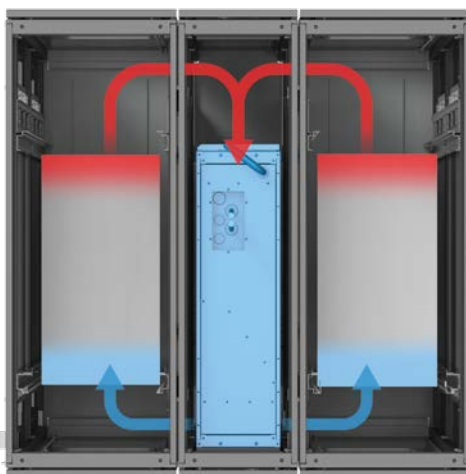
Panels unlock for access to equipment or configuration changes.

Optimized thermal management

The slim cooling systems provide predictable and reliable high-density cooling. Pre-installed in the cooling enclosures, the precision cooling units are positioned to optimize thermal management with side or front air discharge, depending on how many cooling units are in the configuration. A pre-installed network card enables remote access.

Configurations with one cooling unit — side air discharge

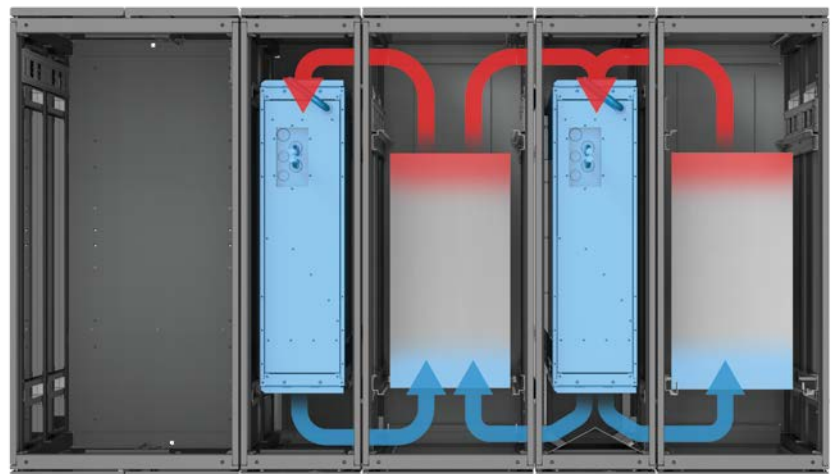
Cooling unit is installed toward the front of the cooling enclosure. Cold air flows to the sides and enters the IT rack enclosures, forming a closed-loop cooling system.



Top view

Configurations with multiple cooling units — front air discharge

Cooling units are installed toward the middle of the cooling enclosures, creating a hot aisle and a cold aisle. Cold air floods the front plenum and is diverted to each side and into the IT rack enclosures.



Top view

Gain peace of mind with remote management

Remote management of cooling, UPS systems and PDUs

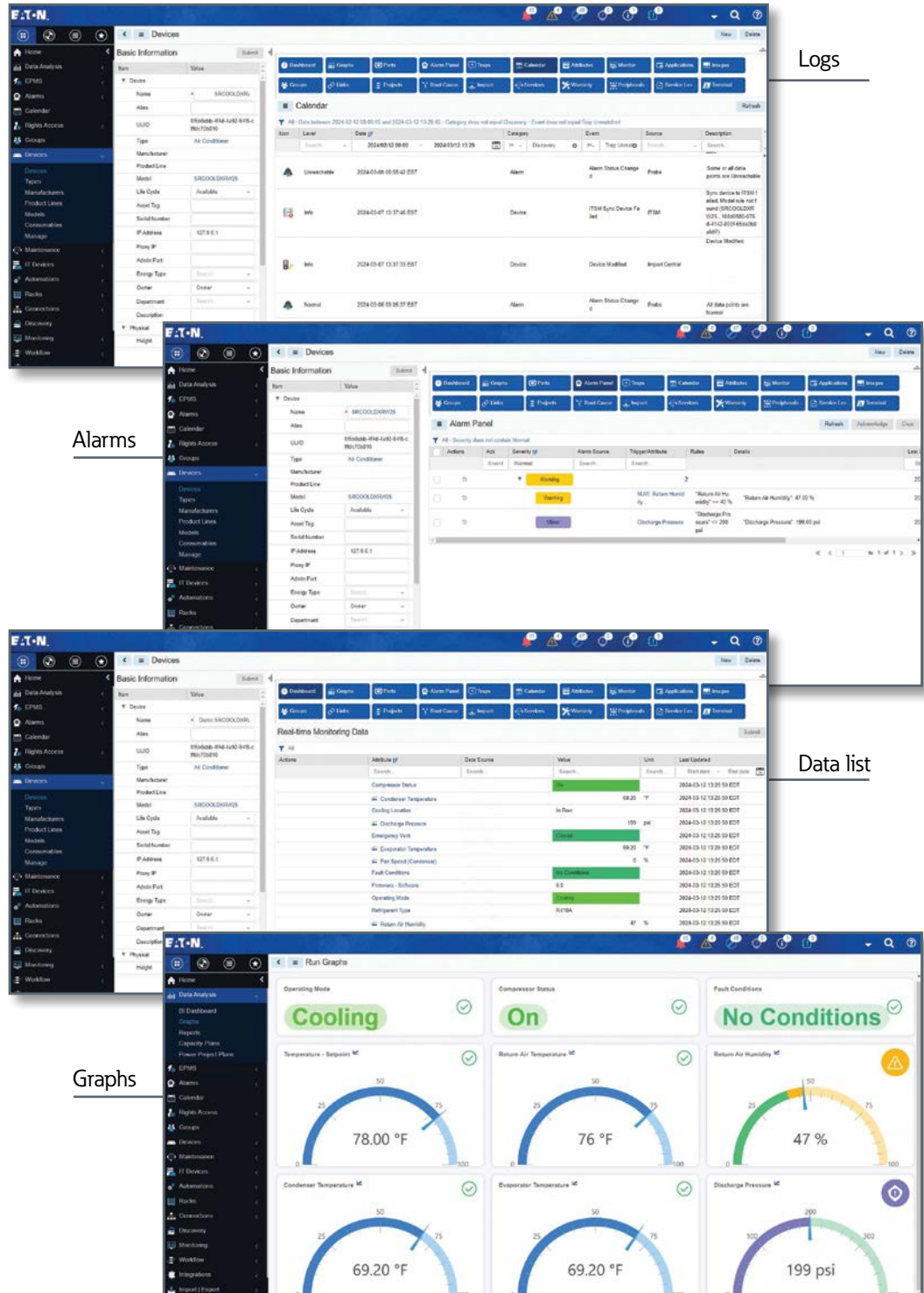
Managing and maintaining edge infrastructure equipment across multiple sites is time consuming—and often stressful. When unexpected downtime occurs, skilled on-site resources may not be present and every minute counts.

Eaton's Distributed IT Performance Management (DITPM) software, a part of the Brightlayer Data Centers suite, enables remote monitoring and control of networked cooling units, UPS systems and PDUs to provide you with peace of mind.

Distributed IT Performance Management (DITPM) software

Compatible with modular data center cooling units and select Eaton UPS systems and PDUs, DITPM software provides asset monitoring and management at the edge.

- **Manage and optimize performance**
View real-time reports, trend charts and dashboards. Receive real-time alerts prioritized by severity and escalated when needed.
- **Resolve issues and avoid disaster**
Remotely control assets, automate device response and diagnose equipment performance.
- **Keep your data center cybersecure**
Push remote firmware updates to improve cybersecurity and reduce the need for in-person visits.
- **Speed software onboarding**
Leverage tools and resources to quickly install, configure and use the software.



For more information about Eaton's Brightlayer Data Centers suite, visit Eaton.com/BrightlayerDataCenters

Enhanced access control

For greater security, access control door handles for the modular data center enclosures are available. Choose from a variety of authentication options, including PIN pad, RFID and fingerprint scan. These access control systems are compatible with DITPM software, enabling remote management of the locks.

SmartRack Modular Data Center configurations



Understanding catalog numbers

The enclosure type and quantity of each type are represented in the catalog number.

R = IT rack enclosure

C12 = 12 kW cooling system with enclosure

C25 = 25 kW cooling system with enclosure

M = Medium service enclosure

SRP-2R-C25-M

Two
IT rack
enclosures

25 kW cooling
system with
enclosure

Medium
service
enclosure



ModularDataCenter
CONFIGURATOR

Need help choosing a configuration? Start with our online configurator
at TrippLite.Eaton.com/EatonMDC

Specifications

Catalog number	IT rack enclosure (R) qty.	12 kW cooling system with enclosure (C12) qty.	25 kW cooling system with enclosure (C25) qty.	Medium service enclosure (M) qty.	Overall size*, H x W x D	Overall weight with cooling system(s)*
Single-rack configurations						
SRP-R-C12	1	1	—	—	95 x 40.4 x 64.9 in. (2415 x 1026 x 1648 mm)	1407 lb. (638 kg)
SRP-R-C25	1	—	1	—	95 x 40.4 x 64.9 in. (2415 x 1026 x 1648 mm)	1447 lb. (656 kg)
Two-rack configurations						
SRP-2R-C12	2	1	—	—	95 x 64.3 x 64.9 in. (2415 x 1632 x 1648 mm)	1977 lb. (897 kg)
SRP-2R-C25	2	—	1	—	95 x 64.3 x 64.9 in. (2415 x 1632 x 1648 mm)	2017 lb. (915 kg)
SRP-2R-2C12	2	2	—	—	95 x 81 x 64.9 in. (2415 x 2058 x 1648 mm)	2814 lb. (1276 kg)
SRP-2R-C25-M	2	—	1	1	95 x 96 x 64.9 in. (2415 x 2438 x 1648 mm)	2753 lb. (1249 kg)
SRP-2R-2C12-M	2	2	—	1	95 x 112.8 x 64.9 in. (2415 x 2864 x 1648 mm)	3550 lb. (1610 kg)
SRP-2R-3C12-M	2	3	—	1	95 x 129.5 x 64.9 in. (2415 x 3290 x 1648 mm)	4387 lb. (1990 kg)
Three-rack configurations						
SRP-3R-2C12	3	2	—	—	95 x 104.9 x 64.9 in. (2415 x 2664 x 1648 mm)	3384 lb. (1535 kg)
SRP-3R-2C25-M	3	—	2	1	95 x 136.6 x 64.9 in. (2415 x 3470 x 1648 mm)	4200 lb. (1905 kg)
SRP-3R-3C12-M	3	3	—	1	95 x 153.4 x 64.9 in. (2415 x 3896 x 1648 mm)	4957 lb. (2248 kg)
Four-rack configurations						
SRP-4R-2C25	4	—	2	—	95 x 128.7 x 64.9 in. (2415 x 3270 x 1648 mm)	4034 lb. (1830 kg)
SRP-4R-3C12-M	4	3	—	1	95 x 177.2 x 64.9 in. (2415 x 4502 x 1648 mm)	5527 lb. (2507 kg)

Specifications for individual components

Enclosure type	IT rack enclosure (R)	Cooling enclosure (C12, C25)	12 kW cooling system*	25 kW cooling system*	Medium service enclosure (M)**
Size, H x W x D	95 x 23.6 x 64.9 in. (2415 x 600 x 1648 mm)	95 x 16.5 x 64.9 in. (2415 x 420 x 1648 mm)	78.7 x 11.8 x 43.3 in. (2000 x 300 x 1100 mm)	78.7 x 11.8 x 43.3 in. (2000 x 300 x 1100 mm)	95 x 31.5 x 64.9 in. (2415 x 800 x 1648 mm)
Weight	570 lb. (259 kg)	440 lb. (200 kg) without cooler	397 lb. (180 kg)	437 lb. (198 kg)	736 lb. (334 kg)

Due to continuous improvement programs, all specifications are subject to change without notice. *Size and weight values do not include the outdoor condenser. **Small service enclosure is 700 mm wide. Large service enclosure is 1000 mm wide.

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
[Eaton.com](https://www.eaton.com)

© 2024 Eaton
All Rights Reserved
Printed in USA
BR159024EN / 24-02-120
April 2024

To learn more, scan the QR code or
contact your Eaton sales representative.



Powering Business Worldwide

Eaton and SmartRack are
registered trademarks.

All other trademarks are property
of their respective owners.

Follow us on social media to get the
latest product and support information.

