



FUTURE PROOF

YOUR DATACENTER WITH DDC S-SERIES

Push beyond the limits of traditional data center cooling with DDC S-Series, patented cabinet technology that supports HPC and Al infrastructure with ultra-high-density air and liquid-to-chip ready cooling.



Challenge

Al and HPC workloads are quickly changing the data center landscape. Over the next few years, they will boost data center demand dramatically and will propel a transformation in data center design. The time to upgrade, retrofit, or build your data center to ensure future viability is now. But there are space limitations, resource sustainability concerns, and an increasing need for efficiency.

Solution Overview

Meet capacity and density needs without sacrificing performance. The Scalable S-Series Data Center Cabinet Platform with Dynamic Density Control™ (DDC) features an ultra-high-density air-cooled system with liquid-to-chip ready built in. The modular design allows your company to scale, adding capacity as demands grow allowing you to lower total cost of ownership. Patented DDC technology adjusts airflow and temperature dynamically based on equipment loads, delivering better hardware performance, fewer component failures, and increased efficiency for more sustainable operation. Reduce operating and financial risk with NEMA 3R certified cabinets, built-in fire suppression, real-time monitoring, and security.













INDUSTRY FACT

Technology innovations in liquid cooling have improved its ease of use and lowered the cost to retrofit operational data centers.¹

2024 Trends in Data Center Services
 Infrastructure, 451 Research and
 S&P Global

S-SERIES CABINETS + DCIM MANAGEMENT SOFTWARE = A COMPLETE SOLUTION FOR DATA CENTERS

Dynamically manage and monitor your S-Series cabinets to reduce risk and improve efficiency with real-time, predictive environmental control for your high-density air, and liquid-to-chip cooled equipment.

BY THE NUMBERS

DDC S-Series delivers:

- 100-kilowatt air-cooled density
- 400-kilowatt liquid-to-chip ready
- 1-1000+ cabinet scalability
- 75% reduced deployment time
- 1000+ global deployments

 $^{^{1}\} https://pages.marketintelligence.spglobal.com/CIQPro-2024-Top-TMT-Trends-OutlookReportDatacenterSvcsandInfrastructure.html$



Business Value

DDC's Scalable S-Series meets the needs of new data centers, modernizations, and retrofits, delivering the following benefits:

- Ultra-high-density air-cooled cabinets up to 100kW
- Liquid-to-chip ready up to 400kW per cabinet
- Lowers TCO and construction costs
- Reduces operating risk/financial risk
- Increases efficiency with lower PUE/WUE
- Offers sustainable closed loop system with zero water waste
- Ensures scalable installation of 1 or 1,000+ cabinets
- Delivers redundant motors and coils avoiding single point of failure
- · Allows modularity so you can build as you grow

Cabinet dimensions

Rack Widths 30" & 36" 45 RMU 116"H x 82"D 48 RMU 121.25"H x 82"D 52 RMU 126.5"H x 82"D 60 RMU 140.5"H x 82"D Weight: 790 - 870 lbs

"DDC allowed Tierpoint to deliver the highest density infrastructure with the lowest cost to build."

-Tierpoint

How it Works

The DDC Scalable S-Series cabinet is a self-contained, scalable, and cost-effective data center solution offering:

- Modularity: DDC's modular design allows you to deploy 1-1,000+ cabinets matching build-out timelines to IT and budget demands.
 Deploy ultra-high-density cabinets next to traditional IT cabinets and dynamically manage density as workloads expand and contract for ultimate flexibility.
- Scalability: As workloads transform, dynamically move from 1kW to 100kW using air cooling. Direct liquid-to-chip capabilities can accommodate up to 400kW per cabinet, ensuring your business is future-proofed.
- Location Flexibility: Deploy the S-Series in a wide variety of locations due to reduced ambient noise and transfer heat into your environment.
- Efficiency: DDC's dynamic management and real-time monitoring DCIM software uses sensors throughout the cabinet to ensure consistent temperature within two degrees top to bottom, dew point, and CFM airflow to a surgical degree.
- Ruggedized Engineering: S-Series is engineered with a reinforced sealing between hot and cold decks to optimize internal cooling and minimize heat transfer; stronger tops so technicians can walk on the tops of the cabinets for maintenance, servicing, and rigging; and simplified chilled water feeds to prevent leaks.
- Risk Mitigation: Reduce operation and financial risk to expensive
 equipment from fire and water in your data center. Lower your loss
 footprint from an entire data center to a single cabinet designed
 with NEMA 3R certification, built-in security and fire suppression,
 redundant motors and coils, and granular environmental control.

Learn more about DDC and their ultra-high-density data center solutions.

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