PRODUCT BRIEF **DCIM**

DDC SOLUTIONS

GREAT LAKES DATA RACKS & CABINETS

DYNAMICALLY OPTIMIZE EVERY ASSET OF YOUR DATA CENTER WITH DDC'S DCIM INTELLIGENT MANAGEMENT AND MONITORING SOFTWARE

Reduce operational risk and improve efficiency with real-time condition monitoring and dynamic environmental control from the infrastructure down to the equipment level.

DYNAMIC ENVIRONMENTAL CONTROL

REAL-TIME ASSET MANAGEMENT

REDUCED OPERATION RISK

By the Numbers

Optimize your S-Series Cabinets with DDC's DCIM monitoring and management software to achieve:

- 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 and financial risk
- Increases efficiency with lower PUE

S-Series + DCIM = A Complete Solution for Data Centers

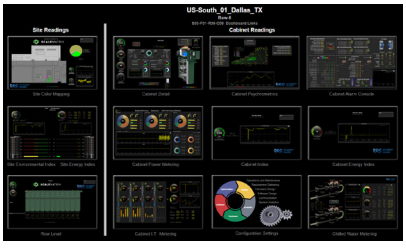
DDC provides turnkey data center solutions with its S-Series Cabinet technology combined with DCIM dynamic monitoring and management software. Together they deliver intelligent power handling and sustainable enterprise environment controls. Conduct real-time monitoring of conditions within the cabinet and adjust airflow and/or liquid cooling dynamically to meet equipment needs at any given time.

INDUSTRY FACT

> **"As data centers continue to be impacted by AI, greater energy requirements, sustainability, automation, more complexities, and numerous technological advancements, DCIM tools offer significant benefits."**
>
> ***— Gartner Hype Cycle for Data Center Infrastructure Technologies, 2024****

Challenge

Increasing demand for HPC and AI workloads are forcing operators to accommodate widely varying workloads across their data centers. Traditional data center monitoring software is designed to monitor an entire room or building and is so complex that it requires highly skilled operators to run. This vast-space approach does not account for the individual needs of each piece of equipment in a data center—some of which may be running hotter, higher density workloads than other equipment nearby. These traditional solutions are also not designed to accommodate new cooling methods – like ultra-high-density air and liquid-to-chip cooling - as data center cooling needs evolve. Today's workloads are no longer stagnant and cooling needs are constantly changing as workloads ramp up, making it impossible to monitor and optimize your data center manually.



*Gartner, HYPERLINK "https://www.gartner.com/document-reader/document/5540595?toggle=1&viewType=Full"Hype Cycle™ for Data Center Infrastructure Technologies, 2024, HYPERLINK "https://www.gartner.com/analyst/bcc906b57e"Henrique Cecci, HYPERLINK "https://www.gartner.com/analyst/bacf00bf7d"Philip Dawson, 27 June 2024 (Gartner subscribers can access the report) GARTNER is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and internationally, and HYPE CYCLE is a registered trademark of Gartner, Inc. and/or its affiliates and are used herein with permission. All rights reserved.

PRODUCT BRIEF **DCIM**

MONITOR AND DYNAMICALLY OPTIMIZE EVERY ASSET OF YOUR DATA CENTER

Solution Overview

Reduce risk and improve sustainable operations with real-time condition monitoring for every piece of equipment with a panoptic view of your data center from a single screen. As workloads increase and decrease, DDC's DCIM software predicts equipment needs based on real-time monitoring inside the cabinet itself and dynamically adjusts airflow and water temperatures before the equipment becomes overheated - maintaining a constant temperature throughout the cabinet. DDC cabinets are pre-equipped for a variety of cooling needs from ultra-high-density air to direct liquid-to-chip cooling. DDC DCIM software can monitor and control the unique cooling methods in every cabinet across an entire data center — providing operators with a sustainable, future-proofed approach with a lower total cost of ownership.

Business Value

DDC's DCIM monitoring interface meets the needs of new data centers, modernizations, and retrofits, delivering the following benefits:

- **Monitor assets in real-time** - Sensors provide unprecedented visibility into what's happening inside cabinets across the data center – not available with traditional open-air cooling systems.
- **Extend equipment life** - Predicts equipment cooling needs and adjusts airflow dynamically for each piece of equipment at any given time, eliminating stranded assets, reducing temperature variation, and extending the life of valuable equipment.
- **Optimize efficiency and sustainability** - Patented DDC technology adjusts airflow and water flow in real time based on equipment loads rather than cooling an entire room. Run a more efficient and sustainable facility with fewer equipment failures.
- **Scale without replacing** - Deploy ultra-high-density cabinets next to traditional IT cabinets and dynamically manage density as workloads expand and contract for ultimate flexibility. 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.
- **Lower total cost of ownership** - DDC's proven system is less expensive to build, faster to deploy, and less costly to run than other datacenter options. It is expertly engineered to provide years of trouble-free operations.
- **Easy to use** - Secure, browser-based access is available from any desktop, tablet, or smartphone. The user-friendly navigation and graphical interface facilitate quick identification and response to any situation, regardless of your location.

"DCIM software not only monitors every single cabinet but it's also constantly optimizing to keep them all balanced in unison across any size build."

— Executive Vice President of Operations, TierPoint

How it Works

Each cabinet in a DDC data center is self-contained and built with top to bottom environmental sensors that send real-time information about the operation of each piece of equipment back to the DCIM interface. The intelligent monitoring system dynamically and automatically adjusts to the cooling needs of the equipment in that individual cabinet, allowing data center operators to run high- and low-density workloads side by side without wasting resources.

DCIM's single pane of glass interface provides granular control plus real-time and historical performance data. Multiple properties can be precisely managed from a single browser-based interface. Easily drill down to the individual port power for each server level for an unprecedented look at what's happening in every rack, at every data center, every moment of the day.

Future-proof operations with a complete solution built to optimize any size workload. Use DCIM to manage multiple cooling methods in a single data center. Go from ultra-high-density to liquid-to-chip as densities increase - all without replacing any equipment. Connect to an existing building management system or use it as a stand-alone system to match resource demand with supply, creating a zero-waste environment.

Key Features

- Data visualization
- Power Usage Effectiveness (PUE) management
- Environmental monitoring
- Analytics and Fault Detection (FDD)
- Single point of contact
- Standardization and consistency across multiple sites
- Centralized billing and warranty management
- System redundancy
- Critical alarming
- Systems integration
- Data center expertise
- Master service agreements with our strategic accounts team

Next Steps

Experience the power of the DDC DCIM for yourself.

Contact

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About

Great Lakes Data Racks & Cabinets designs high-quality data center cabinets, racks, and enclosures.

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