

CDU

**NORTEK™**  
DATA CENTER  
COOLING

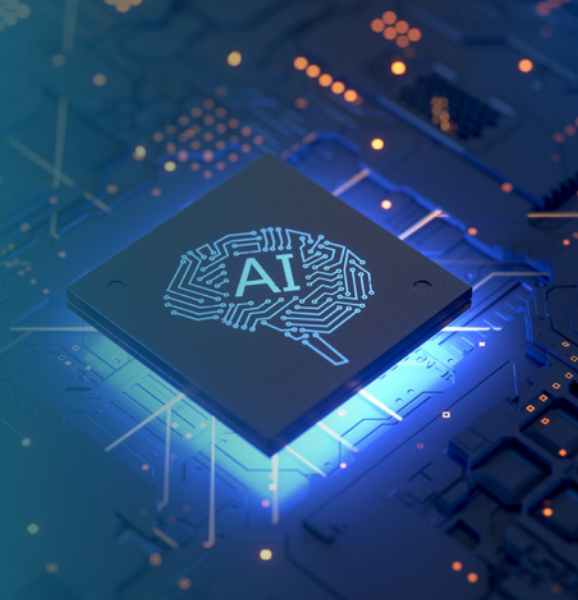
# Future-proofing data center innovation with state-of-the-art liquid cooling solutions

**NORTEK DCC, POWERED BY C-FORCE**



**As AI and high-performance computing (HPC) revolutionize the way we live and work**, our infrastructure supporting this information revolution must be robust, sustainable, and scalable. Data centers are in a race to keep up with the pace of change.

Amid this complex and dynamic landscape, Nortek Data Center Cooling (Nortek DCC) emerges as a vital partner, pioneering advanced liquid cooling solutions to ensure data center reliability, resilience, and sustainability.



## Delivering agility at scale

Nortek DCC is part of Madison Air, a multi-billion dollar enterprise with a portfolio of 20 world-class brands. As a standalone entity specializing in data centers, Nortek DCC is agile and can move quickly to make customer-focused decisions at the point of impact. As part of Madison Air, the company is able to lean into the leverage and scale of a leading enterprise with a global footprint, adjacent businesses, and supply chain redundancies across the organization.

This unique combination ensures that Nortek DCC is equipped to meet the demands of an expanding data center market and help your business succeed.



## Seamless transition to liquid cooling

As the exponential growth of AI increases rack load density, the required cooling capacity also increases, with liquid cooling emerging as the most reliable and sustainable solution. The Nortek **Cooling Distribution Unit (CDU)** is designed for today and tomorrow, making it the most efficient and effective solution for current and future data center designs.

### High performance, compact footprint

Our CDU delivers coolant directly to technical racks for high-density cooling, supplying a nominal capacity of 1.2 MW of cooling with upwards of 1.5+ MW to the technical loop.

#### The unit contains:

- ▶ Two variable speed pumps.
- ▶ Stainless steel piping and hygienic connections to maintain water quality.
- ▶ A bank of filters for the technical water loop that can go down to 25 microns.
- ▶ Pressure and temperature sensors on both loops, with the option of redundancy.
- ▶ A compact brazed plate heat exchanger.
- ▶ A control valve for the primary loop to maintain approach temperatures.
- ▶ Filters for the facility water loop.

This powerfully engineered liquid cooling solution packs high performance in a compact footprint. Multiple versions are available in common rack sizes for easy retrofit or new construction applications.



# CDU



		CDU Cooling Capacity (kW)	PRIMARY					SECONDARY				
			T_IN		T_OUT		Flow Rate (GPM) Water	T_IN		T_OUT		Flow Rate (GPM) PG25%
			°C	°F	°C	°F		°C	°F	°C	°F	
CDU-650	Setpoint 1	650	26.0	78.8	36.0	96.8	247.7	42.0	107.6	30.0	86.0	213.3
	Setpoint 2	813	32.0	89.6	42.0	107.6	248.2	51.0	123.8	36.0	96.8	170.5
	Setpoint 3	1,020	32.2	90.0	50.5	123.0	213.0	65.0	149.0	45.0	113.0	200.5
CDU-1200	Setpoint 1	1,200	26.0	78.8	36.0	96.8	457.3	42.0	107.6	30.0	86.0	393.8
	Setpoint 2	1,555	32.0	89.6	45.0	113.0	457.0	53.0	127.4	36.0	96.8	359.8
	Setpoint 3	1,878	32.2	90.0	47.9	118.3	457.3	65.0	149.0	45.0	113.0	369.2

CDU-1200: 50 PSI External Head Pressure available for Technical Loop @ 457 GPM

CDU-650: 50 PSI External Head Pressure available for Technical Loop @ 248 GPM

## KEY FEATURES

- **Variable coolant capacity:** Ranges from 300 kW to 1.2-1.5+ MW.
- **Advanced filtration:** Industry-first 25-micron filtration.
- **Enhanced reliability:** Built-in 2N redundancy and hot-swappable components.
- **Compact and modular design:** Ideal for diverse data center applications, from hyperscale to edge.

## BENEFITS

- **Scalable solutions:** Expand your cooling capacity as your infrastructure grows.
- **Space efficiency:** Minimize footprint without compromising performance.
- **Rapid deployment:** U.S. manufacturing backed industry-best lead times.
- **Safety and monitoring:** UL-certified systems with integrated alarms and notifications.

Whether you need direct-to-chip cooling, rear-door heat exchangers, or in-row solutions, Nortek CDUs provide the flexibility and reliability your data center demands.

## Powered by C-Force

Nortek DCC's C-Force is designed to put people and service at the heart of your experience, delivering seamless support throughout the lifecycle of our products. From engineering and operations to commissioning and service, our model is built to serve you at every step. At its core is a team of highly skilled application and hardware engineers backed by extensive expertise in data centers and fully integrated with specialists across service, quality and operations. C-Force was created to ensure you receive comprehensive, end-to-end support that's as responsive as it is reliable.

## The Nortek DCC difference



## PREPARED FOR WHATEVER COMES NEXT

Nortek DCC has you covered, including custom CDU projects based on your unique requirements.

Higher  
CDU capacity  
(300kW to +5.0MW)

Different  
redundancy strategies  
(2N, N+1, N+2)

Design  
based on your  
temperatures

Different filter  
requirements  
(50µm, 25 µm)



**Cooling the cloud. Protecting the planet.™**

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