# **Liquid Cooling Overview**

# Deploying liquid cooling systems for high-density workloads requires planning and partnership



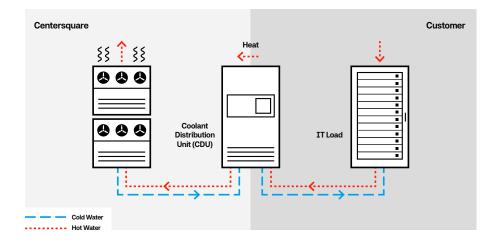
With advancements in containment, rear door heat exchangers, and in-row cooling systems, air-based cooling systems will meet most infrastructure requirements well into the future. For organizations exploring space, power and liquid-cooled strategies for high-performance compute and AI/xPU workloads, we are ready to help you plan build-to-fit solutions that can deliver up to 125kW per rack for liquid-cooled systems and up to 50kW per rack for air-cooled needs.

## How We Work With You

Delivering the next generation of high-density computing solutions takes meticulous planning, partnership, and, ultimately, a shared responsibility model for execution and management. For planning, budgeting, and implementation purposes, we will work with your team to:

- 1. Understand your technology infrastructure goals and objectives
- Review server, systems and equipment specifications from your preferred systems integration vendor (or connect you with one of our trusted partners)
- 3. Coordinate responsibility for the liquid-cooled service (i.e., customer or third party)
- 4. Validate planned heat rejection percentage of the solution (i.e., air vs. water)
- Identify available Centersquare colocation space, power and other necessary infrastructure to support the project

Our data centers were built to endure with an eye toward being versatile and extensible. We continue to invest in significant facility upgrades and expansions to provide our customers with speed to value in highly connected sites that can support emerging infrastructure technologies.



# Common Liquid Cooling Considerations

## In-depth planning is key

It takes collaboration between all parties to determine the full scope of investment, equipment and management required for successful liquid cooling deployments.

#### It's more than cold water

A heat exchanger (CDU) acts as the demarcation between the facility's water loop and the IT systems and must be installed, monitored, managed, and supported.

#### Knowing who's responsible for what is crucial

This is a shared responsibility model. We supply facility water at an agreed temperature and flow, with responsibility extending up to the supply tap and resuming at the return tap. Managing the secondary liquid-cooling system is the purview of the customer and/or their partner.

# Containment products may be necessary

A liquid-cooled setup may require containment, depending on how much heat transfers to the liquid vs. being released into the air, and this should be calculated and considered during the planning stage.

# The Centersquare Advantage

Unwavering Reliability Unmatched Flexibility Superior Customer Care

# **About Centersquare**

Centersquare is a preeminent colocation provider with a proven track record of providing highly reliable data center services.

Prioritizing security, reliability and superior customer service, Centersquare offers flexible data center solutions backed by a

100% uptime guarantee for thousands of diverse organizations across all industries. Learn more at www.centersquaredc.com.

Whatever you need, we are here to help.

Got questions about our services? Looking for space and power availability? Need pricing? Want to schedule a tour? Drop us an email or give us a call.

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