

# LIEBERT® CHILLED WATER AIR HANDLER

What's Cool in the Data Center Thermal Management Innovations



## BENEFITS

### Highly Efficient

- Mechanical PUE less than 1.2 as part of a system
- Multiple economization options available
- Use of EC fans for lower motor power usage
- Self-optimizing controls reduce over-cooling and under-cooling

### Greater Protection

- Less risk of hot spots, through advanced controls and rack inlet sensors
- Advanced monitoring and event notification
- Finely tuned controls for more consistent unit supply air temperature and minimized swings across component ranges

### Lower Installation & Maintenance Costs

- Multiple section design minimizes shipping costs and speeds installation
- Full coil cleaning access and single-side piping
- Insight for Action
- Simplified access to real-time data and trending
- Quick diagnostics of potential critical events

More Efficiency. More Choices. More Experience.

### Liebert Custom Air Handling Units

Our mission-critical air handlers with Liebert iCOM™ controls deliver efficient, reliable and cost-effective management of heat in large data centers.

We offer the largest selection of air handling solutions, combined with the expert guidance to help you select, implement and maintain the right technology to ensure **delivered performance for the lifetime of your data center.**

### Liebert Chilled Water Air Handler

The Liebert Chilled Water Air Handler Unit is the industry's most advanced chilled water cooling system, providing you with maximum thermal control in your data center.

**Economical Deployment.** It maintains conditions at a wide range of return air temperatures and is easy to commission and service, helping to boost productivity and reduce installation and maintenance costs.

**Industry-Leading Efficiency.** The Liebert Chilled Water Air Handler Unit can deliver higher-than-average temperatures (65-70°F), with industry-leading efficiency through the use of for water- or air-side economization and high-efficiency EC fans.

**Simplified Maintenance.** Maintenance can be performed easily and quickly, as a result of features such as full-coil cleaning access, front access to V-Bank filters and single side-piping.

**Intelligent Controls.** The Liebert Chilled Water Air Handling Unit features integrated Liebert iCOM unit controls to maximize data center protection, efficiency and insight. The controls prevent over-cooling and under-cooling through machine-to-machine communications and advanced algorithms. Teamwork modes harmonize the multiple cooling units for higher efficiency and protection.

**Local Service and Support.** All of our solutions are backed by local customer engineers with decades of data center experience and a network of factory-trained service technicians.



**Key Attributes**

- Very efficient with elevated water loop temperatures and waterside or airside economizers.
- Indoor units are typically easy to service and commission.

**Typical Deployments**

- Vertical units along perimeter or in gallery discharging into raised floor.
- Horizontal units in gallery or outside the building — may not use raised floor for air distribution.

Liebert® Chilled Water Air Handlers are best used with Liebert iCOM™ unit controls, wired or wireless rack sensors, and a Liebert iCOM™-S system control to ensure that the entire data center system is optimized with the other components of the chilled water system. Liebert iCOM control algorithms continuously process readings from the rack inlet sensors to

ensure optimal air flow through the system while supply air sensors are used to control the unit cooling capacity. Dampers or exhaust fans are automatically adjusted by the Liebert iCOM unit control, which also harmonizes the operation of multiple air handling units to eliminate conflicts in temperature, airflow and humidity.

**Advanced Controls For Efficiency, Protection and Insight**

