



Liebert® XDU

Coolant Distribution
Unit, 60kW

Enables Liquid Cooled
Solutions in Your
Air-Cooled Environment



Liebert® XDU

Efficiently Deploy Water-Cooled Servers in Any Data Center Environment

Liebert® XDU is a coolant distribution unit that allows you to easily and cost-effectively tap into the advantages of liquid cooling with no need to redesign or replumb your air-cooled environment. The Liebert XDU utilizes a liquid-to-air heat exchanger, which eliminates the need for facilities water. With its row-based format and 60 kW+ of heat rejection, it removes the traditional barriers to liquid cooling, giving you a cost-effective means for deploying water-cooled servers where you need them to support advanced applications and higher rack densities.

IoT, AI, and other data-intensive technologies like virtual reality are requiring data centers and colocation environments to deploy servers with ever-higher power and cooling requirements. While liquid-cooled servers afford tremendous efficiency benefits in these high-density environments, it is no small task for an air-cooled data center to make the infrastructure changes needed to support liquid-cooled servers. Until now.

The ideal retrofit solution.

The new Liebert XDU makes it possible for data centers to deploy liquid-cooled servers without running new water lines to the servers or giving up rack space to accommodate the hardware. The row-based Liebert XDU does not require facilities water. Instead, the easy-to-deploy, fully-enclosed system is filled at the time of installation and mounted adjacent to or nearby a cabinet of water-cooled servers. **With hose piping**, the system uses an integrated filter to ensure water quality, and requires just enough liquid to absorb the rejected heat, greatly reducing the potential for leaks. The Liebert XDU **rejects the heat into the data center space where it can be effectively handled by perimeter air-cooled units**, seamlessly integrating with your existing thermal management solution **and eliminating the need for any major capital expenditures.**

Powerful, reliable, efficient heat rejection.

With 60 kW+ of heat rejection, the Liebert XDU can handle the thermal needs of today's advanced hardware while giving you the room you need to grow.

The redundant pump design ensures the reliability of your cooling solutions while variable speed drive (VSD) controls and EC fans promote your efficiency goals, allowing you to set the flow rate based on facility conditions and automatically match supply water temperature to the load.

Complete visibility and control

For further peace of mind, the state-of-the-art Liebert® iCOM™ Control graphical display affords complete visibility into unit status and operating conditions, which can also be monitored remotely. You can set flow rates and receive alerts if thresholds are missed or if the unit ever switches to the backup pump. With the Liebert XDU, you get everything you need to quickly, cost-effectively and confidently deploy liquid-cooled servers in your air-cooled data center, enabling you to efficiently and reliably accommodate higher rack densities and next-generation, data-intensive technologies.

Key Benefits

- Significantly reduces the capital expense associated with liquid cooling in an air-cooled environment by eliminating the need for facilities water.
- Easily and quickly installs and deploys in any data center environment with in-row or perimeter placement options that don't require valuable rack space.
- Delivers exceptional chip cooling heat rejection capacity (60+ kW) to accommodate high-density racks.
- Ensures cooling reliability and efficiency with redundant pump design, VSD pump controls, and EC fans.
- Easy to control, monitor, service, and maintain system water quality.

Liebert® XDU Features

- **Redundant Pumps with VSD Control** ensure reliable, efficient cooling with a flow rate that can be set to meet the data center's specific cooling requirements.
- **Closed Loop Fan Speed Control with Extra Capacity** automatically matches the supply water temperature to the load to eliminate overcooling and boost efficiency.
- **Top or Bottom Liquid Supply & Return Connection** accommodates any facility design including raised floor and non-raised floor data centers.
- **Integrated 50-Micron Filter** keeps supply water clean to protect server integrity and performance.
- **iCOM™ 7" Color Touch Screen Display** with state-of-the-art controls for complete visibility of operating conditions and unit status.
- **Remote Monitoring** available through communications with HTTP, SNMP, RS-485 Modbus, Modbus IP/BACnet IP, and Liebert Site Scan(R) Web 4.0.
- **Adjacent or Remote Placement Options** to channel rejected hot air to the right location to coordinate with the facility's current cooling configuration.
- **Intelligent Flow Monitoring with Alarm Features** to help maintain system performance and efficiency.
- **Closed-Loop Pipe Design with Integrated Leak Detection** operates with limited water volume and hose piping to simplify deployment and protect data center equipment.
- **Easily Accessible Fill Port and Drain Locations** to streamline and simplify maintenance.

Technical Data

Physical Data

Unit Dimensions (Width x Height x Depth)	600mm x 1162mm x 2000mm 23-5/8" x 78-3/4" x 45-13/16"
Weight +/- 5%	Dry 361kg (796lb) Wet 384kg (847lb)

Electrical Data

Power Supply	208V 3phase 60Hz
Full Load Current	15.0A @ 208V
Maximum Power	3.0kW (@100% Fan Speed)
Nominal Power	1.3kW (@50% Fan Speed)

Performance Data (@45C Water Delivery @24C Air Inlet)

Nominal Cooling Capacity	32.1kW (@50% Fan Speed)
Maximum Cooling Capacity	52.2kW (@100% Fan Speed)
Nominal Fluid Flow	46.2l/min (12.2 USGPM)
Maximum Fluid Flow	75.3 l/min (19.9 USGPM)
Nominal Airflow	2825 m³/h (1663 CFM) (@50% Fan Speed)
Maximum Airflow	5650 m³/h (3325 CFM)

Performance Data (@50C Water Delivery @24C Air Inlet)

Nominal Cooling Capacity	37.1kW (@50% Fan Speed)
Maximum Cooling Capacity	63kW (@100% Fan Speed)
Nominal Fluid Flow	54.5l/min (14.4 USGPM)
Maximum Fluid Flow	90.8 l/min (24 USGPM)
Nominal Airflow	2825 m³/h (1663 CFM) (@50% Fan Speed)
Maximum Airflow	5650 m³/h (3325 CFM)



Vertiv.com | Vertiv Headquarters, 1050 Dearborn Drive, Columbus, OH, 43085, USA

© 2019 Vertiv Group Corp. All rights reserved. Vertiv™ and the Vertiv logo are trademarks or registered trademarks of Vertiv Group Corp. All other names and logos referred to are trade names, trademarks or registered trademarks of their respective owners. While every precaution has been taken to ensure accuracy and completeness here, Vertiv Group Corp. assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specifications, rebates and other promotional offers are subject to change at Vertiv's sole discretion upon notice.

SL-70541 (R01/20)