

# Liebert® DSE Freecooling System, 250-265kW



## Benefits

### Save Money

- High-efficiency, with an operational PUE under 1.2
- Eliminates water usage, cost and treatment
- Low peak power to allow downsizing of backup generator capacity or more IT power for sale
- No air leakage or volumetric displacement, eliminating the need for additional fan power or make-up air capacity
- Rapidly scalable for faster deployment and time to market
- Low operating costs for higher profitability

### Lower Your Risks

- Proven pumped refrigerant economization technology used in more than 8,500 installations worldwide
- Multiple fans, DX circuits and other key components for ride-through

### Manage Easier

- Advanced controls automatically manage unit lead/lag, protect against coil freeze, maximize economization and provide other protective routines
- Auto-economization ensures the highest number of free cooling hours annually

The Liebert® DSE 250-265kW system is the world's most reliable and efficient water-free cooling system for colocation, cloud hosting and other large data centers. Offering superior reliability, the Liebert DSE 250-265kW uses proven pumped refrigerant economization technology from Vertiv, deployed in more than 8,500 installations worldwide.

The Liebert DSE 250-265kW is designed specifically for colocation and other large data centers.

- It supports large, high-density data center suites requiring a low-complexity infrastructure
- Airflow up to 40,000 CFM supports lower  $\Delta T$  in non-raised floor environments
- Units can be placed side by side in a fan array to support loads of more than 250 watts per square foot, with servicing at the back
- It operates as a split system, providing complete separation of data center and outdoor air and allowing highly flexible installations

### Lower Energy Usage

- Pumped refrigerant economizer uses one-tenth the power of compressors
- Advanced monitoring and control algorithms for multi-unit teamwork, automated transitions to economization and automated protection routines
- Highly efficient in low load / part load conditions

### Easier Servicing

- Rear-access servicing
- No need to enter the data center
- Refrigerant pump is virtually maintenance free
- No dampers to service or outside air filters to replace

### Improves Data Center Stability

- No outside air, contaminants or humidity allowed into the data center
- No water usage
- Advanced control algorithms automate unit lead/lag, protect against coil freeze, maximize economization and avoid adverse thresholds



### Low Peak Power

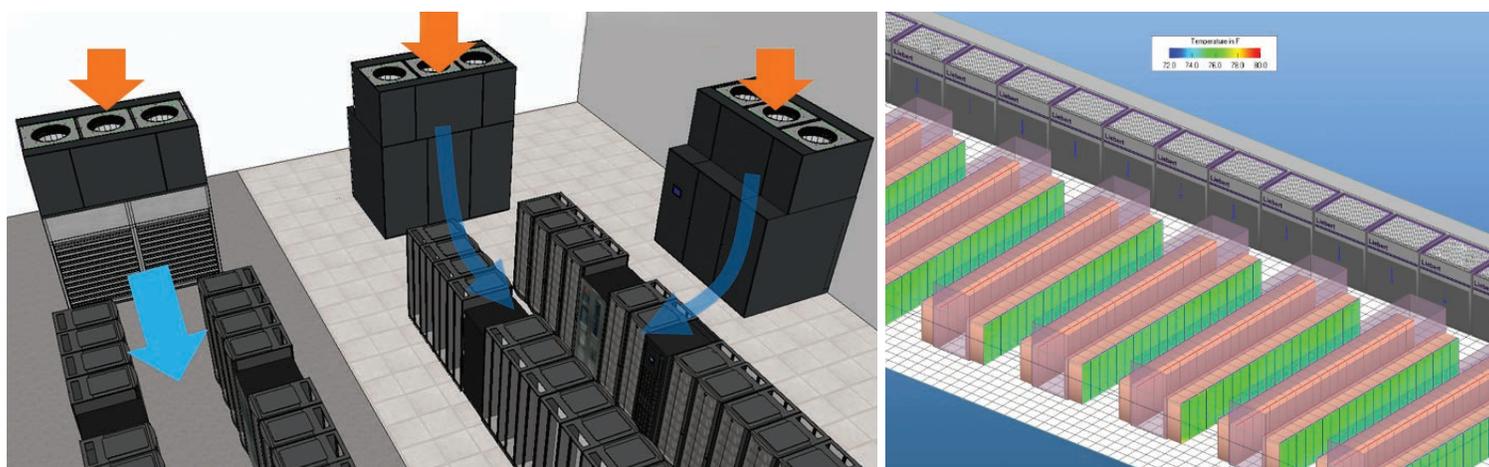
- Large condenser surface area minimizes operating and peak power, allowing for downsized generator backup or sale of additional IT power

### Highly Flexible Design

- High-density design supports loads of more than 250 watts per square foot
- Units can be situated side by side to form a “wall of cooling”
- Underfloor or front air discharge
- Split-system design allows high application flexibility

The Liebert® DSE 250-265kW is the ideal solution for large data center applications requiring application flexibility, high efficiency, no water usage and rapid scalability. It offers:

- Lower unit count compared to DX systems
- Non-raised floor configurations, such as fan array
- High density data center suites - in excess of 250 watts per square foot
- Higher airflow to manage  $\Delta T$
- More consistent data center environment, through physical separation of heat rejection air and data center air with no cross-contamination or transfer of humidity
- Minimal air leakage design with less than 1% air leakage at 1.5 times static pressure and no volumetric displacement
- Low peak power, for smaller generator sizing or more IT power to sell
- Advanced Liebert® iCOM™ controls for automatic protection routines, multi-unit teamwork and greater efficiency



*The Liebert® DSE 250-265kW provides a high level of application flexibility. Its split-system design support situations where outdoor packaged systems are impractical. Multiple airflow configurations provide flexibility for raised-floor and slab-floor environments. Installing the units side by side creates a wall of cooling configuration which saves white space and provide access to the unit from outside the white space.*