

Coolant Distribution Unit (CDU)

In-rack liquid cooling

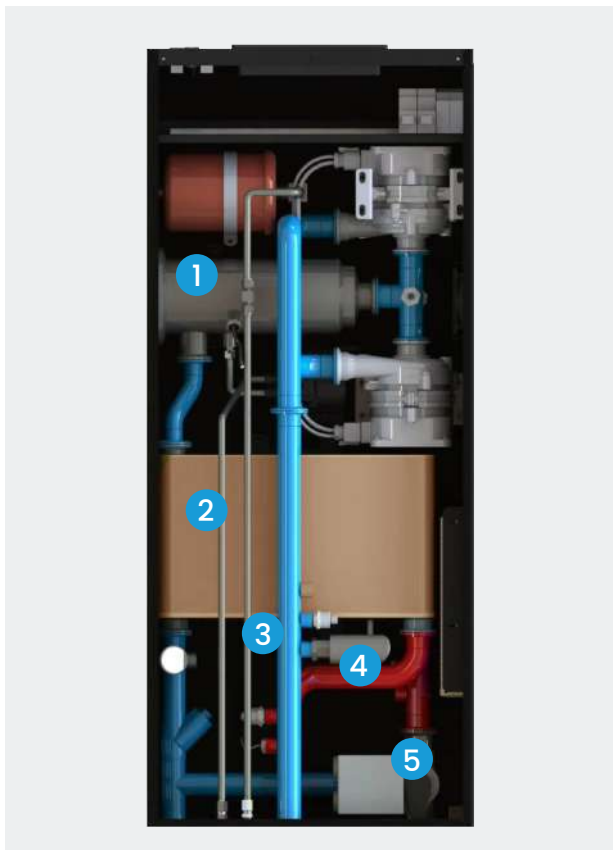
Enabling Future Densities

Liquid Cooling for Server Rack Architectures

Designed for singular racks, in-rack CDUs deliver cooling directly to the heat source, enabling precise thermal control required by high-density workloads.

Compact Form, Complete Flexibility

Offers exceptional integration, supporting a wide range of cooling configurations to suit diverse data centre requirements. With a compact footprint, the CDU can be conveniently deployed in-rack, maximizing valuable floor space while providing efficient and scalable liquid cooling distribution.



1 Filtration System

Optional 50 μ m filter removes fine impurities, ensuring optimum liquid quality to protect sensitive components and prolong equipment lifespan.

2 Plate Type Heat Exchanger

Enables highly efficient rapid heat transfer between primary facility water circuit and secondary coolant circuit, while preventing any flow disturbances.

3 Flow Meters

Optimizes coolant delivery through accurate real-time measurements, preventing inefficient overflow or underflow.

4 Temperature Sensors

Provides precise temperature feedback to the CDU's control system for dynamic, responsive adjustments of coolant flow and pressure.

5 Valves & Isolation Points

Allows for safe maintenance and servicing of the CDU, without disruptions to overall operations. Used for system isolation, flow control, and shutdown.

Features & Benefits



Space Optimization

Compact design maximizes available space and allows for higher server density.



Proactive

Actively filters impurities, prolonging system reliability and liquid cooling quality.



Flexible Deployment

Fits various environments, from small server rooms to large-scale operations.



Lower PUE

Efficient system surpasses local standard PUE requirement.



Superior Heat Transfer

Liquid cooling offers the most efficient heat removal, ideal for high-density applications.



Hybrid Adoption

CDUs can be implemented alongside existing air cooling solutions for flexibility.

Specifications

Model (CDU****)	3100
Rated Capacity (kW)	102, 4.0°C ATD
Maximum Cooling Capacity (kW)	212, 8.0°C ATD
Maximum Flow Rate - Single Pump Operation (L/s)	1.7
Maximum Flow Rate - Dual Pump Operation (L/s)	2.0
Maximum Power Consumption (kW) - Single Pump Operation	1.5
Maximum Power Consumption (kW) - Dual Pump Operation	2.7
Primary Connection	1 inch flange connection at top or rear
Pump Redundancy	Single Pump (N), Dual Pump (N+N)
Pressure Drop (kPa)	181
Secondary Coolant Type	Water, Water/PG25
Secondary Coolant Temperature Range (°C)	10 - 55
Secondary Connection	1 inch flange connection at top or rear
Secondary Filter (μ) - Optional	50
Unit Width (mm)	450
Unit Depth (mm)	1055
Unit Height (mm)	200
Unit Weight (kg)	90
Noise Level within 3m (dBA)	<54
Power Supply	400V 3Ph 50/60Hz
Communication	Modbus RTU, Modbus TCP/IP, SNMP

- Please contact our representatives for other requirements.
- The manufacturer reserves the rights to make changes to the product specifications. The data shown above may vary.