



... providing solutions to your cooling needs

# Liquid Cooling Coolant Distribution Unit (CDU)



CDU-2300W



CDU-2600W



CDU-21200W



CDU-22400W

## Features

- High Heat-Exchange Efficiency
- Standard Rack Dimensions
- Supports Side-By-Side Cabinet Installation
- -Easy Maintenance
- High Reliability
- Wide Load Operating Range
- Precise Control
- Comprehensive Functionality
- Ultra-Low Energy Consumption

Our CDU delivers a purpose-built solution for the intense thermal loads of ultra-high-density cold-plate servers. Its modular, energy-efficient cabinet design makes it ideal for medium- and large-scale liquid-cooled data centers. The unit can be deployed independently in an air conditioned room or integrated side-by-side with liquid-cooled racks to create compact liquid-cooling micro-modules.

## Overview

### Supports Side-By-Side Installation with Equipment Cabinets, Front and Rear Maintenance, and Efficient Heat Exchange

Engineered for seamless integration and high efficiency that supports side-by-side installation with liquid-cooled equipment racks. Its front and rear accessible design allows effortless online maintenance, ensuring minimal downtime. Under rated operating conditions the unit delivers an impressive heat exchange capacity of up to 2400kW. Our CDU efficiently handles the heat transfer and distribution between the primary loop and secondary loop coolant, providing reliable and high-performance liquid cooling for demanding data center applications.

### Redundant Configuration of Key Components for High Reliability

The CDU is equipped with a high-efficiency plate heat exchanger, variable-frequency circulation pumps, leak detection, and an intelligent control system. Upon request, our CDU can be customised with dual power supply, dual pumps for redundancy purpose.

### Comprehensive Functionality with Stepless Adjustment

Features include conductivity monitoring, a large-capacity make-up water system, and stepless load adjustment capability.

### Complete Monitoring and Support for Redundant Operation

Key data from both the primary and secondary sides can be monitored and uploaded to the monitoring system. The system supports parallel operation, hot standby, and group control functions, ensuring redundancy and high reliability.

# CDU-2300W

Dimension (H x W x D)	2000mm x 600mm x 1154mm
Rated Heat Transfer	300kW
Rated Voltage	380VAC-415VAC, 50HZ/60HZ
CDU Weight	Net Weight: 550kg; Operational Weight: 700kg
Rated Power	4.5 kW @ 12m Head (Optional 5kW @ 25m Head)
Human Machine Interface (HMI)	7" Touch Screen
Communication Protocol	Standard: RS485, Modbus RTU; Optional RJ45 (Ethernet), Modbus-TCP
Operating Temperature	0 - 40°C
Operating Relative Humidity	5% - 85% RH

## Primary Side Parameters

Coolant	Soft Water
Rated Liquid Supply / Return Temperature	35 / 45 °C
Supply Temperature Range	15 - 35 °C
Rated Flow rate	28m <sup>3</sup> /h
Filter	270µm
Rated System Pressure	10bar
Pressure Lost	1bar
Connection Pipe Diameter	ISO 3-inch
Connection Method	Clamp Connection

## Secondary Side Parameters

Pump	1 pump (Optional 1+1 Redundancy)
Coolant	PG25 (Optional Deionized Water)
Rated Liquid Supply / Return Temperature	40 / 50 °C
Approach Temperature Between Primary And Secondary Pipe	5 °C
Rated Flow Rate	28m <sup>3</sup> /h (PG25)
CDU Pump Head	12m (Optional 25m)
Connection Pipe Diameter	ISO 3-inch
Connection Method	Clamp Connection
Rated System Pressure	10bar
Filter	50µm
Make Up Water Tank	20L

# CDU-2600W

Dimension (H X W X D)	2200mm X 900mm X 1200mm
Rated Heat Transfer	600kW
Rated Voltage	380VAC-415VAC, 50HZ/60HZ
Cdu Weight	Net Weight: 850kg; Operational Weight: 1000kg
Rated Power	6kW
Human Machine Interface (Hmi)	10" Touch Screen
Communication Protocol	Standard: Rs485, Modbus Rtu; Optional Rj45 (Ethernet), Modbus-TCP
Operating Temperature	0 - 40 °C
Operating Relative Humidity	5% - 85% RH

## Primary Side Parameters

Coolant	Soft Water
Rated Liquid Supply / Return Temperature	35 / 45 °C
Supply Temperature Range	15 - 35 °C
Rated Flow Rate	48m <sup>3</sup> /h
Filter	270µm
Rated System Pressure	10bar
Pressure Lost	1.2bar
Connection Pipe Diameter	ISO 3.5-inch
Connection Method	Clamp Connection

## Secondary Side Parameters

Pump	1 Pump (No Redundancy)
Coolant	PG25 (Optional Deionized Water)
Rated Liquid Supply / Return Temperature	40 / 50 °C
Approach Temperature Between Primary And Secondary Pipe	5 °C
Rated Flow Rate	46m <sup>3</sup> /H (PG25)
CDU Pump Head	25m
Connection Pipe Diameter	ISO 3.5-inch
Connection Method	Clamp Connection
Rated System Pressure	10bar
Filter	50µm, With Optional 25µm
Make Up Water Tank	50L

# CDU-21200W

Dimension (H X W X D)	2200mm x 1200mm x 1400mm
Rated Heat Transfer	1200kW
Rated Voltage	380VAC-415VAC, 50HZ/60HZ
Cdu Weight	Net Weight: 1100kg; Operational Weight: 1300kg
Rated Power	16.3kw
Human Machine Interface (Hmi)	10" Touch Screen
Communication Protocol	Standard: RS485, Modbus RTU; Optional RJ45 (Ethernet), Modbus-TCP
Operating Temperature	0 - 40 °C
Operating Relative Humidity	5% - 85% RH

## Primary Side Parameters

Coolant	Soft Water
Rated Liquid Supply / Return Temperature	35 / 45 °C
Supply Temperature Range	15 - 35 °C
Rated Flow Rate	110m <sup>3</sup> /h
Filter	270µm
Rated System Pressure	10bar
Pressure Lost	1.2bar
Connection Pipe Diameter	DN125
Connection Method	Clamp Connection, With Optional Flange Interface

## Secondary Side Parameters

Pump	1 Pump (No Redundancy)
Coolant	PG25 (Optional Deionized Water)
Rated Liquid Supply / Return Temperature	40 / 50 °C
Approach Temperature Between Primary And Secondary Pipe	5 °C
Rated Flow Rate	108m <sup>3</sup> /h (PG25)
CDU Pump Head	25m
Connection Pipe Diameter	DN125
Connection Method	Clamp Connection, With Optional Flange Interface
Rated System Pressure	10bar
Filter	50µm, With Optional 25µm
Make Up Water Tank	60L

# CDU-22400W

Dimension (H X W X D)	2200mm x 1250mm x 900mm
Rated Heat Transfer	2400kW
Rated Voltage	380VAC-415VAC, 50HZ/60HZ
Cdu Weight	Net Weight: 1800kg; Operational Weight: 2000kg
Rated Power	22kW
Human Machine Interface (Hmi)	10" Touch Screen
Communication Protocol	Standard: RS485, Modbus RTU; Optional RJ45 (Ethernet), Modbus-TCP
Operating Temperature	0 - 40 °C
Operating Relative Humidity	5% - 85% RH

## Primary Side Parameters

Coolant	Soft Water
Rated Liquid Supply / Return Temperature	34 / 54 °C
Supply Temperature Range	15 - 35 °C
Rated Flow Rate	108m <sup>3</sup> /h
Filter	270µm
Rated System Pressure	10bar
Pressure Lost	1.5bar
Connection Pipe Diameter	DN100
Connection Method	Clamp Connection, With Optional Flange Interface

## Secondary Side Parameters

Pump	2 Pumps (No Redundancy)
Coolant	PG25 (Optional Deionized Water)
Rated Liquid Supply / Return Temperature	40 - 60 °C
Approach Temperature Between Primary And Secondary Pipe	6 °C
Rated Flow Rate	108m <sup>3</sup> /h (PG25)
CDU Pump Head	25m
Connection Pipe Diameter	DN100
Connection Method	Clamp Connection, With Optional Flange Interface
Rated System Pressure	10bar
Filter	50µm, With Optional 25µm
Make Up Water Tank	36L