



In Row Coolant Distribution Unit

Experience Unmatched Efficiency with Inova CDUs

At the heart of sophisticated cooling solutions, Coolant Distribution Units (CDUs) play a pivotal role in distributing coolant or water seamlessly throughout the system. By effectively regulating and controlling liquid flow, CDUs maintain precise temperature levels and flow rates, guaranteeing peak performance.

Our CDUs provide a reliable and contaminant-free working fluid for a range of advanced cooling applications, including Rear Door heat exchangers and Direct-to-chip cooling solution. With our innovative technology, we empower businesses and organizations to achieve superior cooling efficiency and maximize the potential of their systems.



Higher Cooling Capacity with A Smaller Footprint

Inova CDU stands out for offering the broadest capacity range and the most energy-efficient design in the industry.



Bespoke Designs for Custom Requirements

Inova CDU offers bespoke designs to perfectly suit your specific requirements, ensuring that you get a solution that aligns perfectly with your needs and goals.



PLC Battery Backup for Continuity

Our PLC Battery backup module provides continuous power to the PLC controls in the event of a power failure. This feature ensures seamless operation and peace of mind, even in unexpected situations.



Rapid Delivery Lead Time

Count on us to deliver your cooling solution promptly, helping you meet tight deadlines and keep your operations running smoothly.



Minimal Maintenance, Fast Payback

Our solutions are designed for minimal maintenance requirements, saving your time and resources in the long run. Additionally, the fast payback period on our products means you can start reaping the benefits of improved efficiency and cost savings sooner rather than later.

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GENERAL DATA

- Redundant pump, power supply, and temperature-sensor.
- Built in PLC battery backup module.
- Quick visual of CDU health – green/amber/red.
- Touchscreen Human-Machine Interface (HMI).
- Integral dosing pot and expansion vessel.
- Dynamic dew-point temperature control prevents condensation.
- On-board integrated leak detection system.
- 3" Hydraulic connections through top or bottom.
- External hydraulic connections, external to CDU enclosure at rear of unit.
- Remote control features through BACnet, Modbus.



PUMPS

- Dual Redundant end suction circulation pumps for the secondary loop:
 - Standard spec – stainless steel shaft, stainless steel impeller, cast iron housing.
 - Optional spec - stainless steel shaft, stainless steel impeller, stainless steel housing
- Independent VFD' s with automatic pump changeover.
- Retractable sliders for ease of maintenance.



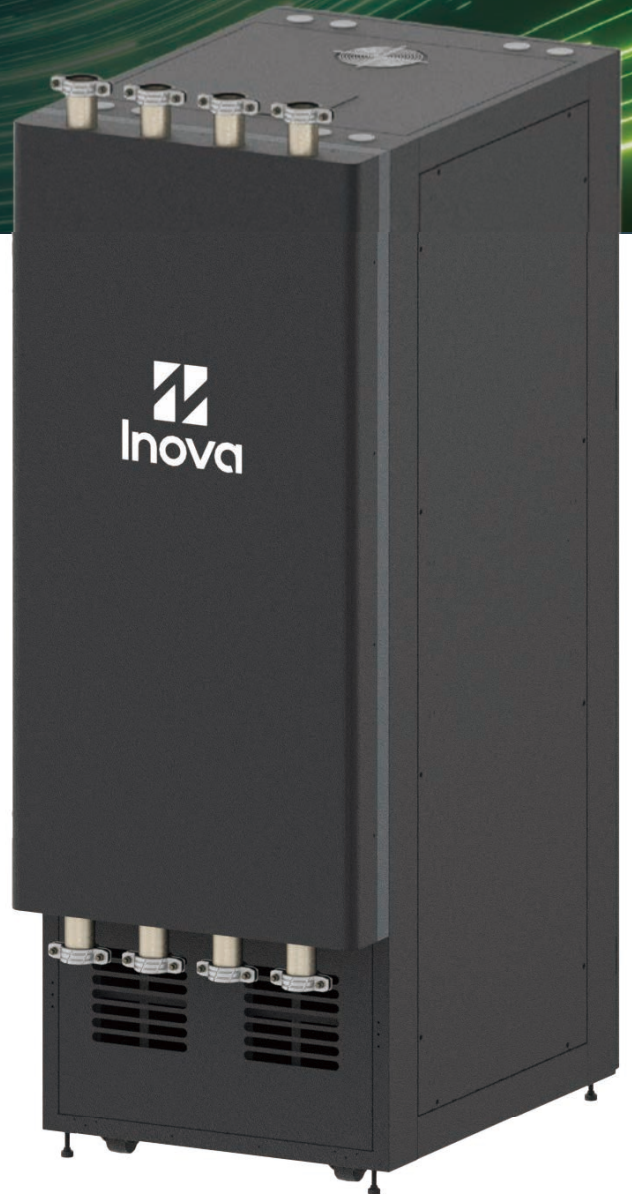
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PIPING

- 2 ½" Stainless steel piping with 3" Victaulic groove connection termination, top or bottom
- 24 liters capacity expansion vessels.
- Auto Air Vents with check valve, WRAS approved.
- 7 x Isolation valves for PHX and pump isolation.
- 2 x Check valves for backflow protection.
- 2 x DN80 strainers (allowing for 50 or 25 micron filters) filtration to secondary loop.
- 1 x 50 mesh filtration to primary loop.

PLATE HEAT EXCHANGER

- AISI316 Stainless steel copper brazed plate and frame heat exchanger.



CONTROLS/ INSTRUMENTATION

- Adjustable PLC Control system.
- PLC battery backup module.
- Dewpoint monitoring.
- Temp and pressure sensors for primary and secondary loop.
- Water leak Detection System.



MODEL PN: ICDU1100

Nominal Cooling Capacity	1107 kW at 10.8 °F (6.0 °C) approach temperature difference
Maximum Cooling Capacity	1739 kW at 18.0 °F (10.0 °C) approach temperature difference
Electrical Power Supply - Available Options	400V/ 3PH/ 50HZ 480V/ 3PH/ 60HZ 208V/ 3PH/ 60HZ
Power Feeds	Redundant A/B, Inbuilt ATS
Maximum Power Consumption	9.7 kW at maximum flow and pressure drop

Pump

Pump Type	Single stage, end suction
Pump Configuration	2 pumps for N+N redundancy
Maximum Pump Flow	250 GPM
Integrated Variable Speed Drives	Included
Pump Pressure Capability	3.90 bar (56.6 psi)
External Pressure Capability	2.0 bar (29.0 psi)

Primary Loop

Hydraulic Connection	3" Victaulic groove, top or bottom
Filtration	1 x 50 mesh
Cooling Fluids	ASHRAE W1 to W4
Coolant Fluid Type	Water, Water/ Glycol

Secondary Loop

Hydraulic Connection	3" Victaulic groove, top or bottom
Filtration	2 x DN80 strainers (allowing for 50 or 25 micron filters)
Coolant Fluid Type	Water, Water/ Glycol
Optional CDU Mounted Manifold	Up to 13 x 1" feeds

Physical Specification

Unit Width	31.5 in (800 mm)
Unit Height	84.44 in (2145 mm)
Unit Depth	46 in (1170 mm)
Unit Dry Weight	2314 lb (1050 kg)
Unit Operating Weight	2747 lb (1246 kg)
Unit Shipping Weight	2469 lb (1120 kg)
Dew Point Monitoring	Included
Primary Flow Meter	Optional
Leak Detection System	Included
Communication Protocol	BACnet, Modbus RS 485, TCP/IP, SNMP



Inova Cooling Offers

Prioritizing Innovation & Sustainability

With Inova, you gain access to a wide range of cooling options, ensuring you can find the perfect solution to optimize your infrastructure's performance while aligning with your sustainability goals.

01.

Traditional In-Row Cooling:

Inova's in-row cooling units are designed to fit seamlessly within your data center layout, delivering targeted cooling exactly where it's needed most, enhancing energy efficiency and reducing operating costs.

03.

Direct-to-Chip Solutions:

Our direct-to-chip cooling solutions offer advanced thermal management for demanding applications, ensuring precise temperature control and extending the lifespan of your hardware. Which includes the CDU and manifold products.

05.

Service & Maintenance:

We offer comprehensive services to ensure the longevity and efficiency of your infrastructure. Our services encompass every stage of the process, from initial design and architecture to component selection and ongoing maintenance.

02.

Rear Door Heat Exchangers:

With Inova's rear door heat exchangers, you can efficiently remove heat from your data center environment, ensuring equipment operates at peak performance while minimizing energy consumption.

04.

Containment Systems:

Inova offers containment solutions to optimize airflow management within your data center, reducing energy consumption and improving cooling efficiency.





About Inova

At Inova, our mission is to revolutionize the data center landscape by providing cutting-edge, reliable, and scalable equipment solutions.

Through our dedication to excellence, sustainability, and customer collaboration, we aim to be at the forefront of technological advancements, driving the industry towards new horizons and enabling our customers to achieve unprecedented success in their endeavors.

Listen, Innovate, Sustain

Selecting our CDU solutions means choosing a partner dedicated to providing a wide array of options for your data center needs. Enjoy the benefits of efficient cooling, energy savings, and a tailored solution that evolves with your infrastructure.

For inquiries and consultation, contact sales@inovadc.com.