

# InRow CDU 1100

## Experience Unmatched Efficiency with CDUs

At ColdLogik, our Coolant Distribution Units (CDUs) are at the core of sophisticated cooling solutions, ensuring seamless distribution of coolant or water throughout your systems. By regulating liquid flow and maintaining precise temperature levels, our CDUs guarantee peak performance for your critical operations.

Our CDUs provide a reliable and contamination-free working fluid for a range of advanced cooling applications, such as Rear Door Heat Exchangers. With our innovative technology, we empower businesses to achieve superior cooling efficiency and unlock the full potential of their systems.

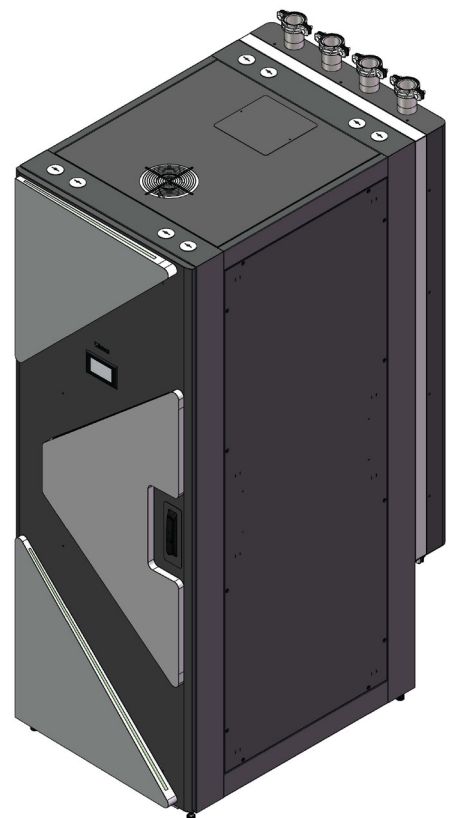
**Higher Cooling Capacity with a Smaller Footprint**

**Bespoke Designs for Custom Requirements**

**PLC Battery Backup for Continuity**

**Rapid Delivery Lead Time**

**Minimal Maintenance, Fast Payback**



**INVCDU1100 Technical Specifications:**

Nominal Cooling Capacity	1107kW at 10.8 °F (6.0 °C) Approach temperature difference
Maximum Cooling capacity	1739kW 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	9.5 kW at Maximum flow and pressure drop
<b>Pump:</b>	
Pump type	Single Stage, End Suction
Pump Configuration	2 Pumps for N+N Redundancy
Maximum pump flow	262 GPM
Integrated Variable Speed Drives	Included
Pump Pressure capability	3.90 bar (56.6 psi)
External Pressure capability	2.0 bar (29.0 psi)
<b>Primary Loop:</b>	
Hydraulic Connection	3" Victaulic groove, Top or Bottom
Filtration	1 x 50 microns
Cooling fluids	ASHRAE W1 to W4
Coolant Fluid Type	Water, Water/Glycol
<b>Secondary Loop:</b>	
Hydraulic Connection	3" Victaulic groove, Top or Bottom
Filtration	2 x 50 microns
Coolant Fluid Type	Water, Water/Glycol
Optional CDU Mounted Manifold	Up to 13 x 1" feeds
<b>Physical Specification:</b>	
Unit Width:	31.5 in (800 mm)
Unit Height:	84.44 in (2145 mm)
Unit Depth:	46 in (1170 mm)
Unit Dry Weight:	2314 lbs (1050 kgs)
Unit Operating Weight:	2747 lbs (1246 kgs)
Unit Shipping Weight:	2469 lbs (1120 kgs)
Dew Point monitoring	Included
Primary Flow meter	Optional
Leak detection system	Included
Communication Protocol	BACnet, Modbus

Shipping Dimension: 38.8 in (990mm) Wide x 54.7 in (1390mm) Deep x 93.3 in (2370mm) High

## General Data

- Redundant pump, power supply, and temperature-sensor.
- Built in PLC battery backup module.
- Quick visual of CDU health.
- Touch screen 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.

## Piping

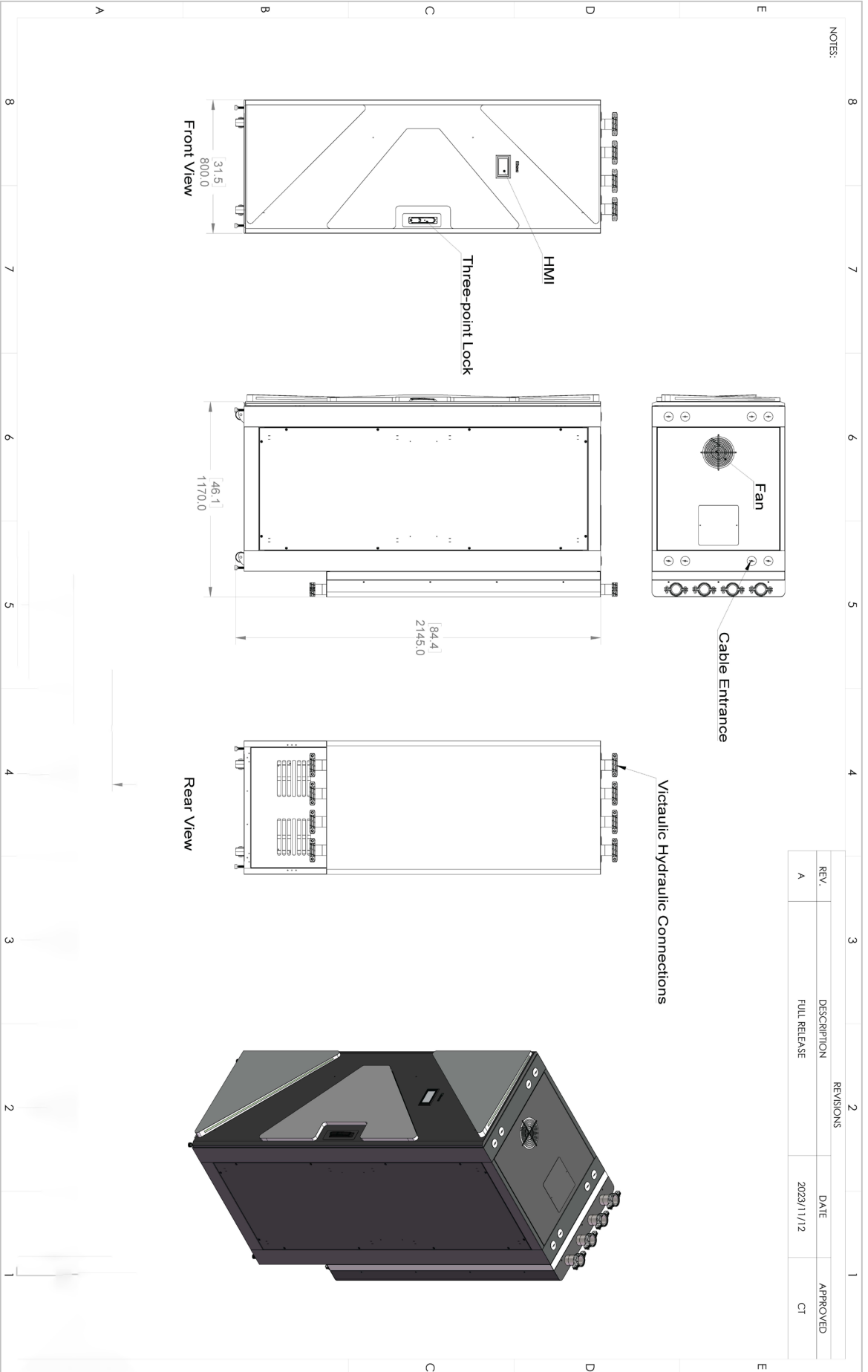
- 3" Victaulic groove connection termination, top or bottom
- 24 litres capacity expansion vessels.
- Auto Air Vents with check valve, WRAS approved.
- Integrated relief valve for safety, protection, and pressure regulation.
- 7 x Isolation valves for PHX and pump isolation.
- 2 x Check valves for backflow protection.
- 2 x 50 Micron filtration to secondary loop.
- 1 x 50 Micron 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.
- Touch screen Human-Machine Interface (HMI).
- Temp and pressure sensors for primary and secondary loop.
- Water leak Detection System.



NOTES:

REV.	DESCRIPTION	DATE	APPROVED
A	FULL RELEASE	2023/11/12	CT

REVISIONS

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## Contact Details

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## Further Documentation

For additional information, please refer to the below. Available through your USystems representative, or our central enquirers line at [customerhub.sg@legrand.com.sg](mailto:customerhub.sg@legrand.com.sg)

Complete Product Range  
Operations and Maintenance Manual  
Troubleshooting Guide  
Product Brochure

Available at [www.legrand.com.sg](http://www.legrand.com.sg)  
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