

# PRODUCT SPEC SHEET

## NeuCool® IR150

### Two-Phase Direct-to-Chip Integrated In-Rack CDU



## PRODUCT OVERVIEW

Infrastructure reimaged for the mission critical liquid cooling era, the NeuCool IR150 is a two-phase, direct-to-chip liquid cooling integrated CDU and IT rack solution, designed to provide up to 150kW of liquid cooling capacity and 42U of IT rack space.

The IR150 is an 800mm wide custom IT enclosure with an integrated CDU. The CDU components utilize a 200mm wide portion of the enclosure, with the remaining 600mm dedicated to 42U of IT space. The IR150 includes integrated rack manifolds to create a holistic liquid cooling solution enabling simple deployment of two-phase enabled servers.



## KEY FEATURES

### Pre-Integrated Solution

- CDU (150 kW)
- Rack Manifolds
- IT Rack (42U)



### Commercial Refrigerant

- Dielectric, A1 safety rating, low GWP refrigerant
- No water enters IT equipment, limiting risk to GPUs and server electronics



### Modular & Scalable

- Single-rack failure domain
- Simplifies deployment of two-phase enabled servers



# iCDU OVERVIEW



## 7" NeuView™ Touchscreen

- System monitoring and controls with NeuView touchscreen and DCIM integration
- Intuitive mimic display visually supports servicing

## Vaporators & Manifolds

- Integrated liquid and vapor rack manifolds
- Supports plug-and-play deployment of servers enabled with two-phase vaporators and robusy in-server plumbing

## Brazed Plate Heat Exchanger

- Condenses refrigerant vapor and transfers heat from the IT loop to the facility water loop
- Facility water connection at top-rear

## NeuCool Reservoir

- Storage tank provides:
  - Inlet pressure for pumps
  - Expansion volume to accommodate full transients from zero to full power without interruptions

## Pumps and Controls

- Efficiently circulates the refrigerant throughout the IT loop between the servers
- 2 pumps (1+1 redundant) and automatic pump switchover in case of failure ensures maximum uptime
- Redundant core logic and sensors control system



## ADDITIONAL FEATURES AND BENEFITS



Industrial condenser with isolated facility water loop uses warm (ASHRAE W45) or chilled water



No water enters the ITE, limiting risk to GPUs and server electronics



Multilayer nylon AC hosing from servers to manifolds



85% Predicted FIR rate does not require an HVAC technician

# PRODUCT SPECIFICATIONS

Feature	Specification
Liquid Cooling Capacity	150kW
IT Space	42U
Height	90.5 in. (2300 mm)
Width	31.5 in. (800mm)
Depth	47 in. (1200 mm)
Display	7" LCD touchscreen
Input Voltage	208/230/240VAC, 400VAC, 480VAC, 50/60Hz
Power Consumption (Max)	2.8kW
Power Consumption (Full load)	1.7kW
Max Operating Pressure	178 psi
Pumps	2
Refrigerant	R-515B
Facility Water Flow Control	Characterized Control Valve (CCV)

Feature	Specification
Water Leak Detection	Drip tray and sensing cable
ASHRAE Compatibility (at rated performance)	W27
ASHRAE Compatibility (derated perf.)	W45
Redundancies	Pumps, dual main power feeds, sensors
Hot Swappable	Pumps, power supply units, sensors, control board, display
Flow Rate (Facility)	225 - 450 LPM
Unit Weight (Empty)	1300 lbs
Communication Protocols	Redfish, BACnet, Modbus, SNMP, IPMI
Filter and Pressure Relief Valve	25 µm filter, integrated pressure relief valve

## NeuGuard® Support & Warranty Program

Bolstered by a highly responsive network of professional service team members, our industry-first NeuGuard multi-year warranty is underwritten by CNA, one of the largest U.S. commercial property and casualty insurance companies, providing defined coverage in the unlikely event of a leak.

©2026 Accelsius LLC. All rights Reserved. V041726  
Product details subject to change without notice. Trade names, marked or not, are the property of the registered owners.



## CONTACT US

1835-B Kramer Lane  
Suite 180  
Austin, TX 78758  
+1 (512) 240-9606  
info@accelsius.com