

Smart Panel

Cooling right where it's needed

Ideal for high-density applications

Canatec's Smart Panel is a rear door heat exchanger (RDHX) that enhances cooling efficiency in high-density environments by capturing heat directly from the servers.

Coolant Distribution Unit: Our Smart Panel can be used with a CDU that supplies coolant. The CDU is able to adjust the coolant flow based on real-time temperature readings from the RDHX, optimizing cooling based demand.

Chilled Water: For systems utilizing chilled water, our Smart Panel can be equipped with an EPIV to optimize the flow required for cooling each individual rack



Features & Benefits



Flexible Implementation

Perfect for server racks that require more localized cooling without transitioning to a full liquid-cooled system.



No Modifications Required

Uses air cooling while containing hot air within the server rack, therefore not requiring direct liquid-to-chip integration.



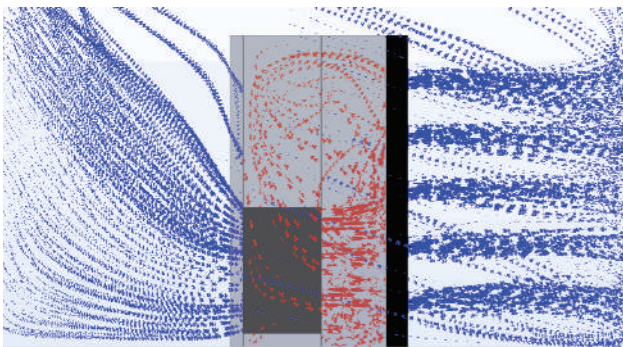
Superior Heat Removal

Provides efficient heat removal at the rack level, placing them second in energy efficiency behind liquid cooling.



Built for Medium to High-Density

Ideal for environments that require AI or HPC, suitable for education, government and defense sector.

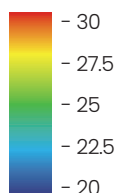


Efficient active airflow

Active RDHX configuration

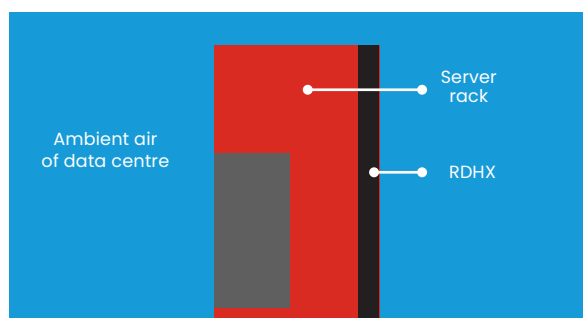
Auxiliary fans actively enhance airflow, allowing the RDHX to effectively capture heat directly from the server rack exhaust. Active type RDHX units offer increased flexibility and efficiency, and are suitable for higher thermal densities.

Cool ambient air temperature



Instantly cooled air

By transferring heat to a liquid cooling loop at the rack level, it prevents hot air from recirculating into the data hall, thereby enhancing cooling efficiency.



Specifications

Model (SP****)	010		015	
Rated Cooling Capacity (kW)	10	7.5	15	10.5
Fan Quantity	14		21	
Total Fan Airflow (m3/h)	2500		4000	
Power Supply	220~240V/1P/50Hz		220~240V/1P/50Hz	
Operating Weight (kg)	68		78	
Unit Width (mm)	600		600	
Unit Depth (mm)	200		200	
Unit Height (mm)	2200		2200	

Piping Connection	19/12.7		19/16	
Return Air Temperature (°C)	39	39	39	39
Chilled Water Supply Temperature (°C)	11	15	11	15
Chilled Water Return Temperature (°C)	16	21	16	21

Refridgerant CDU Model (CDU****)	X120		X160		X200	
Rated Cooling Capacity (kW)	120	90	160	120	150	200
Primary						
Water Supply (°C)	11/16	15/21	11/16	15/21	15/21	11/16
Flow Rate (L/s)	5.9	4.4	7.8	5.9	7.4	9.8
Pressure Drop (kPa)	<80		<80		<80	
Pipe Connection (DN)	DN65		DN65		DN65	

Secondary						
Coolant Type	R134A		R134A		R134A	
Pump Type	VSD Refrigerant Pump		VSD Refrigerant Pump		VSD Refrigerant Pump	
Power Supply	220~240V/1P/50Hz		380~4150V/3P/50Hz		380~4150V/3P/50Hz	
CDU Width (mm)	1100		1200		1400	
CDU Depth (mm)	1000		1000		1000	
CDU Height (mm)	1500		2000		2000	
Unit Weight (kg)	240		280		320	
Noise (dBA)	<60		<65		<65	

- Based on R134a refrigerant
- 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.