CANATEC

Smart Panel

Cooling right where it's needed

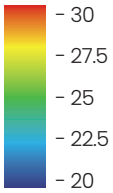
Ideal for high-density applications

Canatec's Smart Panel is a rear door heat exchanger (RDHX) that enhances cooling efficiency in high-density environments. The Smart Panel is mounted on the rear of server racks to capture heat directly from the servers.

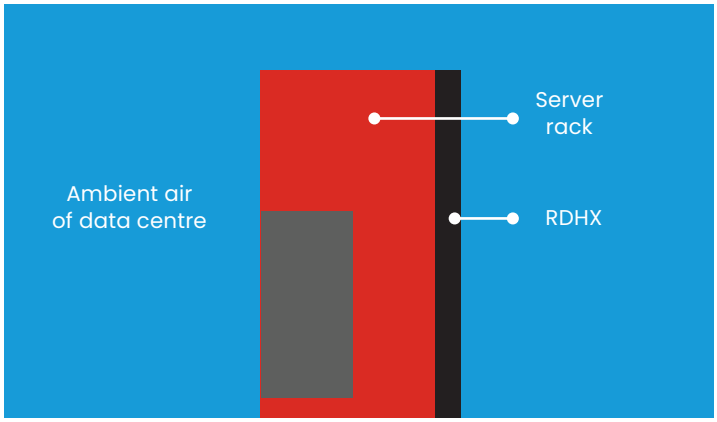
Coolant Distribution Unit: Our Smart Panel can be used with a CDU that supplies coolant. The CDU is able to adjust the coolant flow based on real-time temperature readings from the RDHX, optimizing cooling based on actual demand rather than a static approach.

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

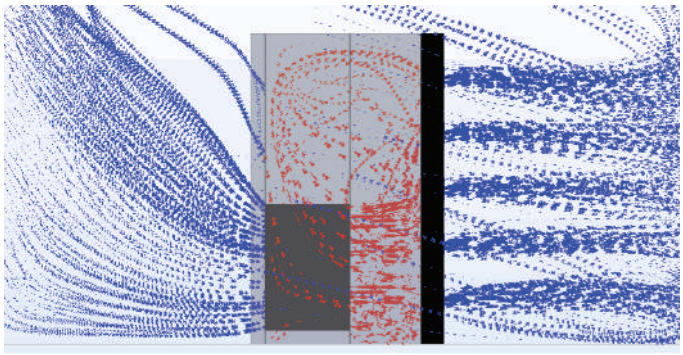
Cool ambient air temperature



Instantly cooled air
Heat is prevented from escaping into the data centre environment thanks to immediate absorption via RDHX.



CANATEC



Efficient airflow
Effectively captures heat directly from the server rack exhaust by using an RDHX integrated into the rear door.

Features & Benefits

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

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

No Modifications Required
Uses air cooling while containing hot air within the server rack, therefore not requiring direct liquid-to-chip integration.

Built for Medium to High-Density
Ideal for environments that require AI or HPC, suitable for education, government and defense sector.

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	
Dimensions (WxDxH) in mm	600 x 200 x 2200		600 x 200 x 2200	
Piping Connection	19/12.7		19/16	
Return Air Temperature (°c)	39		39	
Chilled Water Supply Temperature (°c)	11	15	11	15
Chilled Water Return Temperature (°c)	16	21	16	21

• Based on R134a refrigerant

Refridgerant CDU Model (CDU***R)	120		160		200	
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					
Pipe Connection (DN)	DN65					
Secondary						
Coolant Type	R134a					
Pump Type	VSD Refrigerant Pump					
Power Supply	220~240V/1P/50Hz		380~4150V/3P/50Hz			
Dimension (mm)	1100x1000x1500		1200x1000x2000		1400x1000x2000	
Unit Weight (kg)	240		280		320	
Noise (dBA)	<60		<65		<65	

• 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.