

# InRow<sup>®</sup> Chilled Water

Close-coupled, chilled water cooling for medium to large data centers

Up to 70kW



## Row-Based Cooling



InRow RC, 300mm



InRow RC, 600mm

InRow RP, 600mm

The InRow Chilled Water product design closely couples the cooling with the IT heat load. This design prevents hot air recirculation, while improving cooling predictability and allowing for a pay as you grow environment. IT operators looking to improve efficiency or deploy higher density equipment will benefit from the modular design of the InRow Chilled Water products. The intelligent controls of the InRow Chilled Water products actively adjust fan speed and water flow to match the IT heat load to maximize efficiency and address the dynamic demands of today's IT environments.

To meet the diverse requirements of IT environments, the InRow Chilled water products are available in two sizes. The InRow RC is available in 300 and 600 mm wide cabinets. The InRow RP is available in 600 mm wide only and includes humidifiers and reheat for humidity control.

# Features/Benefits

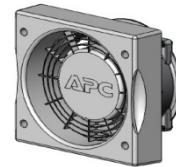
## Availability

- > Active Response Controls monitor and actively adjust cooling capacity to ensure proper server inlet temperatures.
- > Placing the unit in the row of racks moves the source of cooling closer to the heat load. This eliminates air mixing and provides a predictable cooling architecture.



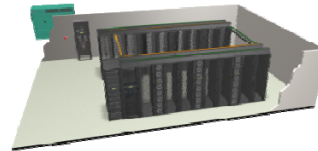
## Total Cost of Ownership

- > Close Coupled Cooling improves operational efficiency 30%-50% over traditional data center cooling approaches.
- > Variable speed fans reduce energy consumption during off-peak cooling periods and adapt to unpredictable power densities.



## Flexibility

- > Adapts to work in both new and existing data center environments. >



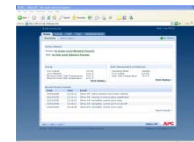
## Serviceability

- > Modular Components simplify replacement and reduce mean time to repair
- > Allows system to remain operational if a fan replacement is required (300mm only).
- > Row based equipment allows for all serviceable components to be replaced/maintained in the hot or cold aisles.
- > Easy to maintain, cleanable, deep loading mesh filter removes particles from the return air stream.



## Manageability

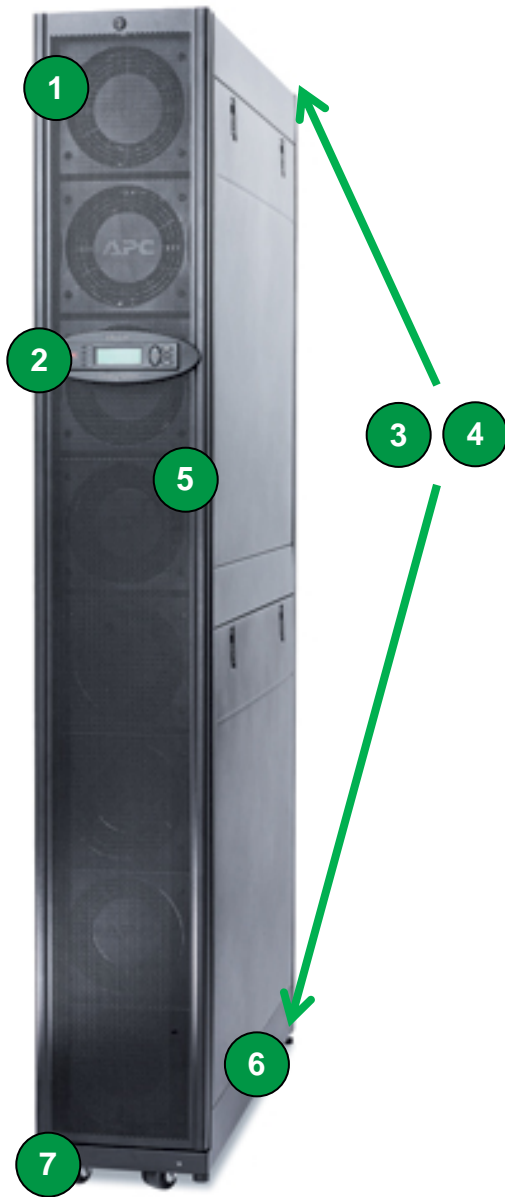
- > Real time display of current and available cooling.
- > InfrastruXure Central compatible
- > Microprocessor controller – 4 line, eighty character, alphanumeric display
- > Building management system integration



# InRow<sup>®</sup> RC

Chilled water cooling for medium to large data centers.

Up to 30kW



- 1 Variable speed, hot-swappable fans reduce energy consumption during off-peak hours and allow system to remain operational if a replacement is required.
- 2 Intelligent control offer network manageability, real time capacity monitoring, predictive failure notification, and rack inlet temperature control.
- 3 Top or bottom piping / power connections.
- 4 Dual A-B power inputs offers redundancy and protection
- 5 Remote probe guarantees inlet temperature to IT equipment.
- 6 Condensate management – factory installed pump removes water from the unit, ensuring continuous operation.
- 7 Casters allow for easy movement

# Performance Specifications

Net Cooling Capacity			
Return Air Temperature	SKU	Total Capacity kW (BTU/hr)	Sensible Capacity kW (BTU/hr)
80°F DB, 62.8°F WB (26.7°C DB, 17.1°C WB)	ACRC100	13.2 (45,000)	13.2 (45,000)
	ACRC103	13.2 (45,000)	13.2 (45,000)
85°F DB, 64.5°F WB (29.4°C DB, 18.1°C WB)	ACRC100	18.2 (62,000)	18.2 (62,000)
	ACRC103	18.2 (62,000)	18.2 (62,000)
90°F DB, 66.1°F WB (32.2°C DB, 18.9°C WB)	ACRC100	21.7 (74,000)	21.7 (74,000)
	ACRC103	21.7 (74,000)	21.7 (74,000)
95°F DB, 67.7°F WB (35.0°C DB, 19.8°C WB)	ACRC100	25.2 (86,000)	25.2 (86,000)
	ACRC103	25.2 (86,000)	25.2 (86,000)
100°F DB, 69.2°F WB (37.8°C DB, 20.7°C WB)	ACRC100	28.7 (98,000)	28.7 (98,000)
	ACRC103	28.7 (98,000)	28.7 (98,000)
105°F DB, 70.8°F WB (40.6°C DB, 21.6°C WB) <sup>1</sup>	ACRC100	30.7 (105,000)	30.7 (105,000)
	ACRC103	30.7 (105,000)	30.7 (105,000)

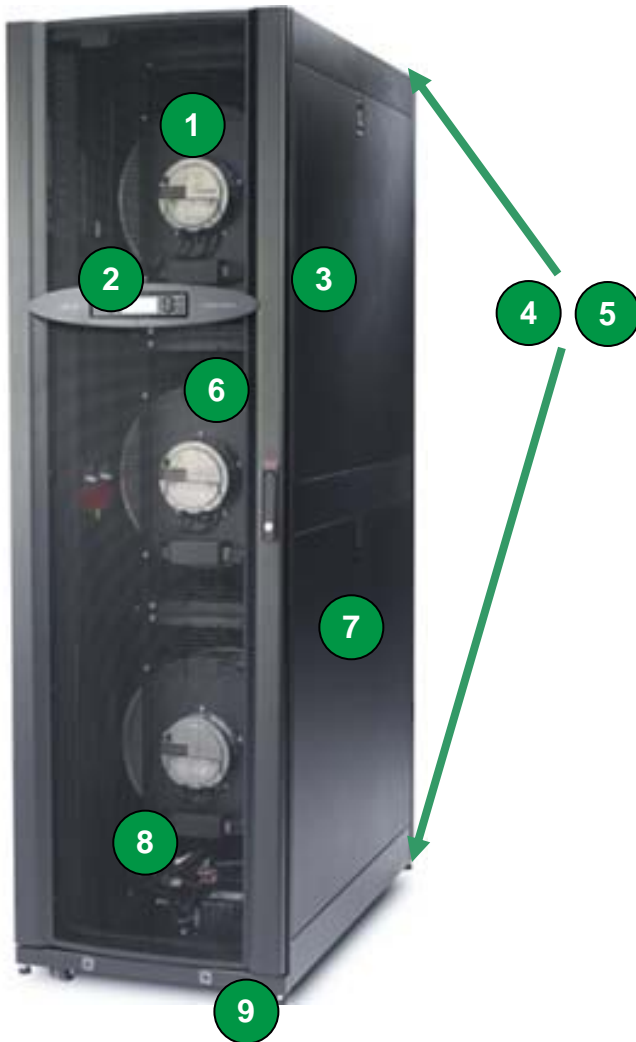
Note: All values are accurate to +/- 0.73 kW (2500 BTU/hr) and based on full speed with standard filters  
 Note: All values in table are based on 45°F (7°C) entering water temperature with a 10°F (5.5°C) chilled water delta temperature.

1. Chilled water delta temperature is 12°F (6.6°C)

# InRow<sup>®</sup> RC and RP 600mm

Chilled water cooling for medium to large data centers.

Up to 70kW



- 1 Variable speed fans reduce energy consumption during off-peak hours
- 2 Intelligent control offer network manageability, real time capacity monitoring, predictive failure notification, and rack inlet temperature control.
- 3 Electric reheat controls temperature during dehumidification **(RP only)**
- 4 Top or bottom piping / Power connections
- 5 Dual A-B power inputs offers redundancy and protection **(RC only)**
- 6 Remote probe guarantees inlet temperature to IT equipment.
- 7 Humidifier maintains moisture level **(RP only)**
- 8 Condensate management – factory installed pump removes water from the unit, ensuring continuous operation.
- 9 Casters allow for easy movement

# Performance Specifications

Net Cooling Capacity			
Return Air Temperature	SKU	Total Capacity kW (BTU/hr)	Sensible Capacity kW (BTU/hr)
80°F DB, 62.8°F WB (26.7°C DB, 17.1°C WB) <sup>1</sup>	ACRC500 / ACRC500	37.9 (130,000)	36.8 (126,000)
	ACRC501 / ACRC501	37.9 (130,000)	36.8 (126,000)
	ACRC502 / ACRC502	37.9 (130,000)	36.8 (126,000)
85°F DB, 64.5°F WB (29.4°C DB, 18.1°C WB) <sup>1</sup>	ACRC500 / ACRC500	45.0 (154,000)	43.7 (149,000)
	ACRC501 / ACRC501	45.0 (154,000)	43.7 (149,000)
	ACRC502 / ACRC502	45.0 (154,000)	43.7 (149,000)
90°F DB, 66.1°F WB (32.2°C DB, 18.9°C WB) <sup>1</sup>	ACRC500 / ACRC500	52.3 (179,000)	51.2 (175,000)
	ACRC501 / ACRC501	52.3 (179,000)	51.2 (175,000)
	ACRC502 / ACRC502	52.3 (179,000)	51.2 (175,000)
95°F DB, 67.7°F WB (35.0°C DB, 19.8°C WB) <sup>2</sup>	ACRC500 / ACRC500	57.2 (195,000)	56.0 (191,000)
	ACRC501 / ACRC501	57.2 (195,000)	56.0 (191,000)
	ACRC502 / ACRC502	57.2 (195,000)	56.0 (191,000)
100°F DB, 69.2°F WB (37.8°C DB, 20.7°C WB) <sup>3</sup>	ACRC500 / ACRC500	61.6 (210,000)	61.0 (208,000)
	ACRC501 / ACRC501	61.6 (210,000)	61.0 (208,000)
	ACRC502 / ACRC502	61.6 (210,000)	61.0 (208,000)
105°F DB, 70.8°F WB (40.6°C DB, 21.6°C WB) <sup>3</sup>	ACRC500 / ACRC500	69.6 (238,000)	69.6 (238,000)
	ACRC501 / ACRC501	69.6 (238,000)	69.6 (238,000)
	ACRC502 / ACRC502	69.6 (238,000)	69.6 (238,000)

Note: All values are accurate to +/- 0.73 kW (2500 BTU/hr) and based on full speed with standard filters

1. Values are based on 45°F (7°C) entering water temperature with a 12°F (6.6°C) chilled water delta temperature.

2. Values are based on 45°F (7°C) entering water temperature with a 14°F (7.7°C) chilled water delta temperature.

3. Values are based on 45°F (7°C) entering water temperature with a 16°F (8.8°C) chilled water delta temperature.

# Electrical Data

SKU	Voltage (Volts)	Phase	Frequency (Hz)	Power (Watts)	Plug
ACRC100	100-120	1	50/60	1100	NEMA L5-20P
ACRC103	200-240	1	50/60	1000	IEC 309 16A
ACRC500	200-240	3	50/60	3200	NEMA L21-20P or hardwired
ACRC501	460-480	3	60	3300	hardwired
ACRC502	380-415	3	50/60	3000	IEC 309 16A or hardwired
ACRP500	200-240	3	50/60	14000	hardwired
ACRP501	460-480	3	60	14000	hardwired
ACRP502	380-415	3	50/60	15000	hardwired