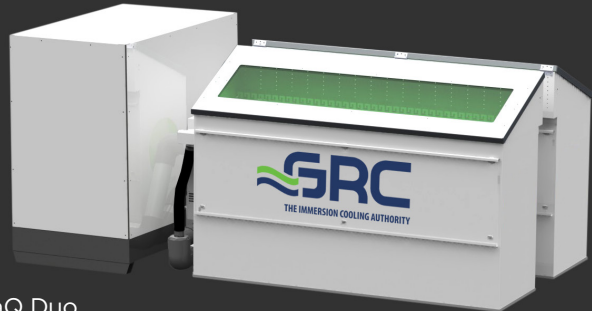
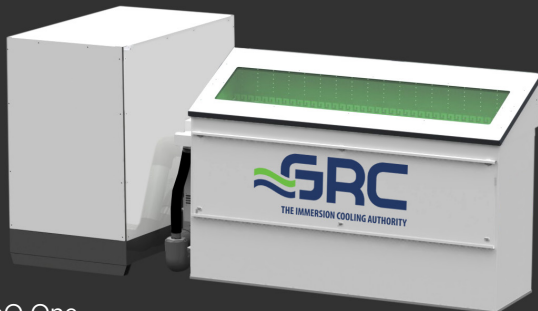


ICEraQ Quad



ICEraQ Duo



ICEraQ One

## Low-Cost, High-Efficiency Immersion Cooling for Data Centers

### Product Specifications

	Quad	Duo	One
Number of Immersion-Cooled Racks	4 x 52U	2 x 52U	1 x 52U
Number of Coolant Distribution Units (CDU)	1	1	1
Chillerfree, Warm Water Operation (95° F) Cooling Capacity/Per Rack Density	100 kW/25 kW	100 kW/50 kW	100 kW/100 kW
Chilled Water Operation (55° F) Cooling Capacity/Per Rack Density	200 kW/50 kW	200 kW/100 kW	200 kW/200 kW
Mechanical PUE	1.03	1.03	1.03
Redundancy <sup>1</sup>	Coolant Pumps: 2N, Control System: 2N		
Rack Dimensions (l x b x h)	100" x 27" x 52" (2.54 m x 0.7 m x 1.3m)		
Rack Floor Loading	154 lb/ft <sup>2</sup> (752 kg/m <sup>2</sup> )		
CDU Dimensions (l x b x h) <sup>2</sup>	63" x 36" x 65" (1.6 m x 0.9 m x 1.7m)		
CDU Floor loading	57 lb/ft <sup>2</sup> (278 kg/m <sup>2</sup> )		

### Delivery & Installation

Shipping Lead Time	• 10 to 12 weeks after receipt of purchase order
Shipping Terms	• Ex Works
Installation	• Three days for the first unit, plus two days for every subsequent unit. GRC service engineer(s) will be onsite to perform installation and training.

<sup>1</sup>Additional redundancy options available.

<sup>2</sup>Underfloor and low profile CDUs available for space constrained sites.

## Power & Water Specifications

Final Heat Rejection Options <sup>3</sup>	Evaporative Cooling Tower or Facility Water Loop/Chiller Water Loop
Water Requirements	<ul style="list-style-type: none"> <li>- Water input temperature 37-122° F (3-50° C)</li> <li>- Recirculating water flow rate 50-150 gpm 11 to 34 m<sup>3</sup>/hr</li> <li>- Connections 2.5" FNPT or hose barb</li> </ul>
Power Requirements	<p>Two electrical feeds (primary &amp; secondary) each with the following characteristics:</p> <ul style="list-style-type: none"> <li>- 3-phase 200 to 240 VAC or 380 to 480 VAC, 50 to 60 Hz</li> <li>- Max Power Consumption: 2.3 kW</li> </ul>

## Infrastructure

Site Requirements	<ul style="list-style-type: none"> <li>- Access to power and water</li> <li>- Level installation surface (raised floor or concrete slab)</li> </ul>
Operating Guidelines	<ul style="list-style-type: none"> <li>- Ambient temperature: 0 to 122° F (-18 to 50° C)</li> <li>- Secondary containment at least 110% of the single largest container</li> <li>- Fire Suppression: Standard data center fire suppression</li> </ul>

## Monitoring and Reporting

Platform	Foresight DCIM: Proprietary, web-based remote/local monitoring and reporting system
Alerts	Configurable email alerts
DCIM / BMS Integration Protocols	BACNET & SNMP
Data Measurements	<ul style="list-style-type: none"> <li>- Heat load</li> <li>- Coolant pressure</li> <li>- Pump speed</li> <li>- Operating temperatures - water and coolant</li> <li>- Operating pressures - water and coolant</li> <li>- Rack temperature - multiple locations</li> <li>- Power consumption</li> <li>- Liquid level - multiple locations</li> <li>- System health, diagnostics, and early fault detection</li> </ul>

## Warranty<sup>4</sup>

- One-year limited warranty including:
  - 24/7 on-call GRC support staff
  - 24/7 remote monitoring
  - Domestic (US): Three business-day onsite response with parts and labor
  - International: Parts by mail
  - Regular maintenance as required

<sup>3</sup>Low water use options available in climates where the design dry bulb temperature does not exceed 90°F/35°C. Additional costs apply.

<sup>4</sup>Warranty is void if the ICeraQ units are run outside of their operating parameters defined in the installation specification.

GRC believes the information in this Data Sheet to be accurate; however, GRC does not make any representation or warranty, express or implied, as to the accuracy or completeness of any such information and shall have no liability for the consequences of the use of such information.

This Data Sheet and its contents do not constitute an order by GRC to sell any product. An order is made only by a quotation provided by GRC. The terms of sale in such quotation may vary from those set forth in this Data Sheet. GRC's acceptance of any order shall be in GRC's sole discretion, and all quotations and sales are subject to GRC's Terms and Conditions of Commercial Sale.



*The Immersion Cooling Authority*