



## High-Efficiency, Scalable, Rack-Based, Green Cooling Solutions for Data Centers





Our Deployments Are in Twenty One Countries Across the Globe



GRC immersion cooling drives mission-critical systems for these and many more organizations.

Our ICEraQ line of micro-modular immersion cooling systems offers breakthrough potential in rack density, location flexibility, and capacity planning, while also reducing the expense of building, running, and expanding a data center. It needs no energy-intensive air conditioners, oversize generators, or raised floors. As a result, it enables rapid deployment of super-reliable, chilled, or chiller-free cooling right where you want it. And with GRC's Earth-friendly focus, the ICEraQ Series 10 products bypass the limits set by predecessors while advancing sustainability.

## **Features & Benefits**

- Cuts cooling energy up to 90%
- Provides a pPUE of <1.03
- Lowers upfront costs up to 50%
- Reduces server power draw 10-20%
- Cools up to 184 kW/rack<sup>1</sup>
- Compatible with all leading OEM servers
- Fast deployment: typically within three months

## Common Applications:

- Overcome space or power constraints
- Surmount rising energy costs
- Integrate high-density racks
- Deploy capacity quickly
- Reduce data center build costs
- Take full advantage of virtualization benefits
- Support sustainability/ESG goals

## Includes:

- Rack(s) filled with our high-performance, synthetic ElectroSafe® coolants
- Coolant distribution unit (CDU)
- Assured reliability with 2N-redundant pumps and control system
- Schneider Electric's Machine Advisor cloud based and local monitoring capabilities with configurable PagerDuty email alerts
- Integrated cable management
- Service bars for easy, in-rack server maintenance
- One-year limited warranty with customized support options available.



Experience the Freedom to Add High-Density Compute Capacity Anywhere — Easily +1.512.692.8003 • ContactUs@grcooling.com • grcooling.com





Product Specifications	ICEraQ <sup>0</sup> Quad	<i>ICEraQ<sup>0</sup></i> Duo
Number of Immersion Cooled Racks	4	2
Number of Cooling Distribution Units (CDU)	Integrated	Integrated
Chiller-Free Water @ 32° C (89 Cooling Capacity Per Rack Density	.6°F) 200 kW 50 kW	200 kW 100 kW
Chilled Water @ 13° C (55.4°F) Cooling Capacity Per Rack Density	368 kW 92 kW	368 kW 184 kW
Partial PUE <sup>2</sup>	<1.03	<1.03
Redundancy <sup>3</sup>	Coolant pumps Control system	
Overall Dimensions (I x w x h) <sup>4</sup> Series 10 Quad Series 10 Duo	5.09 m x 1.68 m x 1.42 m 2.92 m x 1.68 m x 1.42 m (	· · · · · ·
Floor Loading (Operational) <sup>5</sup> Power & Water Spe	822 kg/m² (168 lbs/ft²)	
Final Heat Rejection Options	Flexible Options: • Adiabatic/evaporative • Dry cooler • Chilled water loop	cooling tower

	Dry cooler     Chilled water loop
Water Requirements	Possible water input temperature: • 5 to 32°C (41 to 89.6°F) Recirculating water flow rate:
	• 21 to 30 m³/hr (50 to 150 gpm)
	Connections: • 50.8 mm (2.0") FNPT or hose barb
Power Requirements	Two electrical feeds (primary & secondary) each with the following characteristics:
	• 3 Phase 200 to 240 VAC, OR 380 to 480 VAC, 50 to 60 Hz
	• Max power consumption: 5.6kW

Utilizing a chilled water system. General specification. Additional redundancy options available. Underfloor CDU option for space constrained sites. Does not include weight of IT equipment and accessories. Warranty is void if ICEraQ units are run outside of their operating parameters defined in the installation specification.

Infrastructure /	'Site Requirements			
Client to Provide	Access to power & water			
	Level installation surface with slope < 1/650 (raised floor or concrete slab)			
Operating Guidelines	Ambient temperature 5 to 40°C (41 to 104°F)			
	Secondary containment			
	Standard data center fire suppression			
Monitoring and Reporting				
Platform	Schneider Electric's Machine Advisor cloud-based DCIM and local DCIM hooks			
Alerts	Configurable email alerts with PagerDuty application			
DCIM/BMS Integration Protocols	Modbus, BACnet, and RESTful API			
Data & Measurements	Operating temperatures (water and coolant)			
	Operating pressures (water and coolant)			
	Primary coolant pump power consumption			
	Primary coolant pump speed			
	Rack temperatures			
	Liquid level (multiple locations)			
	System health, diagnostics, and early fault detection			
Delivery & Insta	allation			
Lead Time	Typically ships within three months of receipt of purchase order			
Shipping Terms	Ex-Works			
On-site Installation & Training	Three days for the first unit, plus two days for every subsequent unit			
<b>Warranty</b> <sup>6</sup>				
One-year limited warranty with customized support options available.				
Compatible with All Loading OEM Service				
Compatible with All Leading OEM Servers				
Howlett Dackard	chnologies Supermice Sgi intel.			
Western 💿 NVI Digital.				

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