



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/rack¹
- 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.







Supports



Easy To









ICEraQO Quad Duo





Product Specifications		<i>ICEraQ</i> OQuad	<i>ICEraQ</i> O Duo	
Number of Immersion Cooled Racks		4	2	
Number of Cooling Distribution Units (CDU)		Integrated	Integrated	
Chiller-Free Water @ 32° Cooling Capacity Per Rack Density	°C (89.6°F)	200 kW 50 kW	200 kW 100 kW	
Chilled Water @ 13° C (5. Cooling Capacity Per Rack Density	5.4°F)	368 kW 92 kW	368 kW 184 kW	
Partial PUE ²		<1.03	<1.03	
Redundancy ³		Coolant pumps Control system		
Overall Dimensions (I x v Series 10 Quad Series 10 Duo	5.09 m	5.09 m x 1.68 m x 1.42 m (200.38" x 66.25" x 56") 2.92 m x 1.68 m x 1.42 m (115.25" x 66.25" x 56")		
Floor Loading (Operatio	nal) ⁵ 822 kg	/m² (168 lbs/ft²)		
Power & Water Specifications				
Final Heat Rejection Opti	• Adial • Dry o	e Options: batic/evaporative (cooler ed water loop	cooling tower	
Water Requirements	• 5 to 3 Recirci • 21 to Conne	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	each v • 3 Pha OR 3	ectrical feeds (prir vith the following o ase 200 to 240 VA 380 to 480 VAC, 5 power consumptio	AC, 0 to 60 Hz	

- 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.

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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	d Reporting		
Platform	Schneider Electric's Machine Advisor cloud-based D 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 & Inst	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		
Warranty ⁶			
One-year limited warra	anty with customized support options available.		































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