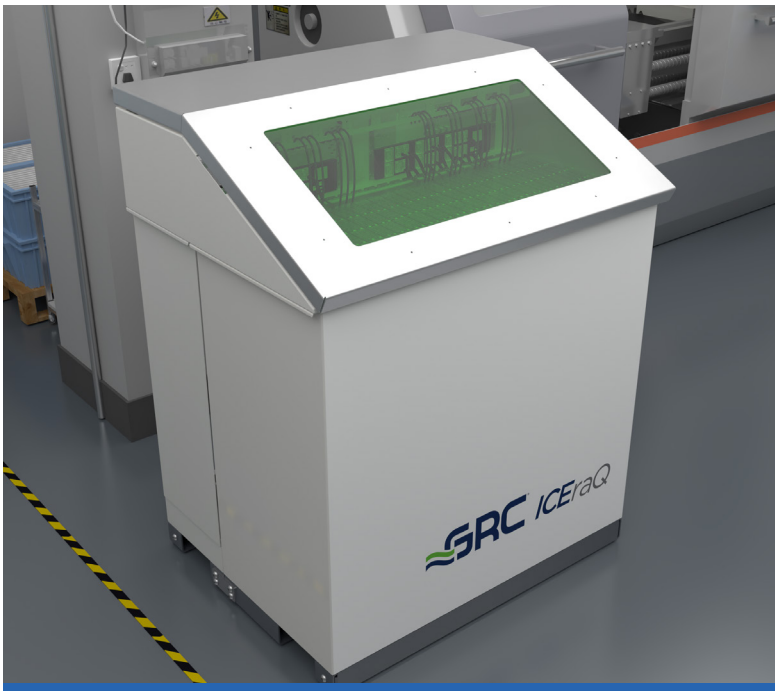
ICEraQ® Micro

GRC
THE IMMERSION COOLING AUTHORITY®

Powerful Immersion Cooling Technology in an Incredibly Compact, Plug-n-Play Package



Experience the Freedom to Add High-Density Compute Capacity Anywhere — Easily. Discover ICEraQ Micro.

Our Deployments Are in Twenty-One Countries Across the Globe

Tokyo Institue of Technology

U.S. AIR FORCE

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

ICEraQ Micro is our self-contained, micro-modular liquid immersion cooling solution designed to give IT professionals the flexibility to meet a variety of data center needs quickly and easily, such as:

- High-Density Zones for GPU-Accelerated Applications (AI, AR, & Others)
- Deploying Compute to the Edge (Cell Towers, IoT, & Others)
- Test Environments for New-Age Applications
- Proof-of-Concept Initiatives . . . and More

With its all-in-one design, minimal site requirements, and environmental resilience, ICEraQ Micro gives you the freedom to easily place high density compute virtually anywhere. When you do, you'll experience the incredible efficiency and savings immersion cooling offers.

ICEraQ Micro — the complete liquid immersion cooling system that's easy to acquire, deploy, integrate, and operate.

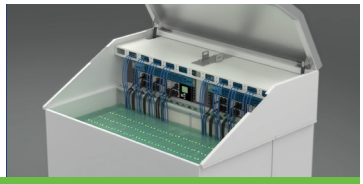
- 24U Immersion-Cooled Rack
- Integrated CDU
- Cools up to 90 kW [1]
- mPUE of <1.03
- Minimal Site Requirements:
  - ✓ Power
  - ✓ Water
  - ✓ Level Floor
- Cloud-based and local monitoring and reporting capabilities, with configurable email alerts.
- Alternate local and cloud-based DCIMs supported via SNMP, Modbus TCP, and RESTful API protocols.

Budget Friendly
Compact Footprint
Quick Deployment
Self Contained
Location Flexability
Supports High Density
Easy To Adopt & Use
Eco-Friendly/ Sustainable

Experience the Freedom to Add High-Density Compute Capacity Anywhere — Easily

+1.512.692.8003 • ContactUs@grcooling.com • grcooling.com

ICEraQ® Micro



Product Specifications

Number of Immersion Cooled Racks	1 x 24U
Cooling Distribution Unit (CDU)	Built-in/Integrated
Maximum Cooling Capacity:[1]	
Chiller-Free Water @ 32 °C (89.6 °F)	45 kW
Chilled Water @ 13 °C (55.4 °F)	90 kW
Mechanical PUE	1.03
Redundancy	Coolant pumps: 2N Control system: 2N
Maximum Server Length[2]	822 mm (32.4")
Dimensions (l x b x h)	1.17 m x .87 m x 1.4351 m (46" x 34.25" x 56.5")
Weight (filled with coolant)[3]	907 kg (2,000 lbs)
Floor Area Loading (with coolant)[3]	891 kg/m² (182.8 lbs/ft²)
Contact Area Loading (with coolant)[3]	3445 kg/m² (706 lbs/ft²)

Power & Water Specifications

Final Heat Rejection	Flexible Options: • Adiabatic/evaporative cooling tower • Dry cooler • Chilled water loop
Water Requirements	Possible water input temperature 3 to 50°C (37 to 122°F) Recirculating water flow rate 6-11m³/hr (27 to 48 gpm) 6 to 8 C dT typical Connections 1.5" grooved
Power Requirements	Two electrical feeds (primary & secondary) each with the following characteristics: • 200-208V 3P 50/60 Hz OR 380-415V 3P 50 Hz OR 380-415V 3P 60 Hz (primary only) OR 480V 3P 60 Hz. • Max power consumption per feed 0.75 kW

Infrastructure / Site Requirements

Client to Provide	Access to power & water Level installation surface (raised floor or concrete slab) Adequate ventilation
Operating Guidelines	Ambient temperature 5 to 40°C (41 to 104°F) Secondary containment Standard data center fire suppression

[1] Rated to limit maximum coolant temperature near 50 °C (122 °F). Actual usable cooling capacity will depend on the hardware/configurations used. Thermal thresholds of individual components may limit usable capacity. Alternatively, higher permissible maximum coolant temperatures may allow higher cooling capacities.
[2] May be limited by server model, orientation, and other features.
[3] Does not include weight of IT equipment and accessories.
[4] Warranty is void if ICEraQ units are run outside of their operating parameters defined in the installation specification.

Monitoring and Reporting

Platform	Cloud based monitoring and graphing platform and local DCIM hooks
Alerts	Configurable email alerts
DCIM/BMS Integration Protocols	SNMP, Modbus TCP, and RESTful API
Data Measurements	Heat load Operating temperatures (water and coolant) Operating pressures (water and coolant) Power consumption Pump speed Rack temperature (multiple locations) Liquid level (multiple locations) System health, diagnostics, and early fault detection

Delivery & Installation

Lead Time	Ships 8 to 12 weeks after receipt of Purchase Order, to ship
Shipping Terms	Ex Works
On-site Installation & Training	One business day

Warranty[4]

One-year limited warranty with customized support options available.

Compatible with Any OEM Servers Properly Optimized for Immersion

— POWERED BY — DELL Technologies · Hewlett Packard Enterprise · Supermicro · sgi · intel · IBM · Western Digital · NVIDIA · iX systems · PENGUIN SOLUTIONS · GIGABYTE TECHNOLOGY · AMAX · Quanta Computer · PCPC Direct · 2crsi · CISCO

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.

GRC
THE IMMERSION COOLING AUTHORITY®

11525 Stonehollow Drive, Suite A-135 Austin, TX 78758
+1.512.692.8003 • ContactUs@grcooling.com • grcooling.com

©2024 GRC, Green Revolution Cooling, and The Immersion Cooling Authority are each registered trademarks of Green Revolution Cooling, Inc.