



# Modular, Immersion-Cooled Data Center







Our Deployments Are in Twenty-One Countries Across the Globe















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

Our ultra-efficient ICEtank "data center in a box" is built upon our proven immersion cooling technology. Completely self-contained and environmentally resilient, each unit comes fully equipped with ICEraQ® immersion-cooled racks, enabling you to deliver powerful, reliable processing in places you never thought possible. You supply water, power and networking — we do the rest.

#### Features & Benefits

- · Cools up to 46 kW/rack
- Cuts cooling energy by up to 95%
- Provides an mPUE of 1.05
- Lowers upfront costs up to 50%
- Reduces server power draw 10-20%
- · Compatible with all leading OEM servers
- Fast deployment: 14 to 16 weeks

# **Common Applications:**

- · Add computing in remote, outside locations
- Great for edge computing and telecom applications
- Overcome space or power constraints
- · Deploy edge or hybrid cloud computing
- Surmount rising energy costs
- · Quickly add capacity

# Includes:

- 20' or 40' ISO shipping container
- Rack(s) filled with our high-performance, Earth-friendly, synthetic ElectroSafe® coolants
- Coolant Distribution Units (CDUs)
- Cooling towers including plumbing up to CDUs
- Mirrored system with 2N-redundant pumps
- · Rack-mounted service rails and integrated server lift
- All electrical (power distribution, breakers, panels, etc.)
- · Fire detection system
- A/C unit(s) for technician comfort
- Schneider Electric's Machine Advisor cloud based and local monitoring capabilities with configurable PagerDuty email alerts
- One-year parts limited warranty against defects in materials and workmanship.



Quick



Environmentally









Cost-Effective

# ICEtank® Models IT20/IT40



Product Specifications	IT20	IT40
Number of Immersion Cooled Racks	4 x 42 U	8 x 42 U
Rack depth (ear to rear)	1041 mm	1041 mm
Number of Cooling Distribution Units (CDU)	1	2
Power Requirements	380-415 VAC <sup>1</sup>	
Cooling Capacity/ Per Rack Density <sup>2</sup>	184 kW 46 kW	368 kW 46 kW
PDU Options	2x 23 kW or 2x 4	46 kW (@2N redundant) <sup>3</sup>
Mechanical PUE	1.05	,
Redundancy <sup>4</sup>	Coolant Pumps: 2N Control System: 2N	
Structure	20' ISO HC Container	40' ISO HC Container
Footprint	20' x 8'	40' x 8'

## **Power & Water Specifications**

Final Heat Rejection Options 5

Flexible Options:

• Adiabatic Coolers

• External Water Supply

Water Evaporation 2-3 gpm intermittent (standard garden hose)

#### Infrastructure / Site Requirements

Client to Provide

Access to power & water Grade level concrete pad

Ongoing water treatment

## **Available Options**

Physical security options: Key lock,

biometric, or access card

Backup Power: Standalone UPS and generator modules available

- External 480 V transformer available
- High density/custom configurations available
- Additional cost option.
- Additional redundancy options available.

  Zero water use options available in climates where the design dry bulb temperature does not exceed 86 °F/30 °C . Additional costs apply.
- Warranty is void if ICEtank units are run outside of their operating parameters defined in

#### **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 Heat load Operating temperatures (water and coolant) Operating pressures (water and coolant) Power consumption Pump speed Rack temperature (multiple locations)

# **Delivery & Installation**

Lead Time	Ships 14 to 16 weeks after receipt of Purchase Order
Shipping Terms	Ex-Works
On-site Installation & Training	Seven to ten days for the first unit, plus five to eight days for every subsequent unit.

Liquid level (multiple locations)

System health, diagnostics, & early fault detection

# Warranty 6

One-year parts limited warranty against defects in materials and workmanship, includes phone support and GRC system alert management service. additional cost.

# Compatible with Leading OEM Servers





























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