

DataTank™ Container Unit 1.4MW

Modular Immersion Cooling System for 3M™ Novec™ Engineered Fluids



Lowest Cost
<\$1/Watt

Fully Integrated
Cooling & Power

Efficient
PUE 1.01

Available
2014

Modular Containerized Data Center with up to 1.4MW

- + Complete turnkey solution, including power distribution and cooling
- + Lowest PUE guaranteed, even in demanding climates
- + Lowest build cost per kW compared to any other solution

Technical Features

- + For 6 DataTank™ Immersion Cooling Racks of 200-240kW each
- + Removes mechanical overhead on facility and device level
- + Fully redundant cooling system, N+1
- + Fully automated system, including monitoring (HTTP, SNMP, Modbus)
- + No CRACs, air handlers or hot/cold aisle needed

Quality & Options

- + Integrated security and remote HD camera monitoring
- + Thermal insulation and various build-out options
- + Manufactured in the USA with American and German parts
- + OEM or co-branding options available
- + Patent pending technology

Wieland

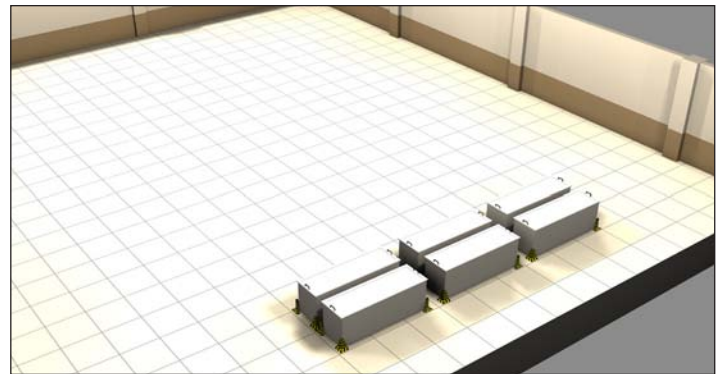
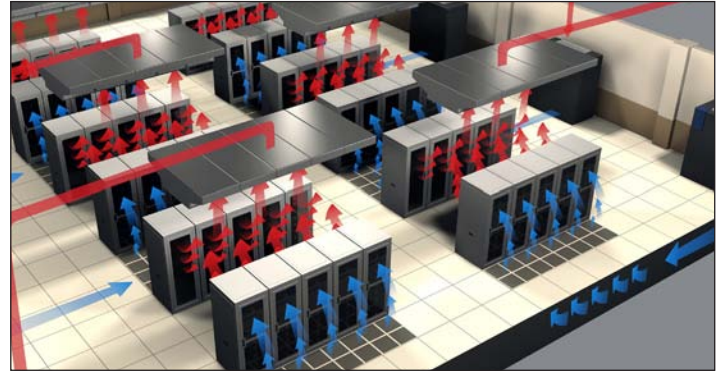
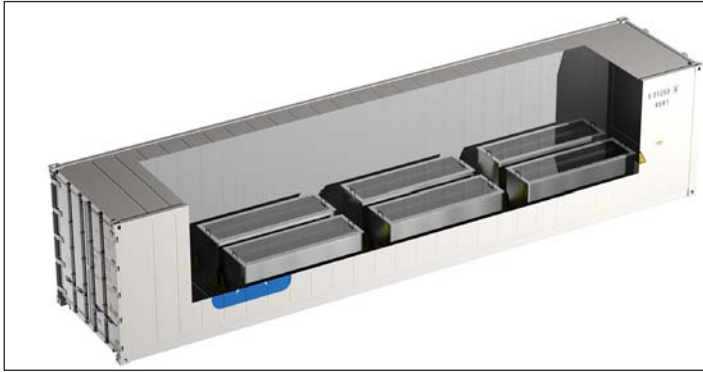
3M
Technology Partner
Novec™ Engineered Fluids

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TRACK BUSWAY

Silver Award
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DataTank™ 240kW Flat Rack

Modular Immersion Cooling System for 3M™ Novec™ Engineered Fluids



Lowest Cost
<\$1/Watt

Dense
4kW per 1 Liter

Different
Silent & Dust Free

Compatible
19-Inch Rails

Modular Immersion Cooling Tanks for 200-240kW

- + Lowest PUE guaranteed, even in demanding climates
- + Lowest build cost per kW compared to any other solution
- + Also available for installation at traditional facilities

Technical Specification

- + Universal 19-Inch design, fits any hardware (1U, 1.5U, etc)
- + Built for HPC, including GPU, CPU or ASIC based systems
- + Up to 500kW per tank with high performance condenser option
- + Advanced hot swap condenser options
- + Integrated vent keeps fluid and vapor inside and dirt/dust outside
- + OpenRack or custom size available on request
- + Integrated 800 Amp 3-phase power feed to each tank
- + No raised floor or high ceiling requirement

Quality & Standards

- + Designed for minimized vapor or fluid losses and minimized fluid usage
- + Manufactured in the USA with American and German parts

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DataTank™ Advantages & Benefits

The value of Passive 2-Phase Immersion Cooling in a Modular Design

Density

Removes thermal bottlenecks from device and facility level. No thermal overhead for hardware designers.

Efficiency

Lowest PUE possible, even without free cooling. Hardware runs cooler and faster without thermal throttling.

Simplicity

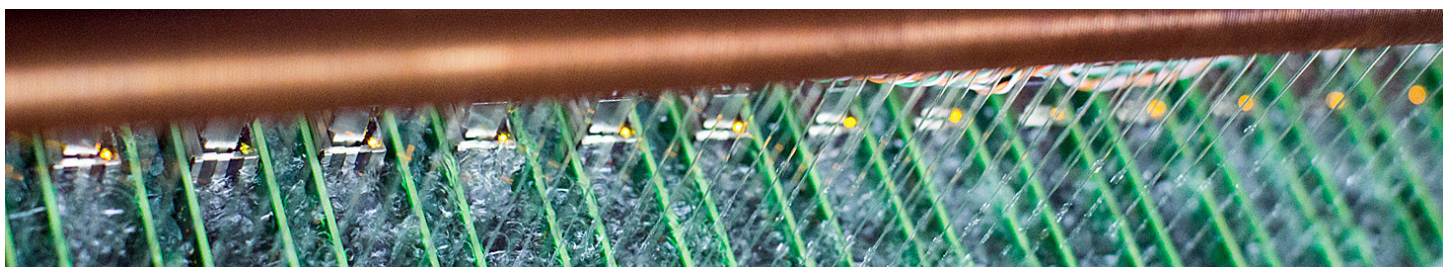
Hardware is reduced to chips on boards, does not require fans, water blocks or pumps. Fluid is all that's needed.

Scalability

Same simple infrastructure no matter if you run 20kW, 200kW or 500kW per rack.

3M™ Novec™ Engineered Fluids

- + Environmentally friendly, non-toxic and non-flammable
- + Various fluids and boiling points (34°C, 49°, 56°C, etc)
- + Fluids are odorless and not oily (hardware comes out dry)
- + Fluids are non-conductive and inert, useful life of 30 years
- + Inherent fire protection



Captures Heat at Source



99% Energy Saved



Conserves Water



Low GWP



Reduces CO2 Emissions



Reduces e-waste



Zero Ozone Depletion

Winner of
Best Green ICT Award 2014

**Most Efficient
Data Center
~ PUE 1.01 ~**



Silver Award
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