

motivair®
COOLING SOLUTIONS



DYNAMIC™ COLD PLATES

Breakthrough Performance for
Liquid Cooling

OUR BUSINESS IS COOLING YOURS™

motivaircorp.com

REVOLUTIONARY LIQUID COOLING FOR HIGH-PERFORMANCE COMPUTING

Empower the next generation of High-Performance Computing

Motivair's Dynamic™ Cold Plates harnesses innovative fluid dynamics to redefine direct liquid cooling. The free-flowing nature of the Dynamic™ Cold Plate accelerates particles and other contaminants moving through and minimizes risks of poor water quality. Our patented technology enables robust performance and allows CPUs and GPUs to operate at peak performance while reducing the the possibility of cooling degradation and costly system failures.

This simple yet effective technology is optimized for cost efficient and scalable production, targeted specifically for high-performance computing, small-to-large clusters and Exascale class systems. All products are engineered and manufactured in the USA, ensuring a predictable, end-to-end experience while eliminating the risks of foreign supply chain disruptions.

FEATURES

- Patent pending thermal technology
- Scalable to +1000 watts
- Non-fouling design
- Pushlok connections
- Made in USA

AMD SP5 GENOA PROCESSOR FAMILY



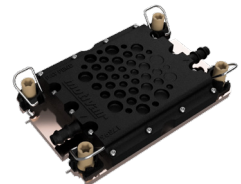
AMD SP3 MILAN PROCESSOR FAMILY



INTEL® XEON® SCALABLE PROCESSOR FAMILY (ICELAKE)



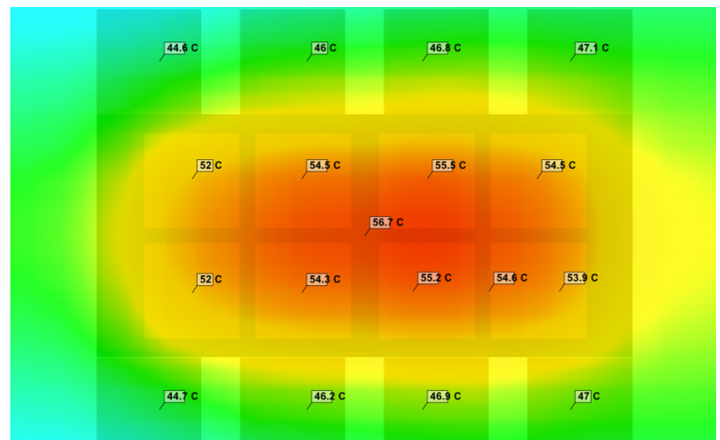
INTEL® XEON® SCALABLE PROCESSOR FAMILY (SAPPHIRE RAPIDS)



Thermal Mapping

In addition to its portfolio of Dynamic Cold Plates, Motivair also offers in-house thermal design to help leverage liquid-cooled cold plates for high-powered CPUs, GPUs, and FPGAs. Using advanced CFD software, Motivair can develop custom server-specific water loop designs based on your technology needs.

- Providing thermal solutions to enable the highest-powered processors in the IT industry
- Integrating into the most densely packed server designs on the market
- Facilitating the highest performance efficiencies and densities for HPC, AI and enterprise



Solve Today's Thermal Challenges

When it comes to addressing thermal challenges, you need to consider the end-to-end solution as a whole – from the silicon out. Our team of engineers will work with you, leveraging our flexible and broad product offerings to design optimized solutions for you based on your unique chip designs.

IN-RACK MANIFOLD

Motivair's stainless steel manifolds provide a common connection point between Motivair's Dynamic™ Cold Plates and the supply and return cooling infrastructure system or Coolant Distribution Unit.

Features

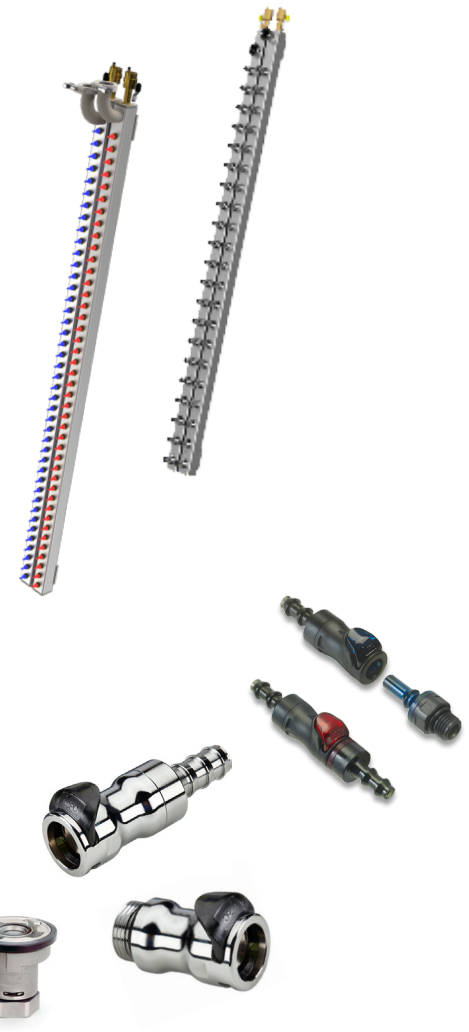
- 304 Stainless Steel
- Variable Size Options 42U/48U/50U/Custom
- Universal Top/Bottom Design
- Made in USA

QUICK CONNECTS

Quick Connects provide a seamless, make-or-break connection of water transfer lines for Motivair's Dynamic™ Cold Plates

Features

- Designed from the ground up for data center liquid cooling
- Employs an advanced engineering polymers or materials for maximum fluid compatibility and long service life
- Made in USA



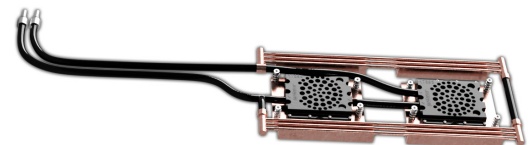
MEMORY COOLING

Capturing the heat from DIMM packages is important in order to take full advantage of direct liquid cooling.

Motivair has customizable designs for DDR4 and DDR5 server memory that integrate into the server liquid cooling package with the same, reliable leak-free connections and robust performance that characterizes the Dynamic™ Cold Plates.

Features

- Made in the USA.



motivair[®]

COOLING SOLUTIONS



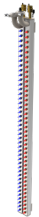
COOLANT DISTRIBUTION UNITS (CDU)

Our diverse portfolio of CDUs provide the ability to deploy higher density, load diverse IT equipment in a smaller footprint while at the same time improving a facility's overall efficiency (PUE) and life expectancy. With 5 models available, The CDU provides 100% sensible cooling up to 2.3MW, depending on the model. For use with the ChilledDoor[®] or other IT cooling systems.



CHILLED DOOR[®] RACK COOLING SYSTEM

Advanced server rack cooling system fits any standard or OEM computer rack. Rack and server agnostic, it removes up to 75 kW of server heat per door.



MANIFOLD SYSTEMS

A manifold provides a common connection point between the ChilledDoors[®] and the supply and return cooling infrastructure system or CDU. Each manifold is preconfigured for each door to include a check valve, individual 2-way valve and quick connect fittings for use with Motivair[®] hoses. Available options for semi-custom designs include 6, 12 and 16 port assemblies.



HEAT DISSIPATION UNIT[™]

The Motivair HDU is connected directly to the computer cooling loop and sits adjacent to or proximate to the computer racks. Circulation pumps located inside the HDU move hot water from the computer system to the HDU's air-cooled heat exchanger. High-efficiency EC fans draw cool room air across the HDU's internal heat exchanger, removing heat from the computer cooling system. A high-powered PLC controls and monitors all aspects of HDU performance ensuring the HPC system can operate within thermal specifications and without dependence on a building water supply.



MLC & MLC-FC

60-500 tons air-cooled, water-cooled & split system chillers for industrial or HVAC applications. Available Integrated Free-Cooling for advanced mission critical operations..



CLIENT SERVICES GROUP

Motivair[®] provides customer-focused service and support for your mission critical equipment. We offer site surveys, installation services, Level III Commissioning support, service agreements, and extended warranties on parts.

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