



SOLUTION BRIEF

Liquid cooled racks optimized for Intel-based computing

We have partnered with Intel to develop customized liquid cooled rack solutions for OEMs and Cloud Solution Providers. Driven by new applications of artificial intelligence and machine learning, data center computing technology continues to evolve and deliver new levels of performance. It also consumes more power than ever - leading to increased heat intensity that requires new cooling solutions. While originally limited to mainframe computers, liquid cooling has made its way into the data center. Increasingly, liquid cooling is becoming a necessity.

Liquid cooled rack

We know the technology landscape and have the engineering depth to co-develop and manufacture liquid cooled racks based on your custom specifications or optimize an existing rack design. Our supply chain of preferred vendors reduces your supply risk and provides access to leading technology. We offer turnkey integration services to deliver optimized servers and a fully populated and tested liquid cooled rack. Your business needs, technical objectives and time-to-market requirements are the guiding principles for our tailored solutions.

Our advantage

Flex has the global scale, regional footprint and comprehensive scope of services to become your preferred supply chain partner for data center infrastructure. Together with our highly experienced engineering staff, we integrate components from approved suppliers into solutions that balance your performance needs and optimize total cost of ownership.

- Deep engineering expertise to develop and manufacture custom liquid cooled racks
- Global sourcing of trusted liquid cooling components from qualified vendors
- Industry-leading experience manufacturing and delivering racks
- Best-in-class regional integration sites with unparalleled scale
- Worldwide distribution, service, repair and circular economy services
- Flex is a Preferred Intel Supplier for liquid-cooled rack integration

Comprehensive scope and global scale

We create end-to-end solutions for our customers, simplifying the supply base. Our scope of services includes comprehensive design services, system manufacturing, server and liquid-cooled rack integration. Additionally, we offer global logistics, maintenance, warranty service, repair and recycling.

Navigating supply chain complexities caused by global pandemics, geographic overconcentration and government regulation are more challenging than ever. Unexpected events or expansion demands can spike suddenly. A well-designed supply chain keeps you ready for anything. We have the capabilities, global scale, physical infrastructure and logistical knowledge to help you grow globally.

Rack solutions

Our supply chain solutions are tailored to deliver outstanding flexibility, performance and value across a range of data center applications and workloads. Industry standard components from a broad array of trusted suppliers are used to improve cost effectiveness and supply chain resiliency. We will innovate based on your unique requirements to deliver a solution optimized for your application, producing a balance of performance, efficiency and cost. Together with Intel, we are creating an eco-system of liquid cooled solutions that enable our customers to adopt new cooling solutions.

Reference solution

Application	19 in liquid cooled rack for data center Servers, storage, networking
Rack units	42U EIA-310-D compliant steel frame rack
Manifolds (4 per rack)	Outlet ports: 30 Material: 304 stainless steel Flow velocity of 1.5m/s
Cooling Distribution Unit (CDU)	Liquid flow rate: 80LPM Cooling capacity: 80kW, 6L
Coolant	Propylene Glycol 25%
Rack height	79.0 in (mm)
Rack width	24 in (mm)
Rack depth	42 in (mm)
Loading	up to 2,000 lbs. capacity
Rails	Adjustable rails
Base	Heavy duty casters and leveling feet

Learn more at flex.com

Flex (reg. No. 199002645H) is the manufacturing partner of choice that helps a diverse customer base design and build products that improve the world. Through the collective strength of a global workforce across 30 countries and responsible, sustainable operations, Flex delivers technology innovation, supply chain, and manufacturing solutions to various industries and end markets. For more information, visit flex.com.

Copyright © 2021, Flex. All rights reserved. No part of this document may be reproduced in any form without the prior written permission of Flex.

Intel, the Intel logo and other names are trademarks of Intel Corporation or its subsidiaries.

ENG-DSS-1-002-00 V1.0

The logo for Flex, consisting of the word "flex" in a lowercase, sans-serif font. The letters are white and set against a blue background.