



**Adam Tas Corridor Energy**

# **Server Rack System Immersion Liquid Cooling Certification**





## Overview

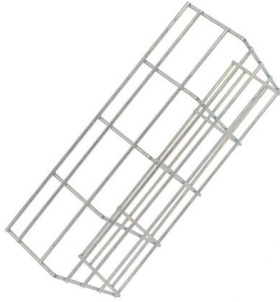
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This ANSI/UL Standard applies to air-cooled racks and cabinets that may include power distribution, fans and other components that are not considered complete systems. A new certification category now specifically addresses immersion cooling cabinets with insulating. We offer testing and certification to help you demonstrate compliance and Marketing Claim Verification to help you build trust as you implement advanced cooling technologies and smart HVACR systems. The rise of artificial intelligence (AI) and high-performance computing (HPC) is driving data center. If you are an organization seeking technical guidance on a large project, Vertiv can provide the support you require.



## Server Rack System Immersion Liquid Cooling Certification

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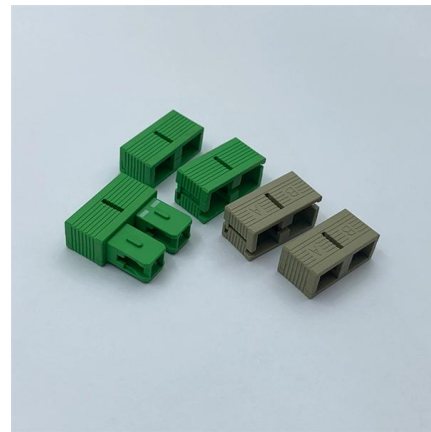


### Efficient Cooling and Thermal Management for Data

We offer testing, certification and Marketing Claim Verification to help you build trust in liquid and air cooling and smart HVACR systems.

### Immersion Liquid Cooling

Immersion Liquid Cooling for Servers in Data Centers data storage systems, etc. The datacenter requires non-interrupted power, communication and Internet access to all equipment inside, it also



### Data Center Cooling Courses and Certifications

Master liquid cooling technologies, thermal management, and energy-efficient solutions for modern data centers handling AI workloads. Learn practical implementation through technical videos on

### Liquid Cooling for High-Density Racks: A Guide , DataSpan

Immersion captures all heat across all components, while direct-to-chip has less



coverage but can achieve higher targeted cooling performance.

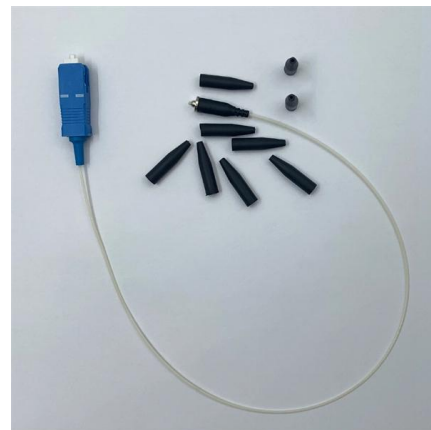


### Supermicro Immersion Cooling

Supermicro, joined by 3M, Intel®, Kaori, and Samsung, demonstrates a proof-of-concept single-phase immersion liquid cooling system with our BigTwin server family of products. Supermicro's partner

### IMMERSION COOLING EQUIPMENT CERTIFICATION APPROACH

o Certification of the immersion cooling cabinet requires testing one representative system that includes immersion cooling cabinet system hardware, insulating liquid, and maximum electrical load that can



### Immersion cooling systems: Advantages and

Immersion cooling (see Figure 2) is a liquid cooling method in which servers and other rack components are submerged in a thermally conductive



## Liquid and Immersion Cooling Options for Data Centers

Long proven for mainframe and gaming applications, liquid cooling is expanding to protect rack-mounted servers in data centers worldwide. Vertiv has created a



## Shell-Submer-Supermicro Case Study

Trusted Liquid Cooling for Modern Data Centers  
Comprehensive testing of Shell Immersion Cooling Fluids delivers the first- ever Intel® Data Center Certified for Immersion Cooling solution, unlocking

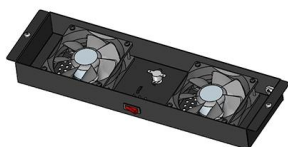
## VERTIV WHITE PAPER

Air cooling systems have continually evolved to address higher densities with greater efficiency, but there is a point at which air simply does not have the thermal transfer properties required to provide



## LiquidCool Solutions: Immersion-Cooled Rack Servers

The industry is migrating to immersion cooling. We're leading the pack, with direct-to-chip immersion-cooled server systems that quickly integrate into existing racks





## Immersion & Liquid Cooling for Data Centers

Immersion cooling and liquid cooling system for data center can significantly reduce energy consumption and operating costs, while also improving cooling capacity



## DCX Liquid Cooling Systems

Our portfolio also includes rack level components, cold plates, manifolds, server immersion systems, modular Hydro & Immersion DataCenters, liquid cooling

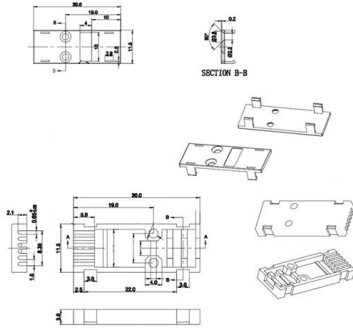
## Shell-Submer-Supermicro Case Study

Comprehensive testing of Shell Immersion Cooling Fluids delivers the first- ever Intel® Data Center Certified for Immersion Cooling solution, unlocking opportunities for reduced data center cooling



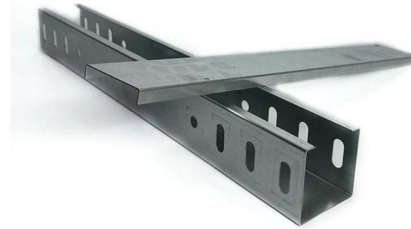
## Rack-Level Liquid Cooling-ingrasys

High Performance Liquid Cooling Solutions  
Ingrasys offers a complete line of rack-level liquid cooling solutions based on where the heat is exhausted in the data



## Shell's Immersion Cooling Advances Sustainability

Shell achieves Intel® Data Center Certification while cutting cooling costs and boosting sustainability and rack density.



## Liquid and Immersion Cooling Options for Data Centers

Long proven for mainframe and gaming applications, liquid cooling is expanding to protect rack-mounted servers in data centers worldwide. Vertiv has created a wide array of resources to help you

## Industry First -

With rigorous testing, the Supermicro server, in combination with a defined liquid and immersion tank, is quality/performance tested and is now





## Schneider Electric Announces Industry's First Integrated

Avnet integrates the liquid-cooled server with Schneider Electric's NetShelter liquid-cooled enclosure system for simple deployment into data

## Liquid and Immersion Cooling Options for Data Centers

Immersion cooling - Single-phase and two-phase immersion cooling systems submerge servers and other components in the rack in a thermally conductive



## Beating the heat in the data center: The industry's first

Today at Schneider Electric, we made an exciting announcement: we introduced our industry's first commercially-available integrated rack with chassis

## Immersion Cooling Is Ready for its Big Moment in the

Why Immersion Cooling? With all the discussion of data centers building to support AI, higher rack densities, and greater power demands, the cooling aspect is often



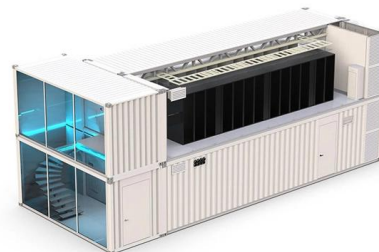
### **Immersion cooling for modern data centers**

The testing and certification of immersion cooling cabinets to UL 2416 requires testing one representative system that features the relevant cabinet system hardware, insulating liquid and the



### **xFusion Obtains World's First TÜV Rheinland Leakage**

Having undergone dozens of days of rigorous high-temperature accelerated aging tests, material tests, and verification, xFusion's liquid-cooled



### **Case Study: Evaluating the SSD7540 Suitability for Deployment in**

Unlike a standard rack server, which relies on conventional cooling fans or liquid-cooled heat exchangers, the computing hardware of an Immersion Cooling platform is fully submerged in



## LiquidCool Brings Immersion Cooling to the Server Chassis

The rear view of a rack of servers using the LiquidCool immersion system. Blue lines bring dielectric coolant to the server to cool components, while the red lines



## Data Center Cooling Courses and Certifications

Discover comprehensive liquid cooling solutions for AI infrastructure, covering CDU, cold plates, manifolds, coolant systems, and real-world project implementation experiences.

## Microsoft is now submerging servers into liquid baths

Microsoft is starting to use two-phase immersion in its data centers to cool servers using liquid baths. The cooling method could improve performance



## OCP Immersion Requirements Rev. 2.0

The common denominator for each immersion system is that a dielectric liquid is in direct contact with the electronic components in need of cooling. The dielectric liquid is thermally



## Contact Us

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For datasheets, pricing, or custom telecom energy solutions, please visit:  
<https://www.koskolong.co.za>