



20. Mai 2026

17. Bechtle
IT-Forum
Thüringen
Steigerwald Stadion Erfurt

20
26

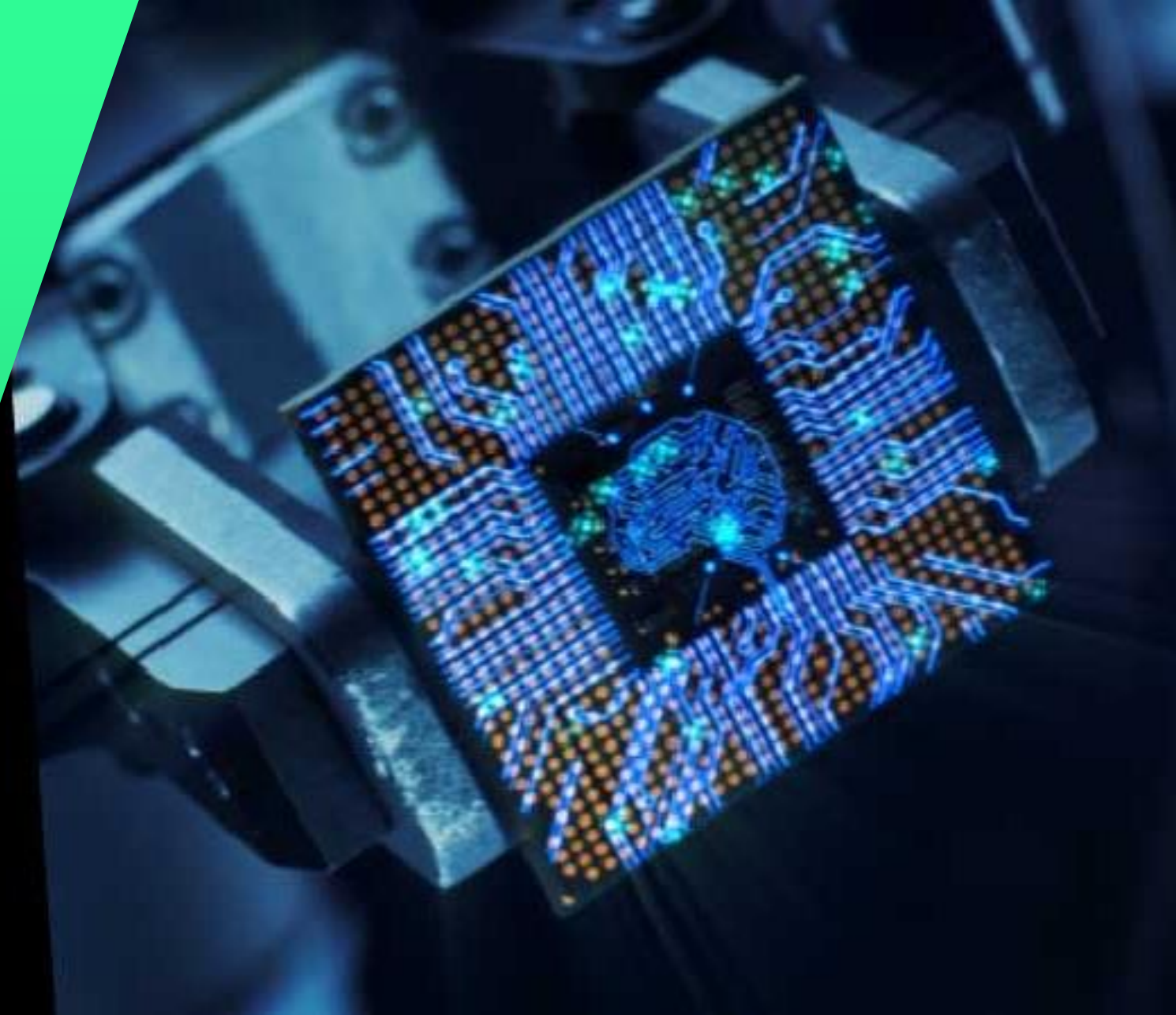


Vertiv 360AI

Maximale Effizienz für Ihre
KI-Bereitstellungen

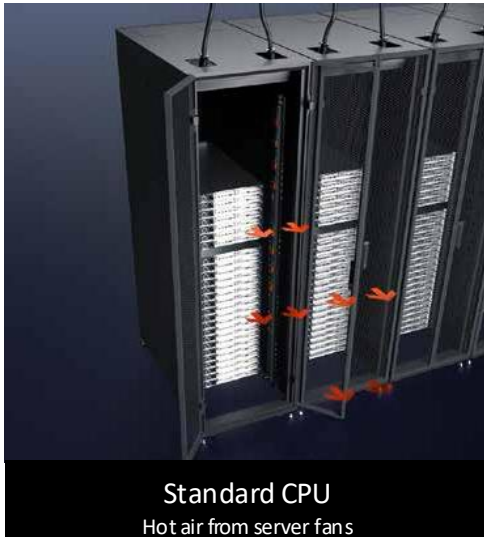
Patrik Krol

20.05.2026



The AI heat wave is coming

Die bestehende Strom- und Kühlinfrastruktur wird eine signifikante Skalierung erfordern, um die beispiellose Nachfrage des Accelerated Computing zu bewältigen. KI-Inferenz und Modelltraining können die Anforderungen an Stromversorgung und Kühlung auf nie dagewesene Rack-Dichten treiben g.



The better way to power and cool AI

Vertiv™ 360AI provides a complete solution to power and cool high-performance computing, accelerate deployment, and keep AI applications running at peak performance. Within the Vertiv 360AI portfolio, Vertiv's pre-engineered solutions help to navigate the complex challenges arising from the AI revolution and provide a faster and easier path for customers to deploy AI infrastructure.



- Power
- Cooling
- Enclosures & structures
- Digitalized management
- Lifecycles services

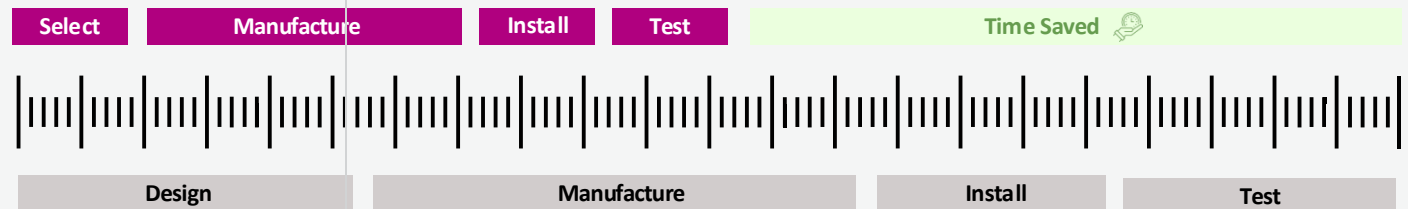
Accelerate your ROI on AI

Don't let infrastructure slow down your return on AI investments, streamline design, deployment, operations, and lifecycle management.

Vertiv pre-engineered AI solutions

Up to 2x faster

Traditional design & build

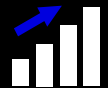


Top benefits of Vertiv 360AI pre-engineered solutions



Reduce deployment time up to 50%

Pre-engineered solutions can eliminate design work reducing deployment time up to 50%.¹



10x Capacity in the same footprint

Increase power and cooling capacity up to 10x in the same footprint to help prevent stranded capacity.



Broad range, scalable

Solutions can scale from Edge inferencing, to AI test labs, to large AI deployments at scale. Systems range from 70kW racks, to a 14MW row.



Flexibility & customization

Solutions can scale from Edge inferencing, to AI test labs, to large AI deployments at scale. Many heat rejection and form factor options allow for retrofit and reuse of existing cooling systems, minimizing deployment cost and scope.



Proven technology

Built with the most complete portfolio of power and cooling infrastructure in the industry. Vertiv can meet both the power and cooling demand of high-performance computing (HPC).

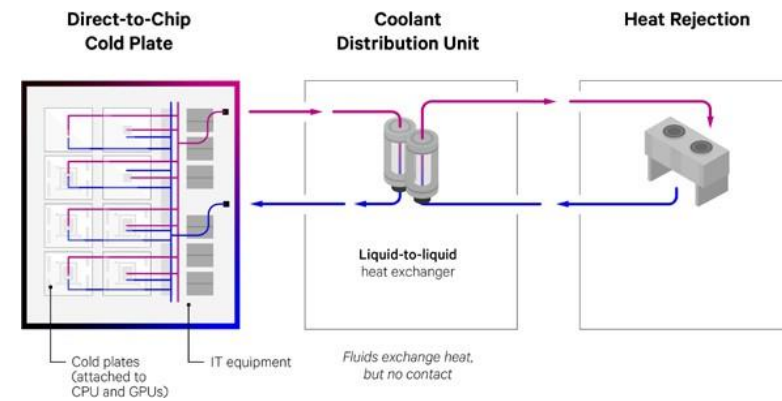
¹ Vertiv management estimate based on direct market research on pre-engineered solutions, actual results will vary.

Flexible cooling strategies

Direct-to-chip liquid cooling uses cold plates to remove the majority of heat, but leaves some residual heat that requires supplemental cooling to remove. Vertiv pre-engineered AI solutions enables the combination of air and liquid cooling topologies with different heat rejection methods to provide flexibility and minimize deployment costs.

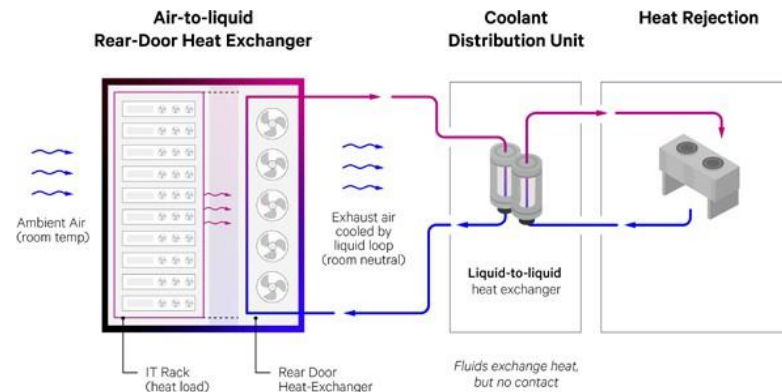
Direct-to-Chip liquid cooling

Liquid to Air (L2A), Liquid to Liquid (L2L), Liquid to Refrigerant (L2R)



Rear-Door heat exchangers

Air to Liquid (A2L)



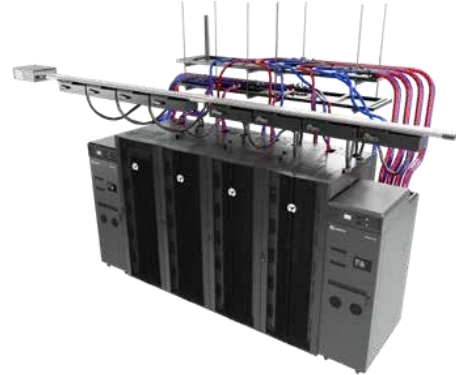
Kickstart AI deployments with pre-engineered solutions

Pre-Engineered solutions can scale from Edge Inferencing to training and AI at scale.

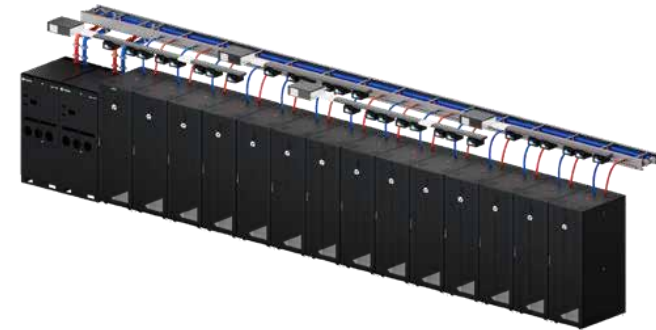
AI test environments, training pilots, or edge inferencing



AI labs, transitions to AI data centers



Prototype AI factory and training



Technology summary	Solution model number	Racks	Density per rack	Green field / Brown field	Heat removal		Chiller included	
					From server	From room		
AI test environments, training pilots or edge inferencing								
Small HPC minimal retrofit	1L88R	1	88kW	Brown field			Air	–
Small HPC retrofit for chilled water system	1L100R	1	100 kW	Brown field			Water / glycol	–
AI labs, transition to AI data center								
Mid-size HPC cost-optimized retrofit	4L400R	4	100 kW	Brown field			Refrigerant	✓
Mid-size HPC with increased heat capture	4XL400	4	100 kW	Brown field / Green field	+		Water / glycol	–
Mid-size HPC retrofit for air cooled computer rooms	4X160R	4	40 kW	Brown field / Green field			Refrigerant	✓
Mid-size HPC low complexity retrofit with air-cooling	5L500	5	100 kW	Brown field			Water / glycol	–
Prototype AI factory								
Large HPC preserving room neutrality	12XL1200	12	100 kW	Brown field / Green field			Water / glycol	–
Large HPC building towards scale	14L1400	14	100 kW	Brown field / Green field			Water / glycol	–

Complete solutions with superior range of technologies for high-density

Coolant distribution units (CDUs) & manifolds



- y Precise Temperature Control to eliminate thermal shock for server CPU and GPUs.
- y Redundant Pumps and Dual Power Feeds for optimizing reliable operation.
- y Teaming Capabilities allow for fleet control to optimize efficiency and reliability.
- y Innovative Stainless-Steel Design and Hygienic Couplings help ensure Secondary Fluid Network integrity.
- y Row Manifolds overhead manifolds included, no raised floor required. (Underfloor available upon request).
- y Rack Manifolds compatible with quick disconnects.

Environmental monitoring



- y Environmental Sensors – monitor rack enclosures for temperature, humidity, and dewpoint.
- y Leak Detection – Up to 100 feet of moisture sensing cable to detect any moisture.

Heavy-Duty rack enclosures



- y High-Capacity for high-density applications, up to 4,250 lbs Static Load.
- y Designed to enable full integration & shipping of high-density IT systems, up to 3,550lbs.
- y Globally Available in 12 standard sizes.

Uninterruptible Power Supplies (UPS)



- y Built for AI to effectively handle densification and stabilize dynamic AI workloads with ease.
- y Close-coupled system integration boosts reliability, saves space, and speeds setup.
- y Enhance energy efficiency, seamlessly integrate with renewables and provide grid services.

Overhead power distribution



- y Hot-swap without any special tools with built-in safety and plug-and-play features.
- y Reduce CAPEX – no need for raised floors to distribute power.
- y Monitor efficiency and capacity with smart metering.

Rack power distribution



- y Rack PDUs up to 80A standard for high density AI applications
- y Engineered-to-order models available, with higher capacities available when required.
- y Compact design – fit up to 4 in a single rack.
- y Outlet monitoring and switching to track and control workloads remotely with software suite.
- y Connect up to 16 environmental sensors to monitor temperature, humidity, dew point, and water leaks.

Sizing up the right solution for your IT



	Single rack		Mid-Size row			Large row			
Vertiv solution ID number	1L88R	1L100R	4L400R	4XL400	4X160R	5L500	12XL1200	14L1400	
Rack quantity	1	1	4	4	4	5	12	14	
Rack density	88	100	100	100	40	100	100	100	
Rear-Door heat exchanger included				X	X		X		
Total system capacity ¹	88	100	400	400	160	500	1200	1400	
Compute architectures									
Server make and model	Main cooling technology	Total quantity of compute nodes supported (evenly distributed across rack enclosures)							
Dell XE9640	Liquid direct-to-chip	16	22	92	92	-	115	276	322
Dell XE9680	Air-cooled	-	-	-	-	12	-	-	-
NVIDIA DGX H100	Air-cooled	-	-	-	-	16	-	-	-
NVIDIA GH200 NVL32	Liquid direct-to-chip	1	1	4	4	-	5	12	14
GB200 NVL72	Liquid direct-to-chip	-	-	3	3	-	3	9	10
Supermicro SYS-421GU-TNXR	Liquid direct-to-chip	10 (12 Max) ²	10 (12 Max) ²	40 (48 Max) ²	40 (48 Max) ²	-	50 (60 Max) ²	120 (144 Max) ²	140 (168 Max) ²

Notes:

¹ Direct-to-chip liquid cooling uses cold plates in the server and will leave residual heat that needs cooled through supplemental cooling technologies, such as rear-door heat exchangers or perimeter air-cooling systems.

² Number in parenthesis refers to a fully populated cabinet without space for other devices, such as switches or network devices.

Key considerations

What is the scale of deployment?

- How many nodes, or how many racks are needed?
- Is this a proof-of-concept for testing?
- Is this AI at scale in a data center?

What rack density is needed?

- What is the design rating of each node?
- Do you want to design for future expansion?

Retrofit vs. new build?

- Can existing cooling systems be modified?
- How much floorspace is available?

Find the right cooling topology

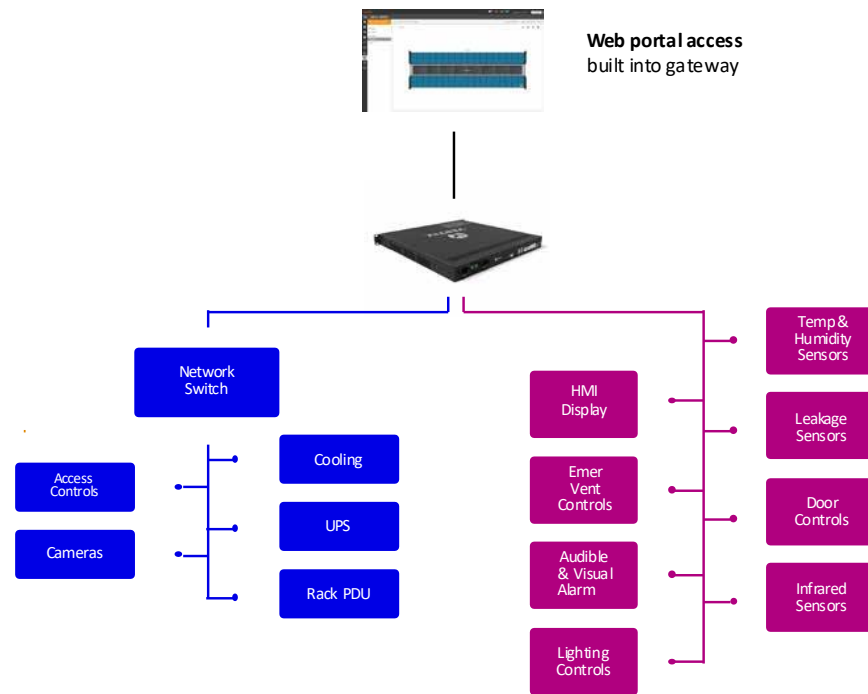
- Liquid-cooled or air-cooled servers?
- Are there existing chillers on site?
- Is there existing air cooling to supplement liquid?
- Can hot air be rejected into the space, or does heat need to be captured for reuse?

Centralized, scalable remote management architecture

Integrated monitoring & remote management

Infrastructure management gateway appliance

- RS485 Serial Communication
- TCP/IP Network Communication



End-to-end services for seamless AI deployments

End-to-end lifecycle services are included with Vertiv™ 360AI solutions to streamline deployment and maintain high-density infrastructure, including liquid cooling systems.



Deployment

- Site assessment.
- Design.
- Project management.



Commissioning

- Installation.
- Startup.
- Testing.
- Complete packages available with commissioning levels L1 to L5 overseen by specialized Vertiv project managers guiding to every step of the way.

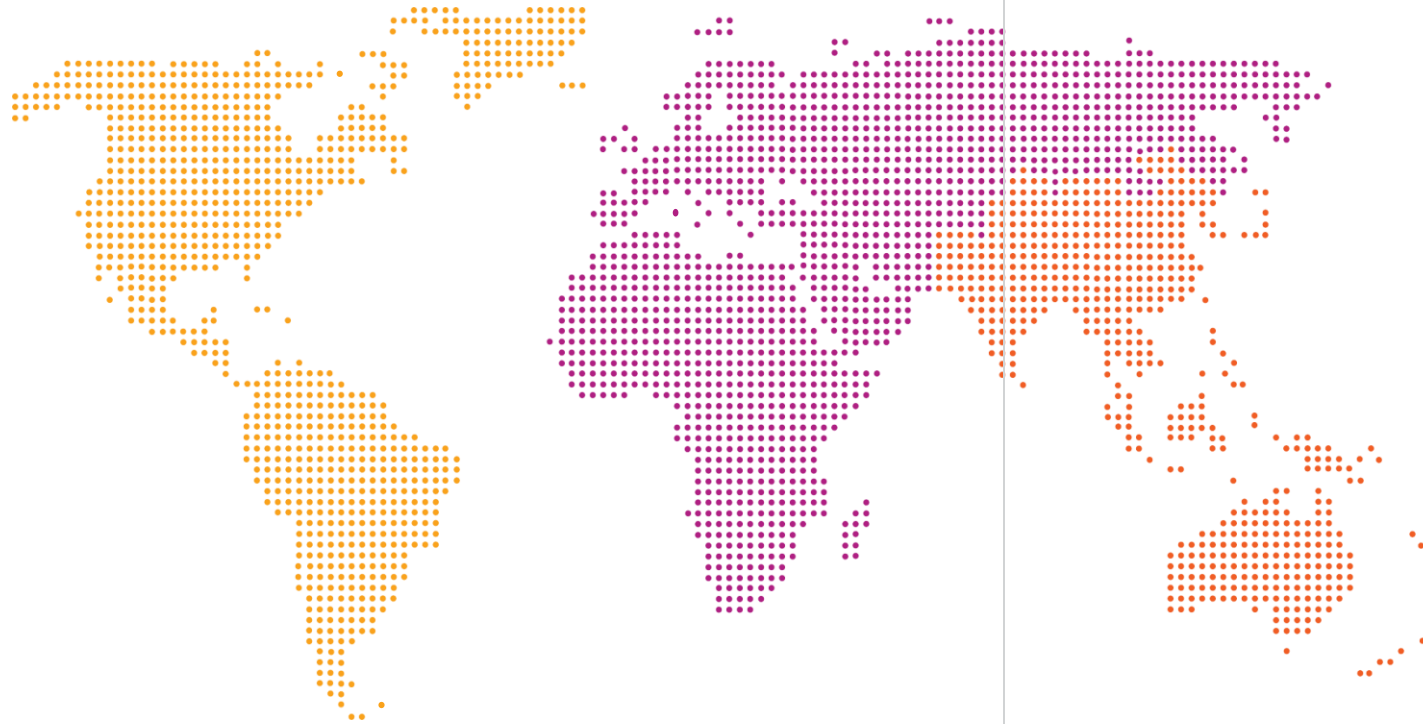


Maintenance

- Preventative maintenance.
- Fluid management.
- Troubleshooting.
- Liquid-Cooling Ready fluid management capabilities include coolant sampling, quality testing, adjusting, and ecological disposal.

Services that can cover the entire lifecycle, anywhere

50+ years building and servicing the world's most critical infrastructure, with end-to-end capabilities for high-density environments.



Our presence worldwide



240+
Service Centers



3,500+
Field Engineers



190+
Tech Response

Americas

Manuf. and Assembly Locations: **8**
Service Centers: **100+**
Service Field Engineers: **1,600+**
Technical Support/Response: **70+**
Customer Experience Centers/Labs: **5**

Europe, Middle East, and Africa

Manuf. and Assembly Locations: **9**
Service Centers: **60+**
Service Field Engineers: **600+**
Technical Support/Response: **100+**
Customer Experience Centers/Labs: **5**

Asia Pacific

Manuf. and Assembly Locations: **5**
Service Centers: **80+**
Service Field Engineers: **1,300+**
Technical Support/Response: **20+**
Customer Experience Centers/Labs: **9**

Liquid to air direct-to-chip retrofit

Model Number: 1L88R

For facilities that are unable to change existing architectures and do not have chilled water available on site, this solution offers a path to introduce liquid cooling into the existing space.



Rack Interior View

System capacity

1 Rack(s)

88 kW Total solution capacity

88 kW Load per rack

Technologies used

Cooling Method	Direct-to-chip (liquid)
Heat Rejection Type	Air

Key components

Rack Enclosure	48U, 800mm x 1200mm (VR9357)
Rack PDUs – 2 per rack	80A Monitored rPDU (VP7UA002)
Coolant Distribution Unit (CDU)	Vertiv™ Liebert® XDU070

Dimensions (L, D, H): 4.63ft x 4.00ft x 7.58ft (1400mm x 1200mm x 2300mm)

What's included

- | | | |
|------------------------------------|----------------------------------|-------------------------------------|
| 1 Rack Enclosure | 4 Rack manifold | 7 Deployment + Commissioning |
| 2 Rack PDU | 5 TH Sensors – 2 per rack | 8 Maintenance |
| 3 Coolant Distribution Unit | 6 Remote Management | |

1L88R

Contact Vertiv for Availability

Liquid to liquid direct-to-chip in-rack retrofit

For facilities considering a small footprint deployment yet implement full liquid-to-liquid solution. Solution does not require additional floor space for coolant distribution units, while leveraging existing air-cooling for remaining portion of the heat load.

Model Number: 1L100R



Rack Interior View

System capacity

1 Rack(s)

100 kW Total solution capacity

100 kW Load per rack

Technologies used

Cooling Method Direct-to-chip (liquid)

Heat Rejection Type Water/Glycol

Key components

Rack Enclosure 48U, 800mm x 1200mm (VR9357)

Rack PDUs – 2 per rack 80A Monitored rPDU (VP7UA002)

In-Rack CDU Vertiv™ CoolChip CDU 100

Dimensions (L, D, H): 2.63ft x 4.00ft x 7.43ft (800mm x 1200mm x 2265mm)

What's included

- | | | |
|-------------------------|----------------------------------|-------------------------------------|
| 1 Rack Enclosure | 4 Rack manifold | 7 Deployment + Commissioning |
| 2 Rack PDUs | 5 TH Sensors – 2 per rack | 8 Maintenance |
| 3 In-Rack CDU | 6 Remote Management | |

1L100R

Contact Vertiv for Availability

