# Hypertec

### Data sheet

# **TRIDENT** iS515R-G6 immersion storage server







# Data sheet **OVERVIEW** > Perfect for

- Edge Computing
- Data Analysis
- > Al on the Edge

- > Content Delivery Network
- > Machine Learning
- > Financial Modeling

## 10 Immersion-Born Server

Hypertec has invested a lot in R&D to come-up with a unique line-up of servers that are immersion-born. The chassis is specifically designed and manufactured to optimize the flow of the liquid coolant, thus the overall temperature of the system. This unique design translates to quieter operation and improved energy efficiency, making them ideal for edge computing deployments.

# High-density, ultra-fast storage

Dense storage up to 1 PB of NVMe drives allows smaller data centers and edge locations to hold massive datasets locally, reducing reliance on centralized facilities and minimizing latency issues caused by longdistance data transfer. Ultra-fast storage enables local access and analysis of information even when disconnected from the central network, ensuring critical operations continue smoothly even in connectivity disruptions.

# Serviceability, a must

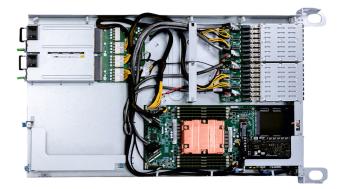
Serviceability is baked in the conception of this server. Unlike any other immersion cooling server with storage, we strategically placed the I/O and the 16 hot-swappable NVMe drives at the surface. Changing drives is a breeze. This user-friendly design minimizes downtime and maximizes serviceability, ensuring smooth operations even in remote edge locations.

# Data sheet TECH SPECS

1U AMD - 16 x EDSF	FF NVMe (Custom Designed for Immersion Cooling)		
Product Category	NVMe Storage Server		
Form Factor	10		
Cooling System	Single-Phase Immersion Cooling		
Power Supply	1+1 Redundant CRPS 1600W AC - 80 PLUS Titanium Power Supply		
Dimensions (L x W x H)	34.01" x 17.71" x 1.71" 864mm x 450mm x 43.5mm		
Estimated Weight	43.7 lb / 19.9 kg		
Processor	Single AMD EPYC <sup>™</sup> 9004 Processors, TDP up to 400W		
Heatsink	Immersion Cooling Custom Heatsink		
TIM	Indium Foil		
Memory	Up to 2TB DDR5-4800 MT/s RDIMM 8-channel memory architecture Supports RDIMM, LRDIMM, 3DS RDIMM/LRDIMM		
Network Controller	Broadcom BCM5720 for BMC shared NIC management and Data transfer Realtek RTL8211F GbE for BMC dedicated management port (NCSI shared NIC - reserved BCM5720)		
Storage	16 x EDSFF E1.S hot-swappable drive bays or 16 x EDSFF E1.L hot-swappable drive bays		
	2 x M.2 NVMe SSD up to 22110		
Expansion Slots	1 x PCle Gen 5 x16 slot LPHL (surface mount) 1 x OCP 3.0 Mezz, Gen 5 x16 (surface mount) 1 x PCle Gen 5 x16 FHFLDW (bottom mount)		
GPU/FPGA Capabilities	Yes (1 x DW slot)		
GPU/FPGA Support	Upon Request		
I/О Тор	2 x USB 3.0, 1 x Mini DP, 1 x RJ45 MLAN, 1 x COM Port (Audio Jack)		
Management	Aspeed <sup>®</sup> AST2600		
OCP (ORv3) Availability	No		

OS Support	Windows Server 2019, Red Hat Enterprise Linux 8.3 ( x64) or later, SUSE Linux
	Enterprise Server 15 SP2 ( x64) or later, Ubuntu 20.04.1 LTS (x64) or later,
	VMware ESXi 7.0 Update 2 or later







# Data sheet BENEFITS

# The Unrivalled Benefits of Immersion Cooling

Immersion cooling has a huge number of benefits, especially when it comes to sustainability and efficiency. It significantly reduces the amount of water used, levels of carbon emissions, and much more.

95% Reduction in Cooling OPEX	PUE of 1.03 (certified by a 3rd party). ROI of less than 1 year even only considering the electricity savings.	60% Increase in Hardware Lifespan	No moving parts, no dust particles, no vibrations, less thermal and mechanical stress due to the uniformity provided by the liquid and its viscosity.
<b>10x</b> Increase in Server Density	Dissipation capacity of up to almost 100 kW in the space of two standard racks.	99% Heat Captured in Form of Warm Water	Allows for unprecedented energy reuse if data centers are built close to communities or industry potentially creating new revenue streams.
<b>50%</b> CAPEX Reduction Build Costs	Rapidly deployable in raw space without need for raised floors nor cold aisles. Minimum retrofitting required for existing data centers.	0% Water Consumption	> The closed loop of the secondary cooling system guarantees no corrosion, health risks (legionella) and prevents any water evaporation.

# Data sheet SERVICES

# The 360° Hypertec Made-For-Immersion Solution

We bring a full 360° solution so all you need to do is sit back and enjoy all the benefits without the headache and save on OPEX and CAPEX. Our professional services enhance your IT journey by reducing time, TCO, effort and resources.

# Want to learn more or need help?

- **Contact Sales**
- Immersion Cooling Solutions >
- Hypertec Cloud Services
- Hypertec Support Center
- Support Services & Warranty
- Sustainability

### Learn more

Hypertec



Site Assessment



Power Budget



Installation Planning



Tank & Pod Layout



Factory Assembly



Onsite Installation



**BIOS & Firmware** Settings

Cabling &

Labeling



Software & OS Installation

Networking &

Power



Customer Image

**Global Warranty** & Service

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### Limited Warranty

Hardware warranty includes a one year, parts and labour with return to Hypertec USA or Canada. Customers may purchase an extended warranty of up to 5 years on parts and labour with different support levels. For additional information regarding worldwide limited warranty and technical support, please visit: https://hypertec.com/support-services-policy/

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