

Preliminary Technical Data Sheet

KUL AI Dell XE7740 / XE7745



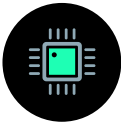
Performance Optimized



Operationally Efficient



Highly Scalable



Increased Hardware Stability



Sealed and Protected



Near Silence Operation



Environmental Sustainability

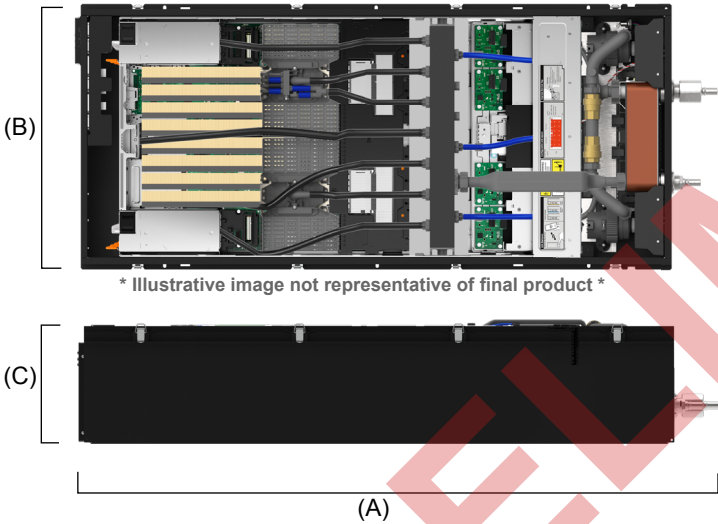


Cost Effective

This datasheet provides indicative specifications relating to a Dell XE7740 & XE7745 immersion ready server configured and integrated into an Iceotope KUL AI rack mountable enclosure. Compatible with Iceotope KUL AI Platform infrastructure. See KUL AI Platform Data Sheet for more information on rack integration. Ideal for AI Inferencing, AI model fine-tuning, AI powered HPC requirements.

Dimensions and Weight

Length (A)	52.1" / 130cm
Width (B)	21" / 53cm
Height (C)	5U / 22.2cm
Installed weight (NET max)	348 lbs / 158kg
Packaged weight (GROSS max)	428 lbs / 194kg



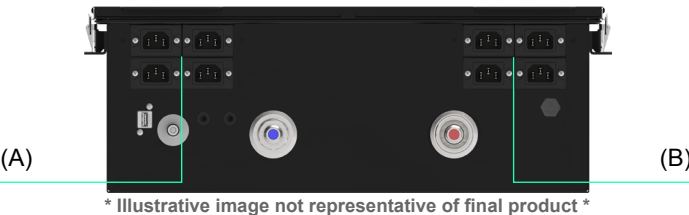
Each KUL AI server is supplied pre-integrated and packaged complete with accompanying hoses, brackets, rails and other ancillaries required for simple rack integration. Dielectric fluid is provided separately.

Power

AC Input type and max quantity (A+B)	C22 x 8
AC Input voltage	220-240V AC 1ph
AC Input frequency	50-60Hz
Maximum configured power of XE7740/XE7745 + KUL AI (hi-spec config)	8.6 kW (power and cooling redundant)

Cooling Requirements

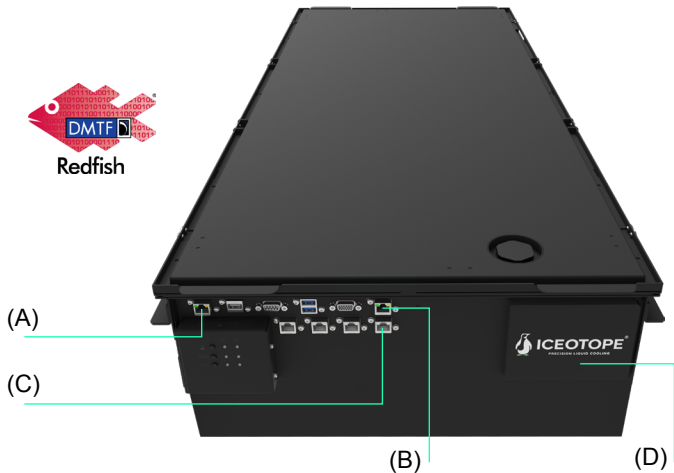
TCS Flow rate per enclosure	4.8 US Gal.pm / 18.1 Lpm
Maximum TCS inlet temperature	95 °F / 40 °C
TCS fluid compatibility	PGM / EGM / water + inhibitor pack
Max rated TCS system pressure	4.4 bar(g) / 64 PSI(g)
Dielectric Fluid Qty (max)	9 US Gal. / 34 L



Iceotope believes the information in this Data Sheet to be accurate; however, Iceotope does not make any representation or warranty, express or implied, as to the accuracy or completeness of any such information and shall have no liability for the consequences of the use of such information. This Data Sheet and its contents does not constitute an order by Iceotope to sell any product. An order is made only by a quotation provided by Iceotope. The terms of sale and technical specifications in such quotation may vary from those set forth in this Data Sheet. Iceotope's acceptance of any order shall be in Iceotope's sole discretion, and all quotations and sales are subject to Iceotope's Terms and Conditions.

Preliminary Technical Data Sheet

KUL AI Dell XE7740 / XE7745



The server integrated in the Iceotope enclosure is connected to the IO ports on the front panel. Iceotope BMC (A) can be integrated using a standard Redfish Compliant interface.

Monitoring and Management	
KUL AI Ports (A)	1x 1Gb Ethernet + 1x USB 3.0
Server Basic Ports (B)	1x 1Gb Ethernet + 1x USB 3.0 + 1x VGA
High Speed Networking Ports (C)(D)	4x 10Gb Ethernet + up to 16x Optical Ports
Integral server specific monitoring	Full access to Dell onboard iDRAC monitoring functionality
Precision Liquid Cooling system specific monitoring	Pump health, pump rpm and power, fluid fill level, temperature

Any existing DCIM/BMS can use standard commands to run alerting based on Iceotope metrics. Iceotope and Server BMC can also be accessed via the same interface. This simplifies the integration with a DCIM/BMS program.

Technical Specifications

Processor	XE7740: 2x Intel Xeon 6 Series XE7745: 2x 5th Gen AMD EPYC 9005	Power Supplies	8x 3200W Titanium PSU
Memory	XE7740: 32 DDR5 DIMM slots - RDIMM 3TB max XE7745: 24 DDR5 DIMM slots - RDIMM 3TB max	Embedded Management	iDRAC Remote Server Managemet Support Redfish Web-based interface
Storage Controllers	Internal Boot: Boot Optimised Storage Subsystem (BOSS-N1 DC-MHS): HWRaid 1 2 x M.2 NVMe SSDs	GPU	8x PCIe Gen 5 up to 600W (8x Nvidia H200)
Drive Bays	Up to 8x EDSFF E3.5 Gen5 NVMe (SSD) 122.88 TB max	Networking	Up to 8x PCIe NIC cards up to 200Gb/s 1 x OCP NIC card 3.0 (optional)
Cooling	Optimised Precision Liquid Cooling Approved fluid - Shell S3X		

Enhanced Product Offerings

- System Redundancy: Incorporated octa power inlet + 2x enhanced-spec pumps
- Scalability Package: Modular architecture, dielectric fluid fill level, coolant temperatures, enhanced pump metrics and reporting
- Serviceability Package: Removable chassis hoses + slide rails for ease of in rack servicing

Regulatory Compliance

Iceotope products are stringently engineered in accordance with relevant regional standards. Further detail on request.



Warranty

Iceotope offers a comprehensive three year parts and labour warranty. Further detail on request.

Iceotope believes the information in this Data Sheet to be accurate; however, Iceotope does not make any representation or warranty, express or implied, as to the accuracy or completeness of any such information and shall have no liability for the consequences of the use of such information. This Data Sheet and its contents does not constitute an order by Iceotope to sell any product. An order is made only by a quotation provided by Iceotope. The terms of sale and technical specifications in such quotation may vary from those set forth in this Data Sheet. Iceotope's acceptance of any order shall be in Iceotope's sole discretion, and all quotations and sales are subject to Iceotope's Terms and Conditions.