

# Technical Data Sheet

ICEOTOPE KUL AI XE7745



**KUL AI XE7745 FEATURES:**

- Dell PowerEdge XE7745 server
- KUL AI rack-mountable enclosure
- Up to 8x DW or 16x SW GPUs

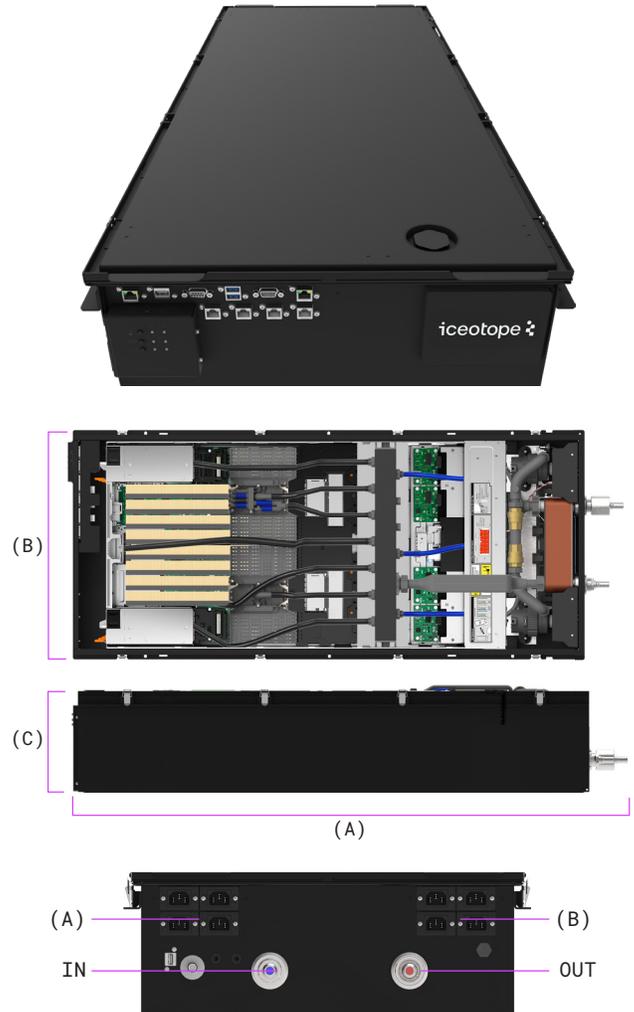
A wide range of immersion-ready configurations are supported; contact [sales@iceotope.com](mailto:sales@iceotope.com) for more information.

**PRECISION LIQUID COOLING BENEFITS<sup>1</sup>:**

- Up to 40% less power usage
- Up to 96% less water usage
- Up to 83% lower cooling costs

<sup>1</sup> Per kW of ITE Power, vs. air-cooled servers: <https://iceotope.info/cundallreport>

Sustained Compute Performance	Low Op-Ex Costs	Extended UPS Runtime	Increased Hardware Stability
Environmental Resilience	Near Silent Operation	Sustainable Operation	Rapid Deployment



\*ILLUSTRATIVE IMAGES NOT REPRESENTATIVE OF FINAL PRODUCT

## DIMENSIONS / 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

## 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

## 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 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



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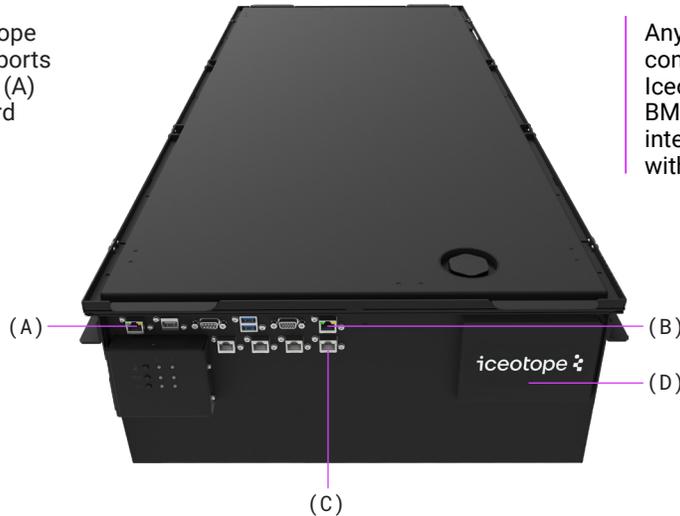
ICEOTOPE KUL AI DELL XE7745

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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.



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.



## MONITORING & 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

## TECHNICAL SPECIFICATIONS

Processor	2x AMD EPYC 9005 Series processor
Memory	24 DDR5 DIMM slots - RDIMM 3TB max
Storage Controllers	Internal Boot: Boot Optimised Storage Subsystem (BOSS-N1 DC-MHS): HWRAID 1 2 x M.2 NVMe SSDs
Drive Bays	Up to 8x EDSFF E3.5 Gen5 NVMe (SSD) 122.88 TB max
Cooling	Optimised Precision Liquid Cooling Approved fluid - Shell S3X
Power Supplies	8x 3200W Titanium PSU
Embedded Management	iDRAC Remote Server Management Support Redfish Web-based interface
GPU	8x double-wide 600W or 16x single-wide 75W PCIe GPUs
Networking	Up to 8x PCIe NIC cards up to 200Gb/s 1 x OCP NIC card 3.0 (optional)

## RACK INTEGRATION

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.

## WARRANTY

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

## REGULATORY COMPLIANCE

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



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