Technical Data Sheet

ICEOTOPE KUL AI R760

KUL AI R760 FEATURES:

- Dell R760 PowerEdge rack server
- KUL AI rack-mountable enclosure
- Up 2 DW or 6 SW NVIDIA GPUs

A wide range of immersion-ready configurations are supported; contact sales@iceotope.com for more information.

PRECISION LIQUID COOLING BENEFITS[1]:

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

[1] Per kW of ITE Power; vs. air-cooled servers: https://iceotope.info/cundallreport)

Sustained Compute Performance

Low Op-Ex Costs

Extended UPS Runtime

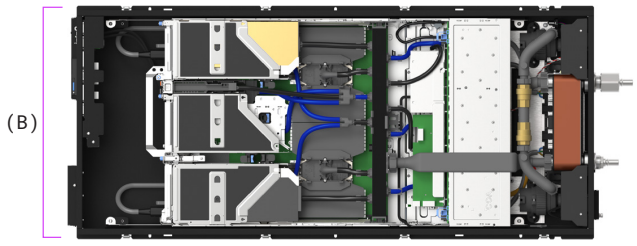
Increased Hardware Stability

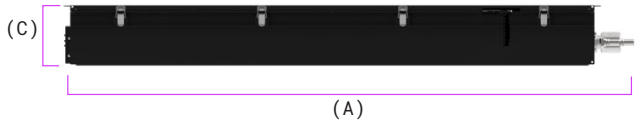
Environmental Resilience

Near Silent Operation

Sustainable Operation

Rapid Deployment





*ILLUSTRATIVE IMAGES NOT REPRESENTATIVE OF FINAL PRODUCT

DIMENSIONS / WEIGHT

Length (A)	47.6” / 121cm
Width (B)	21” / 53cm
Height (C)	3U / 13.5cm
Installed weight (NET max)	196 lbs / 89kg
Packaged weight (GROSS max)	276 lbs / 125kg
Packaged dimensions	L54”/136cm / W25”/64cm / H24”/62cm

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)	C14/C20 x 2
AC Input voltage	110-240V AC 1ph
AC Input frequency	50-60Hz
Maximum configured power of R760 + KUL AI (hi-spec config)	2.2 kW (power and cooling redundant)

COOLING REQUIREMENTS

TCS Flow rate per enclosure	1.2 US Gal.pm / 4.6 Lpm
Maximum TCS inlet temperature	104 °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)	5 US Gal. / 20 L

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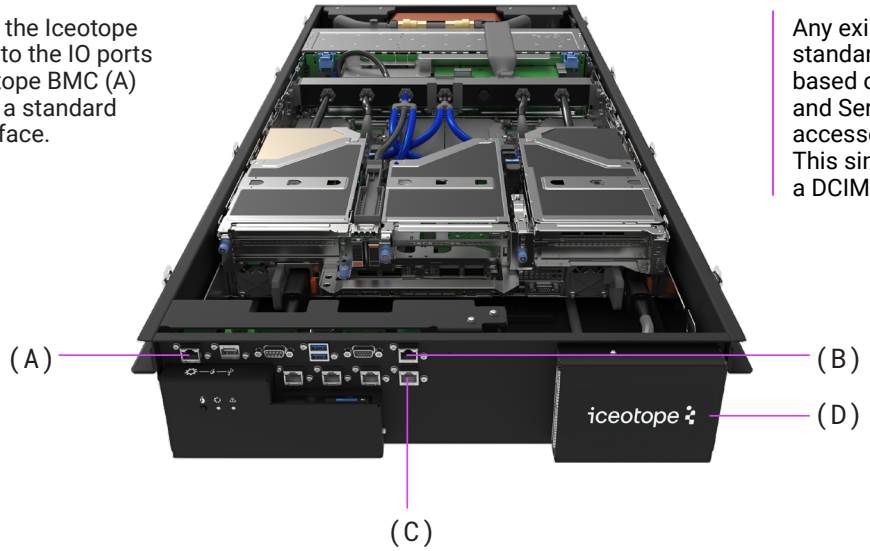
The server integrated in the Iceotope enclosure is connected to the IO ports on the front panel. Iceotope BMC (A) can be integrated using a standard Redfish Compliant interface.



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 2.0
Server Basic Ports (B)	1x 1GB Ethernet + 1x USB 3.0 1x USB 2.0 + 1x VGA
High Speed Networking Ports (C) (D)	4x 10GB RJ45 + 4X QSFP28 or 4x SFP28 or up to 4x 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 4th Generation Intel Xeon Scalable or Intel Xeon Max processors or 2x 5th Generation Intel Xeon Scalable processors
Memory	16 DDR5 DIMM slots, supporting RDIMM 8 TB Speeds up to 5600 MT/s on the 5th Generation Intel Xeon Scalable processors
Storage Controllers	Internal Controllers: PERC H755, PERC H965i, PERC H355 Internal Boot: Optimised Storage Subsystem (BOSS-N1): HWRAID 2x M.2 NVMe SSD
Drive Bays	Up to 24 x 2.5-inch SAS/SATA Up to 8 x 2.5-inch NVMe/SATA
Cooling	Single-phase hydrocarbon (see website for approved fluid vendors)
Power Supplies	Dual Titanium 1800 W mixed mode HLAC 60mm Dual Platinum 2400 W mixed mode 86mm
Embedded Management	iDRAC Remote Server Management Support Redfish Web-based interface
GPU	Up to 2x double wide NVIDIA GPUs or 6x single wide NVIDIA GPUs
Networking	Embedded NIC: 2x 1GbE LOM Optional add on: 1x OCP NIC card 3.0 2x Configurable Network Card up to 200Gb/s

RACK INTEGRATION

Each KUL AI server is supplied pre-integrated 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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