Technical Data Sheet

ICEOTOPE KUL BOX G293

The Iceotope KUL BOX G293 rack server delivers significant advantages for environments where enhanced thermal management, quiet operation and maximum performance are critical.

This compact server uses liquid cooling to capture almost all of the heat generated by the system, which is then released outside through a liquid-to-air cooler.

Iceotope technology reduces cooling costs by up to **83%** and water use by up to **96%** vs. air-cooled servers.[1]

ICEOTOPE KUL BOX G293 PRODUCT FEATURES:

- 24U rack with 6 Iceotope KUL AI chassis
- 6 Gigabyte G293-S45 servers
- 24x NVIDIA H200 NVL GPUs
- Top-of-rack network switch

Sustained Compute Performance

Low Op-Ex Costs

Extended UPS Runtime

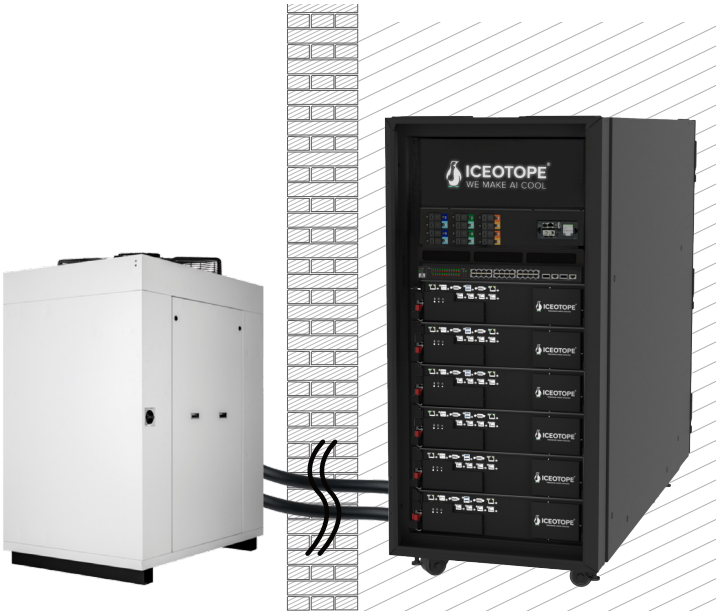
Increased Hardware Stability

Environmental Resilience

Near Silent Operation

Sustainable Operation

Rapid Deployment



Outdoor Cooler
*not to scale

Indoor Rack
*network cables not shown

Working in partnership with: nVent GIGABYTE

SHIPPING / INSTALLATION / SERVICE / WARRANTY

Iceotope's turn-key solution includes shipping, installation, operational training and handover. The service plan covers all parts and labor for 3 years, including coverage for all supplied hardware.

POWER / COOLING

Total Rack Power Draw	30kW
Cooler Power Draw (avg)	8kW (estimated @ 68°F / 20°C air temp)
Cooler Power Draw (max)	16.5kW
Total System Power Draw	38kW ave. / 46.5kW max
*Predicted pPUE (avg)	1.25
Water Consumption WUE	0
Power (Indoor Rack)	380V DC / 48V DC (See Server Specs)
Power (Outdoor Cooler)	400V - 460V AC / 3PE / 50Hz - 60Hz
Outdoor Cooler Working Fluid	Water Glycol Solution
Server Chassis Coolant	Shell S3X single-phase hydrocarbon (see website for other approved vendors)
Outdoor Cooler to Rack Connection	2x 1" - 1.5" hose (flow & return)
Regions	UK / EU / USA / APAC

* pPUE may vary depending on deployment location, seasonal temperature variations and rack utilization.

[1] https://go.iceotope.com/cundall-engineering-report-executive-summary Page 4: Total Cost of Cooling per KW of ITE Power: - 83.5%; Water usage per KW of ITE Power: - 96.1%

DIMENSIONS / WEIGHT

Rack size (inches)	L:64.8 / W:23.6 / H:92.7
Cooler size (inches)	L:40.9 / W:56.6 / H:74.4
Rack installed weight	1500kg
Cooler Installed weight	411kg

ENVIRONMENTAL

Inside Air Temperature (local to rack)	95°F / 35°C MAX
Outside Air Temperature (local to cooler)	5°F / -15°C to 122°F / 50°C
Deployment Environment (local to rack)	Indoor Use Only / Not IP Rated
Deployment Environment (local to cooler)	Outdoor Use Only / IP54 Rated
Maximum Sound Level (local to rack)	< 40 dB
Maximum Sound Level (local to cooler)	< 68.7 dB

REGULATORY COMPLIANCE

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

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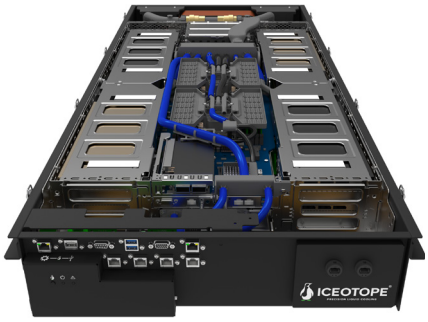
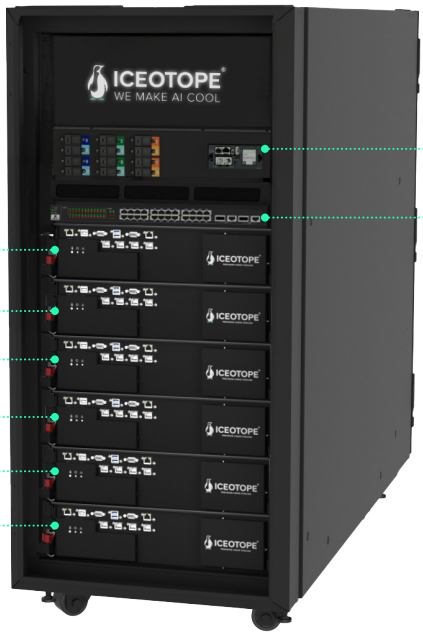
ICEOTOPE KUL BOX G293

ICEOTOPE®
WE MAKE AI COOL



100% Liquid-Cooled



For further information on server cooling technology click here.

Air-cooled

Chassis rear coolant connection

GIGABYTE G293-S45 SERVER

4x NVIDIA H200 NVL GPUs	2400W
2x Intel® Xeon® 8558 Processors (2.1GHz, 48 core)	660W
16x 64GB DDR5 Memory	160W
8x NVMe Gen 4 (PCIe 4.0) Drives	96W
NIC: 1x OCP 25GB + 1x 100GB	75W
Motherboard	150W
Total	3541W

NETWORK SWITCH

32 port 100GB Ethernet	160W

ENHANCED COOLING RESILIENCY

In the event of external power interruption or failure, internal dielectric fluid pumps will maintain system cooling for up to 5 minutes if backup power is still supplied to the rack.

The volume and heat capacity of the dielectric fluid used in Iceotope servers provides a significant safety buffer, enabling extended UPS runtime before its thermal limits are reached. If external power is resumed within 5 minutes, the system will return to normal operation without additional intervention.

PDU

Power Configuration	60/63A, 240/415V
Switched Outlet Level Monitoring	C13/19