

Technical Data Sheet

ICEOTOPE KULBOX G293



The Iceotope KulBox G293 rack server is purpose-built for environments where enhanced thermal management, quiet operation and maximum compute 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.

Our "direct to everything" liquid cooling technology improves system uptime while dramatically reducing energy consumption.

ICEOTOPE KULBOX G293 PRODUCT FEATURES:

- 24U rack with 6 Iceotope KUL AI chassis
- 6 Gigabyte G293-S45 servers
- 12 Intel® Xeon® 6747P Processors
- 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



Working in partnership with:

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 ave.	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 ave.	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
Outdoor Cooler to Rack Connection	2x 1" - 1.5" hose (flow & return)
Regions	UK / EU / USA / APAC

*pPUE can be enhanced with greater capex spend and space consumption on external cooler. pPUE may vary depending on deployment location, seasonal temperature variations and rack utilisation.

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.



Technical Data Sheet

ICEOTOPE KULBOX G293



GIGABYTE G293-S45 380V	
2x Intel® Xeon® 6747P Processors (2.7GHz, 48 core)	660W
16x 64GB DDR5 Memory	160W
8x 3.84 NVMe E3.S Drives	96W
4x H200 NVL GPU	2,400W
NIC: 1x OCP 25GB + 1x 100GB	75W
Motherboard	150W
Total	3531W

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 KulAI servers provides a significant safety buffer, enabling extended UPS runtime before its thermal limits are reached. If external power is resumed within 3 minutes, the system will return to normal operation without additional intervention.

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



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.

