

NVIDIA GB300 DIRECT-TO-CHIP LIQUID COOLING KIT

GB300

Direct-to-chip liquid cooling kit for NVIDIA GB300 AI GPU servers: 2× GPU + 1× CPU high-purity copper micro-channel cold plates, heat-transfer structures, flexible hoses and quick disconnects.



REFERENCE OPERATING POINT

GPU 800–1200 W · CPU 300–500 W (per device)

coolant inlet 20–30 °C; pressure drop ~45 kPa @ 3 L/min; working pressure ≤ 3 bar; confirmed per platform.

Engineering note: stated figures are design targets — confirmed per platform and system-level boundary conditions.

THERMAL PERFORMANCE

GPU heat load	800–1200 W per GPU
CPU heat load	300–500 W
Coolant inlet temp.	20–30 °C
Thermal validation	CFD + thermal test per project

HYDRAULIC / FLUID

Coolant / medium	Water / PG25
Pressure drop	~45 kPa @ 3 L/min (system-dependent)
Working pressure	≤ 3 bar (typical)
Quick disconnect	NVQD02 liquid-cooling connector

MECHANICAL

Cold plates	2× GPU + 1× CPU, high-purity copper micro-channel
Heat pipes	8× (heat-transfer assistance)
Corrugated hoses	6× flexible coolant lines
Manufacturing	CNC micro-channel machining + vacuum brazing

RELIABILITY, TEST & COMPLIANCE

Leak test (100%)	Helium leak (industry-standard)
Pressure test	Verified per project
Validation	Full-item test report available
Compliance	RoHS; REACH & CE on request
Application	AI GPU servers, HPC clusters

Send your platform / chip, heat load, coolant, flow rate, inlet temperature and mechanical envelope — ToneCooling returns a CFD-supported design proposal and quotation.