

ArctiQ DLC Cold Plates

NIVIS Series



The ArctiQ™ NIVIS Series Cold Plates represents ATS's next-generation fluid thermal spreader technology, specifically designed for advanced AI, HPC, and server-grade CPUs. Optimized for the **AMD Socket SP5**, the NIVIS line offers up to **6.5 kW** of cooling capacity within a compact 118 x 92.4 x 31 mm footprint.



Image for illustration purposes only.

With two internal design variations, constructed from aluminum, performance is finely tuned to balance cost and mass. Rigorously validated through CFD and laboratory testing, NIVIS cold plates ensure exceptional reliability and support direct-contact, high-conductivity performance for mission-critical AI applications.

FEATURES AND BENEFITS

- >> Two performance-tuned configurations with the same dimensions: 118 x 92.4 x 31 mm
- >> Supports up to 6.5 kW heat dissipation
- >> Socket-specific design for AMD SP5 architecture
- >> Universal barb fittings for 8 mm OD / 5 mm ID tubing
- >> Lab-tested and CFD-validated for consistent, high-power operation
- >> Mounting hardware included

- **Innovative Technology**
Superior heat transfer with a flexible design platform.
- **Optimized Design**
Compact, socket-specific footprint ensures efficient heat removal and easy integration.
- **Proven Reliability**
CFD-validated and lab-tested for consistent, long-term thermal performance.
- **Customization Available!**
ATS will customize any cold plate to fit into your application.

ATS Part #	Material	Dimensions (mm) (L x W x H)	Weight (g)	Finish	Cooling Capacity*	Thermal Resistance @ 3LPM (°C/W)
ATS-AIC-3709	Al	118 x 92.4 x 31	386	Purple Anodized	5.5 kW	0.011
ATS-AIC-3709			389	Blue Anodized	6.5 kW	0.009

APPLICATIONS

- AI servers
- Automotive electronics
- Data centers
- Edge and embedded systems
- High-performance computing
- Industrial automation



*Fluid Inlet= 25°C; Flow Rate = 3 LPM; T_{case, max} = 84°C

ArctiQ DLC Cold Plates

NIVIS Series



ATS-AIC-3709

Cooling Capacity

up to **5.5 kW**

Optimized for

AMD Socket SP5

Dimensions (L x W x H)

118 x 92.4 x 31 mm

(4.6 x 3.6 x 1.2")

Cold Plate Material / Finish

Aluminum / Purple Anodized

Weight

286 g

Mounting Hole Diameter

Ø 5.50 mm

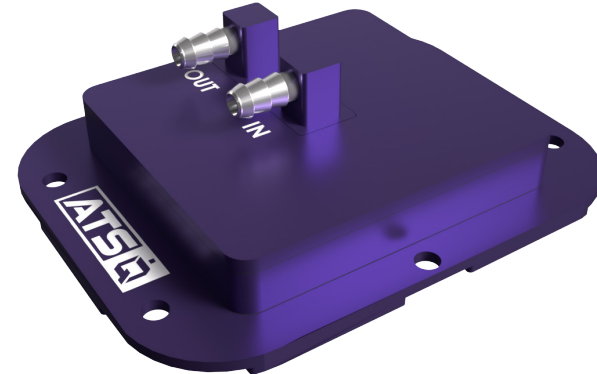
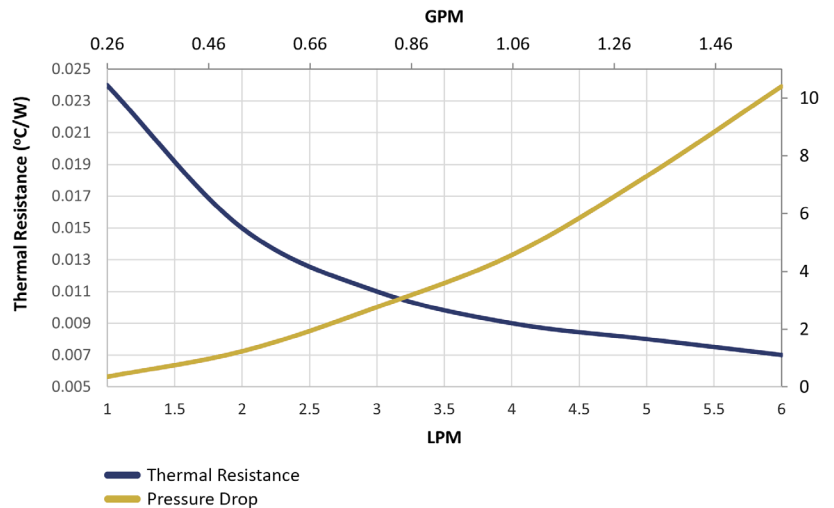


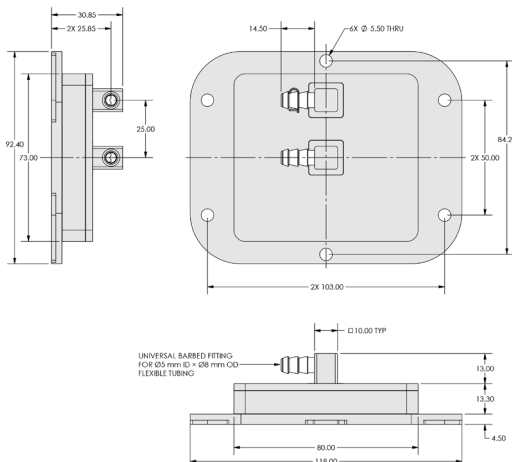
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Thermal Performance (Water as fluid)		
Flow Rate (LPM)	Thermal Resistance (°C/W)	Δ P (psi)
1	0.024	0.35
2	0.015	1.25
3	0.011	2.75
4	0.009	4.58
5	0.008	7.25
6	0.007	10.40

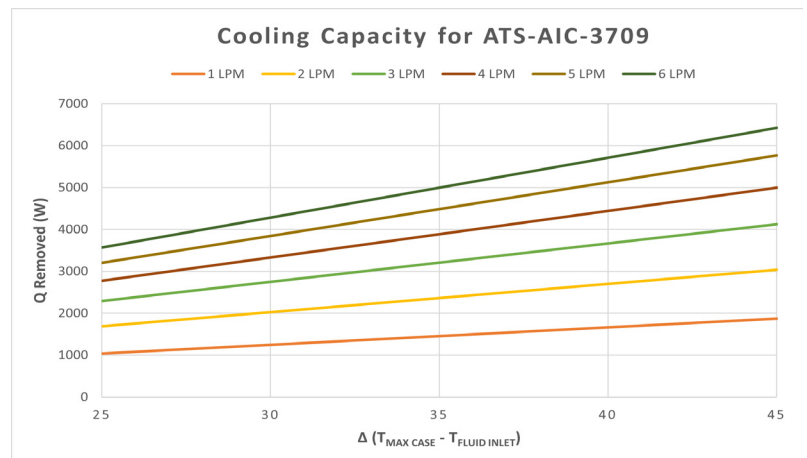
Thermal Resistance and Pressure Drop for ATS-AIC-3709



MECHANICAL SPECIFICATIONS



Cooling Capacity for ATS-AIC-3709



ArctiQ DLC Cold Plates

NIVIS Series



ATS-AIC-3710

Cooling Capacity

up to **6.5 kW**

Optimized for

AMD Socket SP5

Dimensions (L x W x H)

118 x 92.4 x 31 mm
(4.6 x 3.6 x 1.2")

Cold Plate Material / Finish

Aluminum / Blue Anodized

Weight

289 g

Mounting Hole Diameter

Ø 5.50 mm

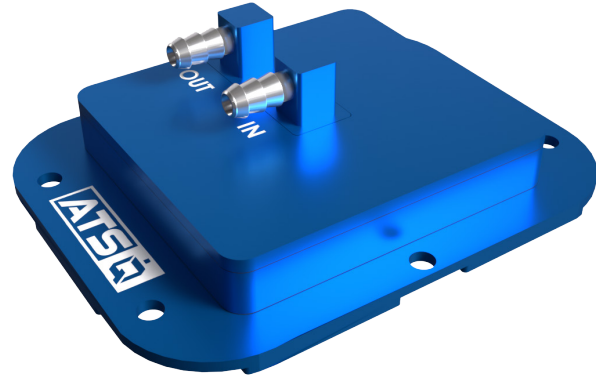
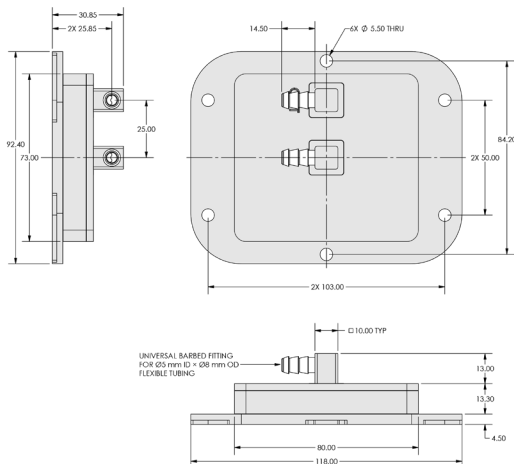


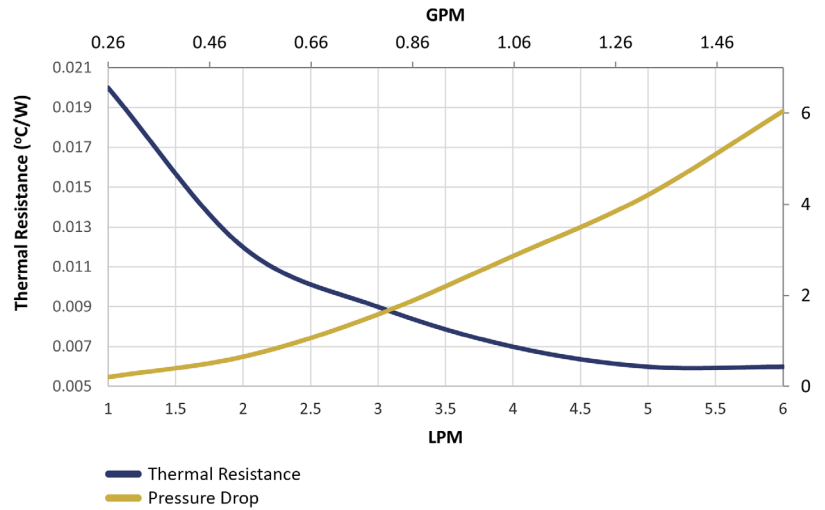
Image for illustration purposes only.

Thermal Performance (Water as fluid)		
Flow Rate (LPM)	Thermal Resistance (°C/W)	Δ P (psi)
1	0.020	0.20
2	0.012	0.66
3	0.009	1.57
4	0.007	2.87
5	0.006	4.18
6	0.006	6.04

MECHANICAL SPECIFICATIONS



Thermal Resistance and Pressure Drop for ATS-AIC-3710



Cooling Capacity for ATS-AIC-3710

