

ArctiQ DLC Cold Plates

NEXA Series



The ArctiQ™ NEXA Direct Liquid Cooling (DLC) Series is a family of high-performance cold plates designed for advanced AI accelerators, GPUs, and enterprise CPUs. Engineered for direct-to-chip cooling in dense data center and HPC environments, NEXA cold plates deliver ultra-low thermal resistance and scalable heat removal from **2.5 kW up to 9 kW** per device.

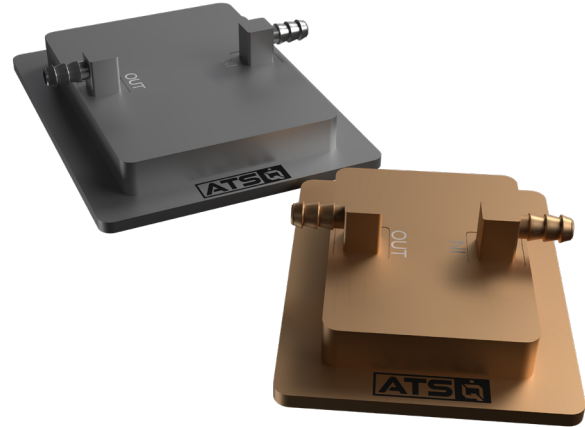


Image for illustration purposes only. Customizable mounting holes not shown.

Available in precision-machined aluminum, copper, and multi-material constructions, NEXA cold plates feature compact, integration-friendly designs with customizable mounting options and universal barb fittings. Optimized for efficient heat transfer and low pressure drop, the NEXA series provides reliable liquid cooling for next-generation AI and high-density compute platforms.

FEATURES AND BENEFITS

- >> Optimized for specific NVIDIA, AMD and Intel chips
- >> High aspect ratio channel liquid cooling
- >> Thermal resistance as low as 0.006°C/W (at 6 LPM)
- >> Universal barb fittings for 8 mm OD / 5 mm ID tubing
- >> Specifically designed for AI/Deep Learning Accelerators, GPUs, and enterprise CPUs
- >> Solid base allows for custom mounting hole patterns to match user applications

- **High Efficiency**
Precision-machined design ensures uniform heat removal for AI processors, GPUs, and enterprise CPUs.
- **Compact & Scalable**
Space-saving form factor ideal for dense electronic assemblies.
- **Optimized Design**
Compact socket-specific footprint ensures efficient heat removal and easy integration.

- **Custom Mounting**
Solid base allows for custom mounting patterns to match user applications.

- **Proven Reliability**
CFD-validated and lab-tested for consistent, long-term thermal performance.

APPLICATIONS

- AI servers
- Automotive electronics
- Edge and embedded systems
- GPUs and accelerators
- High-performance computing
- Industrial automation

ATS Part #	Material	Dimensions (mm) (L x W x H)	Weight (g)	Cooling Capacity*	Thermal Resistance @ 3LPM (°C/W)
ATS-AIC-2059	Al	97.5 x 125 x 29.1	325	5.5 kW	0.011
ATS-AIC-2077	Cu		1,072	8.0 kW	0.007
ATS-AIC-2060	Al	100 x 120 x 29.1	337	6.5 kW	0.009
ATS-AIC-2078	Cu		1,111	9.0 kW	0.007
ATS-AIC-2062	Al	95.5 x 95 x 29.1	234	4.5 kW	0.013
ATS-AIC-2079	Cu		773	6.5 kW	0.009
ATS-AIC-2063	Al	76.6 x 99 x 29.1	188	3.5 kW	0.018
ATS-AIC-2080	Cu		620	5.0 kW	0.012
ATS-AIC-2061	Al & Cu	99 x 99 x 36	770	2.0 kW	0.028

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



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ATS-AIC-2059

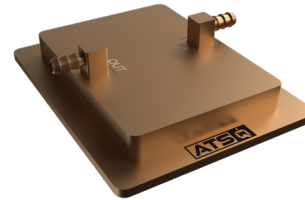


Cooling Capacity
up to **5.5 kW**

Dimensions (L x W x H): 97.5 x 125 x 29.1 mm
 Cooling Area: 72 x 102 mm
 Weight: 325 g
 Material: Aluminum

Thermal Performance (Water as fluid)		
Flow Rate (LPM)	Thermal Resistance (°C/W)	Δ P (psi)
1	0.013	0.51
2	0.011	1.87
3	0.011	4.08
4	0.010	7.08
5	0.010	10.80
6	0.009	15.26

ATS-AIC-2077



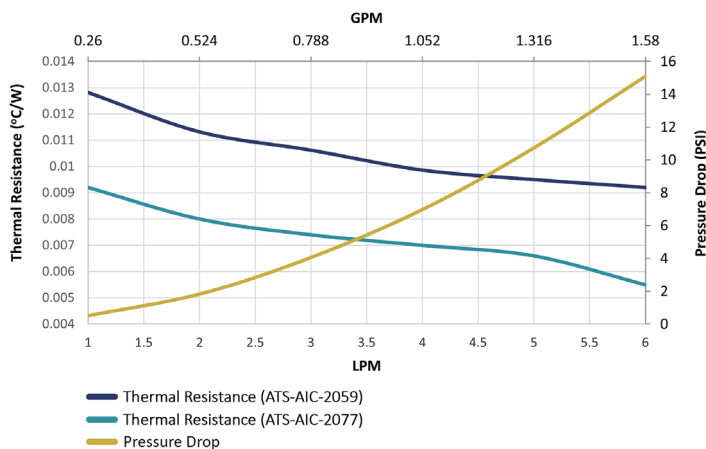
Cooling Capacity
up to **8 kW**

Dimensions (L x W x H): 97.5 x 125 x 29.1 mm
 Cooling Area: 72 x 102 mm
 Weight: 1,072 g
 Material: Copper

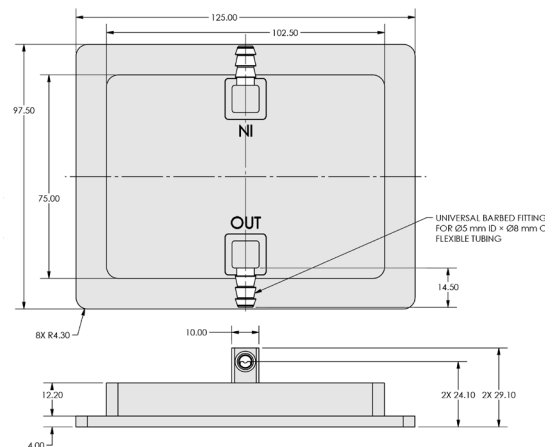
Thermal Performance (Water as fluid)		
Flow Rate (LPM)	Thermal Resistance (°C/W)	Δ P (psi)
1	0.009	0.51
2	0.008	1.87
3	0.007	4.08
4	0.007	7.08
5	0.007	10.80
6	0.006	15.26

Optimized for: • NVIDIA H100 SXM5 • NVIDIA H200 SXM5 • NVIDIA A100 SXM4

Thermal Resistance and Pressure Drop



Mechanical Specifications



ArctiQ DLC Cold Plates

NEXA Series



ATS-AIC-2060



Cooling Capacity
up to **6.5 kW**

Dimensions (L x W x H): 100 x 120 x 29.1 mm
Cooling Area: 80 x 100 mm
Weight: 337 g
Material: Aluminum

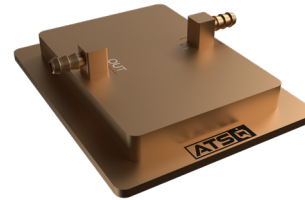
Thermal Performance (Water as fluid)

Flow Rate (LPM)	Thermal Resistance (°C/W)	Δ P (psi)
1	0.011	0.49
2	0.010	1.78
3	0.009	3.82
4	0.009	6.55
5	0.008	9.87
6	0.008	13.89

Optimized for:

- AMD Instinct MI300X

ATS-AIC-2078



Cooling Capacity
up to **9 kW**

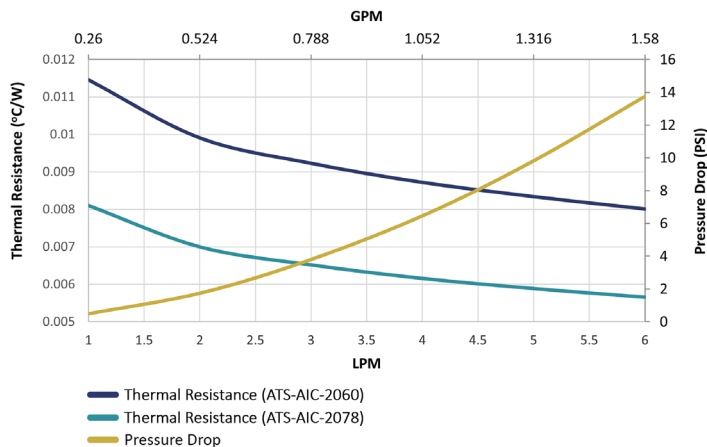
Dimensions (L x W x H): 100 x 120 x 29.1 mm
Cooling Area: 80 x 100 mm
Weight: 1,111 g
Material: Copper

Thermal Performance (Water as fluid)

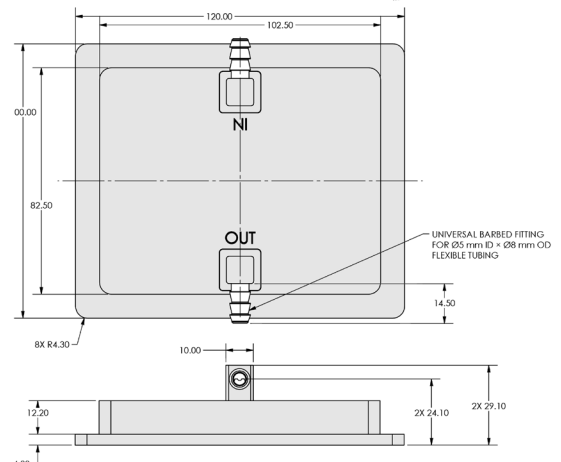
Flow Rate (LPM)	Thermal Resistance (°C/W)	Δ P (psi)
1	0.008	0.49
2	0.007	1.78
3	0.007	3.82
4	0.006	6.55
5	0.006	9.87
6	0.006	13.89

- Intel Data Center GPU Max 1550

Thermal Resistance and Pressure Drop



Mechanical Specifications



ArctiQ DLC Cold Plates

NEXA Series



ATS-AIC-2062



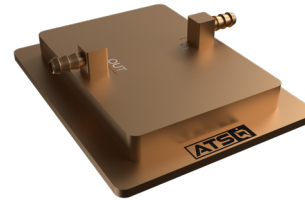
Cooling Capacity
up to **4.5 kW**

Dimensions (L x W x H): 95.5 x 95 x 29.1 mm
Cooling Area: 75.4 x 72 mm
Weight: 234 g
Material: Aluminum

Thermal Performance (Water as fluid)

Flow Rate (LPM)	Thermal Resistance (°C/W)	Δ P (psi)
1	0.016	0.51
2	0.014	1.89
3	0.013	4.10
4	0.012	7.05
5	0.012	10.78
6	0.011	15.40

ATS-AIC-2079



Cooling Capacity
up to **6.5 kW**

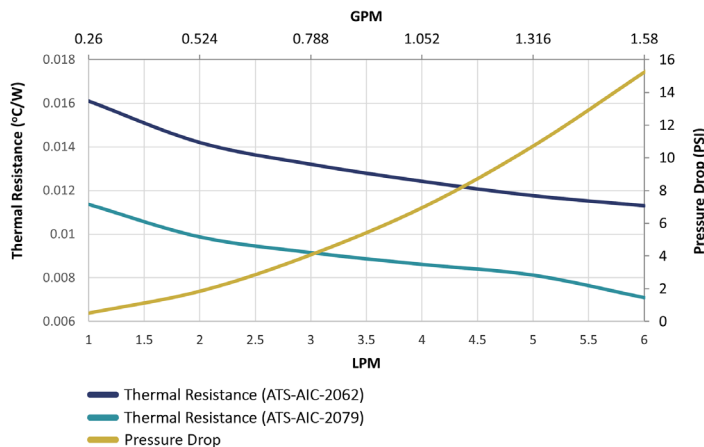
Dimensions (L x W x H): 95.5 x 95 x 29.1 mm
Cooling Area: 75.4 x 72 mm
Weight: 773 g
Material: Copper

Thermal Performance (Water as fluid)

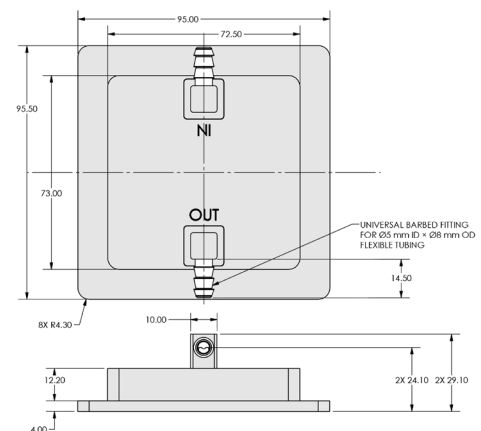
Flow Rate (LPM)	Thermal Resistance (°C/W)	Δ P (psi)
1	0.011	0.51
2	0.010	1.89
3	0.009	4.10
4	0.009	7.05
5	0.008	10.78
6	0.007	15.40

Optimized for: • AMD EPYC 9754 • AMD Ryzen Threadripper PRO 7995WX

Thermal Resistance and Pressure Drop



Mechanical Specifications



ArctiQ DLC Cold Plates

NEXA Series



ATS-AIC-2063



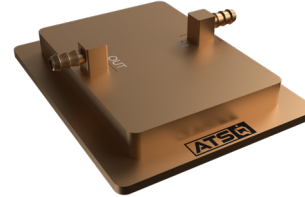
Cooling Capacity
up to **3.5 kW**

Dimensions (L x W x H): 76.6 x 99 x 29.1 mm
Cooling Area: 56.5 x 72 mm
Weight: 188 g
Material: Aluminum

Thermal Performance (Water as fluid)

Flow Rate (LPM)	Thermal Resistance (°C/W)	Δ P (psi)
1	0.022	0.51
2	0.019	1.81
3	0.018	4.01
4	0.016	7.00
5	0.015	10.30
6	0.015	14.90

ATS-AIC-2080



Cooling Capacity
up to **5 kW**

Dimensions (L x W x H): 95.5 x 95 x 29.1 mm
Cooling Area: 56.5 x 72 mm
Weight: 620 g
Material: Copper

Thermal Performance (Water as fluid)

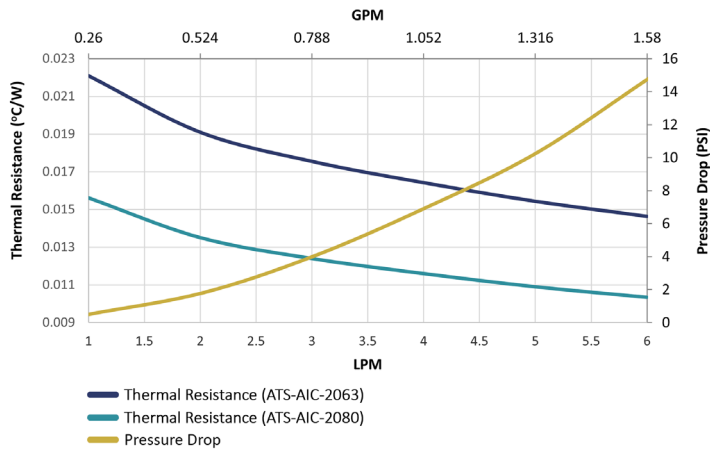
Flow Rate (LPM)	Thermal Resistance (°C/W)	Δ P (psi)
1	0.016	0.51
2	0.014	1.81
3	0.012	4.01
4	0.012	7.00
5	0.011	10.30
6	0.010	14.90

Optimized for:

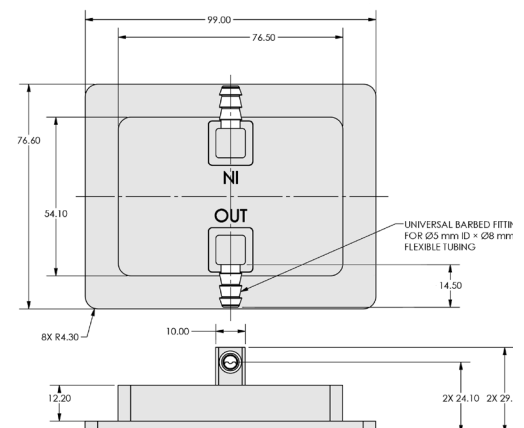
• Intel Xeon Platinum 8592+

• Intel Xeon Max 9480

Thermal Resistance and Pressure Drop



Mechanical Specifications

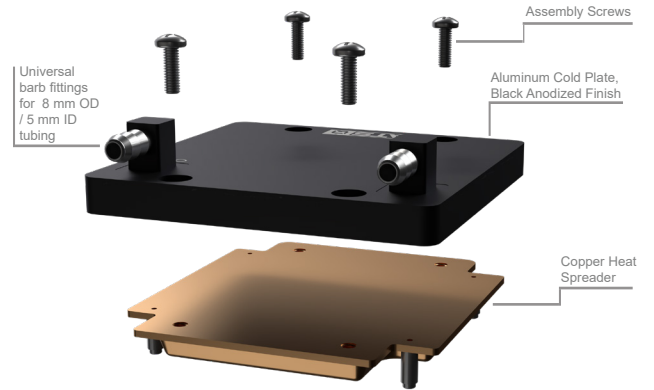


ArctiQ DLC Cold Plates

NEXA Series



ATS-AIC-2061



Cooling Capacity
up to **2 kW**

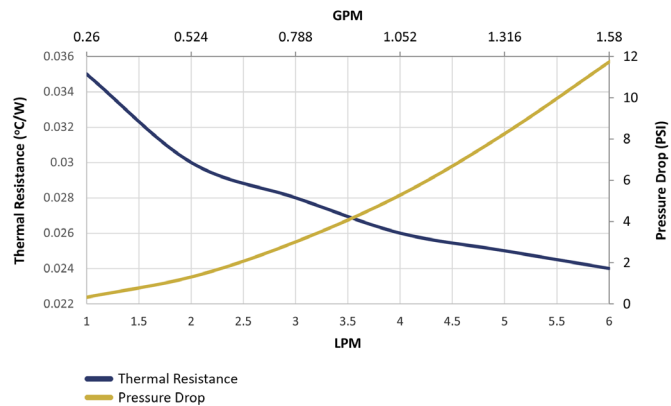
Dimensions (L x W x H): 99 x 99 x 36 mm

Weight: 770 g

Material: Aluminum Cold Plate & Copper Heat Spreader

Thermal Performance (Water as fluid)		
Flow Rate (LPM)	Thermal Resistance (°C/W)	ΔP (psi)
1	0.035	0.32
2	0.030	1.33
3	0.028	3.02
4	0.026	5.35
5	0.025	8.30
6	0.024	11.86

Thermal Resistance and Pressure Drop for ATS-AIC-2061



Optimized for:

- NVIDIA Blackwell GPU

Mechanical Specifications

