

### Alphacool Eiswolf 2 AIO - 360mm RTX 4080 Reference Design with Backplate

Alphacool article number: 14484



V. 1.006 // 04.2024



## Quick Info

The Alphacool Eiswolf 2 is the first full cover GPU AlO waterblock from Alphacool. It is based on the Alphacool GPX Eisblock Aurora GPX water block, a pump unit and a 360mm NexXxoS ST30 full copper radiator. The latter is equipped with the Alphacool Aurora Rise Digital RGB fans.

- Full copper radiator
- Virtually silent DC-LT 2 pump
- Chrome-plated copper cooler
- Digital aRGB illuminated cooler
- Digital aRGB 120mm fans

## Compatibility

Attention! For PNY GeForce RTX 4080 the rear part of the PCB is not covered. This has no negative effect on the cooling performance

- Inno3D GeForce RTX 4080 iCHILL X3, 16GB GDDR6X (C40803-166XX-187049H)
- Inno3D GeForce RTX 4080 X3 OC, 16GB GDDR6X
- Inno3D GeForce RTX 4080 X3, 16GB GDDR6X
- PNY GeForce RTX 4080 16GB Verto Triple Fan, 16GB GDDR6X (VCG408016TFXPB1)
- PNY GeForce RTX 4080 16GB XLR8 Gaming Verto Epic-X RGB Overclocked Triple Fan, 16GB GDDR6X (VCG408016TFXXPB1-0)
- PNY GeForce RTX 4080 16GB XLR8 Gaming Verto Epic-X RGB Triple Fan, 16GB GDDR6X (VCG408016TFXXPB1)
- Inno3D GeForce RTX 4080 SUPER iCHILL Black, 16GB GDDR6X (C408SB-166XX-18700006)
- Inno3D GeForce RTX 4080 SUPER iCHILL Frostbite, 16GB GDDR6X (C408S-166XX-1870FB)
- Inno3D GeForce RTX 4080 SUPER iCHILL X3, 16GB GDDR6X (C408S3-166XX-187049H)
- Inno3D GeForce RTX 4080 SUPER X3 OC, 16GB GDDR6X (N408S3-166XX-187049N)

### Scope of delivery

1x Eiswolf 2 (pump, cooler, backplate) 1x Radiator NexXxoS ST30 360mm 3x Fans Rise Aurora 120mm 1x Montage Set GPU Cooler 12x M3x6mm Screw

### Technical data radiator

Technical data cooler and nump

Dimensions (L x W x H)	395 x 124 x 30mm (+/- 3%)
Material cooling fins, chambers & channels	Copper
Material threads	Brass
Material outer housing	stainless steel
G 1/4" threads	2 x for tubes (+ 1x Fillport G1/4")
For fan size	120 mm
Options for fan assembly	3 x one-sided / 6 x both-sided

12x M3x30mm Screw

1x aRGB Adapter

1x Plug tool

1x PWM Cable Y-Adapter

Dimensions (L x W x H)	198,41 x 154,19 x 48,04mm
Material cooler bottom	Chrome plated copper
Material cooler top	acrylic
Threads	2 x G1/4"
Pump type	DC-LT 2
Pump speed	2600 rpm (+/- 10%)
Head of delivery	1 m
Maximum flow rate	72 L/h
Voltage	6-13.5V DC
Power consumption	3.2W
MTBF	50.000 h

# Technical data liquid

Color	clear
Ingredient 1	Destilled water (CAS-number 7732-18-5)
Ingredient 2	Glysantin (CAS-number 1017-21-1)
Working temperatures	-15 C° / +90 °C

Technical data quick fasteners	
Dimensions (L x D)	95 x 27mm
Material	Nylon
For tube size	12,7 / 7,6mm
Color	Black

# Technical data fittings

Dimensions (L x D) straight fitting	24 x 18mm
Quantity straight fittings	2x
Dimensions (L $\times$ B $\times$ H) 90° fitting	35 x 27 x 17mm
Dimensions (EX BX II) /o maing	
Quantity 90° fittings	2x
For tube size	12,7 / 7,6mm
	12,7 / 7,01111
Material fittings	Brass

## Technical data tube

Length	50cm
Material tube	TPV (EPDM/PP)
Color	Matt black
Tube size	12,7 / 7,6mm
Hardness grade	35 Shore-A to 50 Shore-D
Working temperature	-50 to +155 °C

## Technical data fan

Speed0 - 2500 RPMStatic pressure3,17 mm H2OAir flow rate19,8 m³/hBearingsSleeve bearingFan connector4-Pin PWMConnection Digital aRGB3-Pin JST + 3-Pin 5VDimensions (L x W x H)120 x 120 x 25mmNet weight187g		
Air flow rate119,8 m³/hBearingsSleeve bearingFan connector4-Pin PWMConnection Digital aRGB3-Pin JST + 3-Pin 5VDimensions (L x W x H)120 x 120 x 25mmNet weight187g	Speed	0 - 2500 RPM
BearingsSleeve bearingFan connector4-Pin PWMConnection Digital aRGB3-Pin JST + 3-Pin 5VDimensions (L x W x H)120 x 120 x 25mmNet weight187g	Static pressure	3,17 mm H20
Fan connector4-Pin PWMConnection Digital aRGB3-Pin JST + 3-Pin 5VDimensions (L x W x H)120 x 120 x 25mmNet weight187g	Air flow rate	119,8 m³/h
Connection Digital aRGB3-Pin JST + 3-Pin 5VDimensions (L x W x H)120 x 120 x 25mmNet weight187g	Bearings	Sleeve bearing
Dimensions (L x W x H) 120 x 120 x 25mm   Net weight 187g	Fan connector	4-Pin PWM
Net weight 187g	Connection Digital aRGB	3-Pin JST + 3-Pin 5V
	Dimensions (L x W x H)	120 x 120 x 25mm
	Net weight	187g
Max working temperature 60°C	Max working temperature	0°C

# Download links

Manuals	14484_Alphacool_Eiswolf_2_AIO360mm_RTX_4080_Reference_Design_with_Backplate_Manual(1).pdf 14484_Alphacool_Eiswolf_2_AIO360mm_RTX_4080_Reference_Design_with_Backplate_Manual(2).pdf
Safety data sheet	14484_Alphacool_Eiswolf_2_AIO360mm_RTX_4080_Reference_Design_with_Backplate_SDS.pdf
Product pictures	14484_Alphacool_Eiswolf_2_AIO360mm_RTX_4080_Reference_Design_with_Backplate_pics.zip

Packaging dimensions per unit	
LxWxH	475 x 380 x 155 mm
Weight	5000 g

# Other data

Certificates	CE, FC, RoHS
EAN	4250197144841
Customs code	84195080900

### Article text

The Alphacool Eiswolf 2 is the first full cover GPU AIO waterblock from Alphacool. It is based on the Alphacool GPX Eisblock Aurora GPX water block, a pump unit and a 360mm NexXxoS ST30 full copper radiator. The latter is equipped with the Alphacool Aurora Rise Digital RGB fans.

### Fullcover Waterblock?

The Eiswolf 2 graphics card AIO water block not only cools the GPU with liquid but also all relevant components that require active cooling. This includes the graphics memory, the VRM and, if necessary, other components that require direct cooling. By using the Eisblock GPX Aurora water cooler, the cooling capacity is identical to that of a DIY graphics card water cooler.

### Chrome-plated copper

The cooler is made entirely of chrome-plated copper. A chrome plating is much harder than a nickel plating and therefore less sensitive to acids, scratches and damage. It completely eliminates the risk of chipping nickel plating. Additionally, chrome plating looks much more homogeneous and provides a shine that cannot be achieved by nickel plating. Chrome-plated coolers have previously only been used in the industrial sector in areas where extreme influences act on the coolers.

### Pump

The Eiswolf 2 has a pump unit in place of the normal connection terminal. This pump unit houses the DC-LT 2 pump. An improved and quieter version of the well-known DC-LT Low Noise Ceramic Pump. Despite looking rather large, the pump unit is only 5 mm wider than a normal connection terminal.

### **Fittings and Tubing**

As with all new AIO units, Alphacool uses only TPV hoses from the Enterprise Solution range for (usually reserved for servers and workstations) in the Eiswolf 2. The tubing is made of EPDM/PP and are extremely heat-resistant, durable, and free of plasticizers. All fittings are also based on the Enterprise Solution range and match the TPV hoses perfectly.

### Expandability

By using the quick-release fastener, the Eiswolf 2 can be connected to another Alphacool AIO unit to achieve a larger loop in seconds. Alphacool offers various prefilled components with which the loop can be easily extended. For safety reasons, the quick-release fasteners are firmly screwed together and not just plugged together.

### Lighting and fans

The Eiswolf 2 cooler has a digital RGB LED lighting, also called addressable RGB LEDs. They run along the entire back of the graphics card cooler and provide complete illumination of the water cooler. The pump unit is more discreet and offers a green glowing logo for Nvidia and a red glowing logo for AMD cards. The name "Eiswolf" on the pump unit remains unlit, discreetly in the background. The fan used is the Aurora Rise with 120mm. Due to the special blade design, the fan is extremely quiet and the addressable RGB LEDs provide brilliant illumination. The Alphacool Aurora Rise fan convinces with a max. static pressure of 3.17mm/H20 and offers a max. air flow of 119.8m3/h. The PWM control allows the fan to be controlled over a wide speed range. In addition, it offers a zero control. It can therefore be regulated down to 0 rpm and then starts with approx. 350 rpm.

### NexXxoS Radiator

As with all AIO units, Alphacool uses radiators from the world renowned NexXxoS series. The full copper radiators offer a much higher cooling capacity than aluminium radiators and have contributed significantly to Alphacool's worldwide success.

The combination of all of the components results in a solution that is as simple as an AIO solution to install, but with the performance of a preassembled and prefilled custom loop.

### Technical note!

Due to long storage times and various transport routes, the liquid in the Eiswolf 2 AIO remains still for a long time. The ingredients of the liquid can therefore deposit and lead to a brownish discoloration. As soon as the pump starts operating, the ingredients mix again and the liquid should regain an approximately clear color. This is not a reason for complaint as neither the performance nor the function of the AIO are restricted by this. If the discolouration of the cooling liquid does not disappear after the AIO has been put into operation, please contact our support team via E-Mail (info@alphacool.com). You will receive quick and uncomplicated help there.



