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Alphacool Eiswolf 2 AIO - 360mm RTX 4090 Reference Design with Backplate

Alphacool article number: 14482

Quick Info

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.

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

We assume no responsibility for any typing errors. Alphacool International GmbH, Marienberger Strasse 1, 38122 Braunschweig Tel: (+49)0531 288 7400 Supportmail: info@alphacool.com

Compatibility

Attention! For PNY GeForce RTX 4090 the rear part of the PCB is not covered. This has no negative effect on the cooling performance

Attention: Unfortunately Inno3D is using two different PCB Layouts. Please check your serial number. If it looks like following, it is not compatible with our water blocks: 32-879-xxxx8xxxx

- Inno3D GeForce RTX 4090 iCHILL Black, 24GB GDDR6X (C4090-246XX-18330005)
- Inno3D GeForce RTX 4090 iCHILL Frostbite, 24GB GDDR6X (C4090-246XX-1833FB)
- Inno3D GeForce RTX 4090 iCHILL X3, 24GB GDDR6X (C40903-246XX-1833VA47)
- Inno3D GeForce RTX 4090 X3 OC, 24GB GDDR6X (N40903-246XX-18332989)
- PNY GeForce RTX 4090 XLR8 Gaming Verto Epic-X RGB Overclocked Triple Fan, 24GB GDDR6X (VCG409024TFXXPB1-O)
- PNY GeForce RTX 4090 XLR8 Gaming Verto Epic-X RGB Triple Fan, 24GB GDDR6X (VCG409024TFXXPB1)

Scope of delivery

1x Alphacool Eiswolf 2	1x M2x5 screws
1x Radiator	1x PCI Bracket
3x Fans	1x 3-Pin JST to 3-Pin 5V adaptor
1x Backplate	1x Y-Adaptor 4-Pin PWM
5x EVA washers	1x Plug tool
5x M2x5 washers	12x M3x30 screws
1x Thermal Grease	12x M3x5 screws
5x M2x11 screws	1x Allen key

Technical data radiator

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

Technical data cooler and pump

Dimensions (L x W x H)	198,5 x 154 x 40,5mm
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

L x D straight fitting	24 x 18mm
Quantity straight fittings	2x
L x B x H 90° fitting	35 x 27 x 17mm
Quantity 90° fittings	2x
For tube size	12,7 / 7,6mm
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

Speed	0 - 2500 RPM
Static pressure	3,17 mm H2O
Air flow rate	119,8 m^3/h
Bearings	Sleeve bearing
Fan connector	4-Pin PWM
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

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Manuals	14482_Alphacool_Eiswolf_2_AIO_-_360mm_RTX_4090_Reference_Design_with_Backplate_Manual(1).pdf 14482_Alphacool_Eiswolf_2_AIO_-_360mm_RTX_4090_Reference_Design_with_Backplate_Manual(2).pdf
Safety data sheet	14482_Alphacool_Eiswolf_2_AIO_-_360mm_RTX_4090_Reference_Design_with_Backplate_SDS.pdf
Product pictures	14482_Alphacool_Eiswolf_2_AIO_-_360mm_RTX_4090_Reference_Design_with_Backplate_pics.zip
EU-DoC / CE / RoHS	Alphacool_EuDoc_CE_RoHS_14482.pdf

Packaging dimensions per unit

L x W x H	475 x 380 x 155 mm
Weight	5100 g

Other data

Certificates	CE, FC, RoHS
EAN	4250197144827
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.

Important note: The RTX 4090 Eiswolf 2 Reference AiO is not compatible with Nvidia's Geforce RTX 4090 Founders Edition.

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/H2O 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

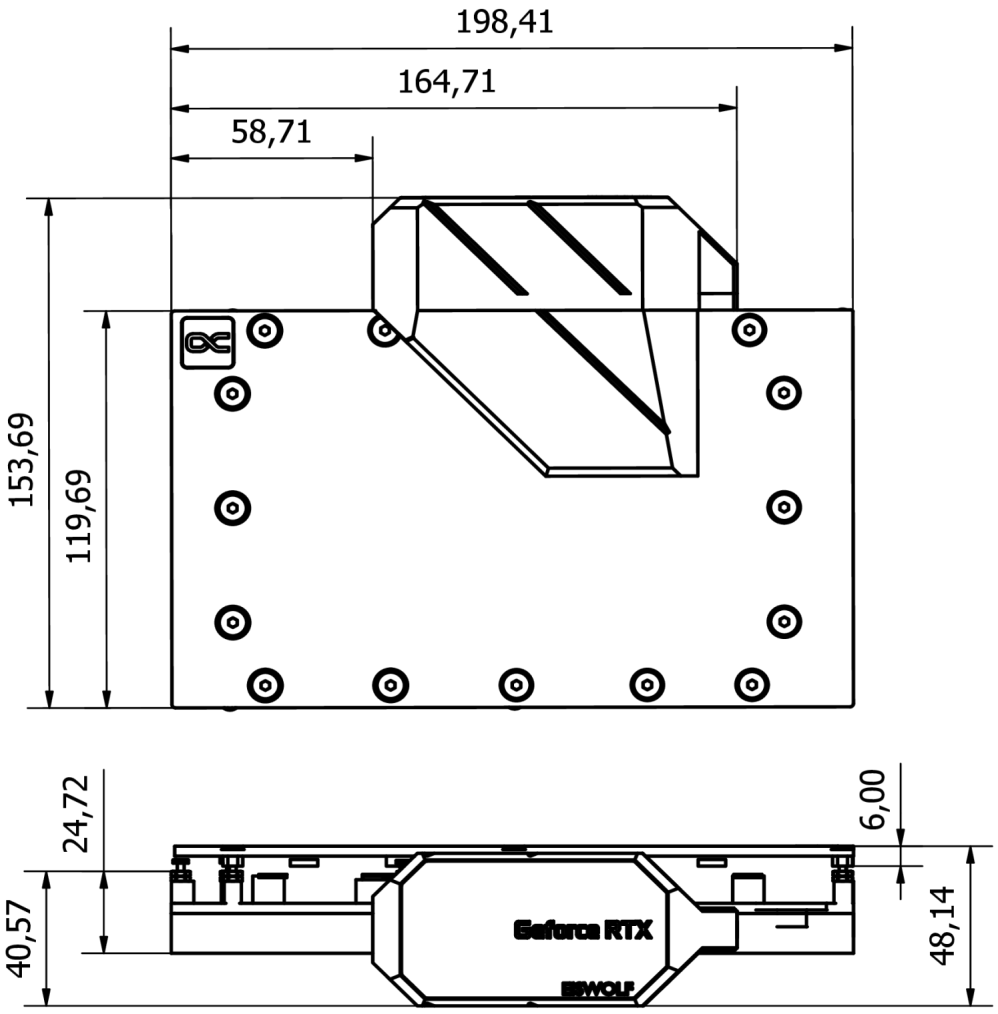
As with all AIO units, Alphacool uses radiators from the world renowned NexXxoS series. The full copper radiators offer a much higher cooling capacity than aluminium radiators and have contributed significantly to Alphacool's worldwide success.

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 pre-assembled 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.

Figure


198,41
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Geforce RTX
BYWOLF