ALPHACOOL – THE COOLING COMPANY

Alphacool Eisbaer Aurora 280 CPU - Digital RGB

What is it?

A CPU water cooling system that consists entirely of Alphacool's DIY products and is therefore expandable, refillable and modifiable. The Alphacool Eisbaer Aurora CPU water cooling system is equipped with digital addressable RGB LEDs on the fans as well as on the reservior - pump combination. These can be controlled with the supplied digital RGB controller, own digital RGB controllers or via compatible mainboards.

Highlights

- Digital addressable RGB LEDs incl. Controller
- Pump with 10% more power and less noise (compared to the previous model)
- New TPV hoses and fittings from the Alphacool Enterprise Solution series

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We assume no responsibility for any typing errors.

Alphacool International GmbH, Marienberger Strasse 1, 38122 Braunschweig Tel: (+49)0531 288 740 Supportmail: info@alphacool.com

Scope of delivery	
8 pcs. M3x5 8 pcs. M3x30 1 pcs. Thermal paste 4 pcs. Springs 4 pcs. 0,5 mm Waschers 4 pcs. Nuts 1 pcs. Y-Adapter 4-Pin PWM 1 pcs. Digital–RGB Controller 1 pcs. Digital–RGB Adapter	**AMD** 1 pcs. Set Bracket 4 pcs. AMD Screws 4 pcs. 2,0 mm Waschers 1 pcs. TR4 Assembly Set **INTEL** 1 pcs. Set Bracket 4 pcs. 1150 Screws 4 pcs. 2011 Screws 1 pcs. Backplate

Technical data radiator	
LxWxH:	279 x 124 x 30 mm
Material:	Full copper
Threads:	2x G1/4”
Technical data pump housing:	
LxWxH:	66 x 66 x 69 mm
Material reservoir:	Transparent Nylon
Threads:	2x G1/4”
Connection Digital aRGB	3-Pin JST + 3-Pin 5V
Technical data pump:	
Speed:	2800 RPM
Voltage:	7-13.5V DC
Power consumption:	4 Watt
Maximum flow rate:	75L/h
Maximum head:	0.95m
Technical data fans:	
Speed:	600 - 1500 RPM
Static pressure:	0,41 - 1,6 mm H2O
Air flow rate:	27 - 71 m³/h
Bearings:	Hydraulic
Fan connector:	4-Pin PWM
Connection Digital aRGB	3-Pin JST + 3-Pin 5V

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Other technical data	
Net weight	2467 g
Max working temperature	60 °C
Pressure tested	2 bar
Certificates	CE, FC, ROHS
Compatibility Intel	775 / 1056 / 1155 / 1150 / 1151 / 2011 / 2011-3 / 2066
Compatibility AMD	AM2 / AM2+ / AM3 / AM3+ / FM1 / FM2 / FM2+ / AM4

Product pics download	http://alphacool.com/download/1016663_Eisbaer_Aurora_280mm_pics.zip

Manual PDF	http://www.alphacool.com/download/Eisbaer-Aurora_Manual.pdf

Other data	
Article number Alphacool	11729
EAN Code	4250197117296
PU Box	1
Dimensions PU B x T x H	36,5 x 25,5 x 16 cm
Weight	3,77 kg
Customs code	84195080900

Article text

The Alphacool Eisbaer Aurora AIO CPU water cooler is a latest development of the popular and well-known Eisbaer cooler. Alphacool has improved many features but the ability to expand the cooler via the quick release fasteners and the famous high-quality copper radiators have been retained. The large capacity reservoir and the ability to refill the cooler has also been kept the same.

The Heart of the AiO

The pump, CPU cooler and reservoir combo is the heart of the Eisbaer Aurora. The cooler base is made of high-quality copper and has a fine slotted structure. The surface area has been further expanded compared to the previous model to completely cover the larger DIE areas of AMD and Intel processors. The DC-LT pump has also been redesigned and is now almost 10% more powerful at a reduced noise level. The reservoir is many times larger compared to standard AIO systems ensuring a longer service life. In addition, the unit also has a fill port which can be used to refill if necessary. This is especially important if you want to extend the loop via the quick release fasteners.

Custom Cooling Components!

A great advantage of the Eisbaer Aurora series is the expandability via the aptly named 'Eisbaer-Ready' quick release fasteners. These have also been redesigned and are now smoother and more unobtrusive than those of the previous model. Nevertheless, these quick-release fasteners are 100% compatible with all Eisbaer Ready products such as prefilled radiators, the Eiswolf AIO water cooler for graphics cards and the well-known Alphacool HF quick-release fasteners, which are available separately for normal DIY water cooling systems. The fittings are from the Enterprise Solution series from Alphacool. They have a standard G1/4" thread and can be exchanged for any other fittings if you wish. The TPV hose is extremely resistant and is also used in the Enterprise Solution series for servers and workstations. Using custom cooling parts for an AiO means you get many more options than usual.

Copper Radiator

As usual with Alphacool, the radiators are made of copper. Alphacool is the first manufacturer worldwide to use copper for all water-carrying components such as the end chambers, the cooling fins and the cooling channels to which the fins are soldered. Only the thread inserts are made of brass as copper is too soft for this application. The cooling fins are also only lightly painted. If you look closely, the copper even shimmers through. The reason for this is to ensure that the paint does not affect the cooling capacity, which would be reduced by too thick a coating. The fin density is at an optimal 15FPI, allowing the radiator to work perfectly at low airflow. A too high density would require faster, louder fans. Alphacool has chosen the golden number here as you can keep fans running slower and quieter whilst still getting fantastic performance.

Fans and Lighting

The entire Eisbaer Aurora cooler has been equipped with addressable digital RGB LEDs. The pump housing has an Eisbaer pattern all around which is fully illuminated. This gives a unique look when installed into a case. The Alphacool Aurora LUX Pro fans are also fully illuminated with 5V aRGB LEDs. The fan frame has a unique pattern with many small cut-outs that create a particularly elegant effect. You do not see individual LEDs and the lighting is much more interesting than a simple LED ring. Of course, all Digital RGB LEDs can be controlled as you like, such as via the motherboard or with a third-party controller. Depending on the controller almost all effects are possible.

How to Connect Everything

The fans are controlled via a 4-pin PWM connector. To reduce the number of headers needed on the motherboard, Y-cable is included so that 2 or 3 fans can be ran from a single header. The RGB lighting is connected via a 3-pin JST connector. Each cable also has an integrated Y-adapter, so that the fans can be daisy chained very easily. A 3-pin 5V adapter is included in the package. This allows you to connect and control the fans to any mainboard with the appropriate connector. Alternatively, the included Digital RGB Controller can be used. The pump of the Eisbaer Aurora uses a 3-pin Molex connector. This can also be connected to the mainboard.

The Eisbaer Aurora CPU AIO water cooling is a worthy successor of the well-known Eisbaer series and improves many details of the water cooling.

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