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Alphacool Eisbaer Pro HPE Aurora 360 CPU AIO

Alphacool article number: 13074

Quick Info

The Eisbaer Pro HPE Aurora 360 CPU AIO water cooling features the extremely powerful NexXxos HPE Performance all-copper radiator equipped with the high-throughput Aurora Rise 120mm fans. All of the components used come from the classic DIY water cooling range and are also used for the most part in the enterprise products for servers. The Eisbaer LT Aurora can be expanded with additional components thanks to the quick-release fastener. Alphacool's Eisbaer Pro HPE Aurora 360 CPU AIO is a high performance all-in-one water cooling system that is as easy to install as an AIO, but offers the performance of a pre-assembled and pre-filled custom loop.

- Full copper HPE Radiator
- Digital aRGB lighting on cooler & fans
- Expandable thanks to quick release coupling

Compatibility

AMD: AM4 / AM5 / SP3 / SP6 / sTR5 / sWRX8 / TR4

Intel: LGA 1700 / LGA 1851 / LGA 2011 / LGA 2011-3 / LGA 2066 / LGA 3647 / LGA 4189 (optional) / LGA 4677 (optional) / LGA 4710 (optional)

Scope of delivery

1x Eisbaer Pro HPE Aurora 360 CPU AIO (radiator, fan & cooler)
1x Mounting set AMD
1x Mounting set Intel
1x Thermal compound (Subzero 16 W/mK)
12x M3x5 case mounting screws
12x M3x30 fan screws
1x Y-adaptor 4-Pin PWM
1x Digital RGB controller
1x 3-Pin JST to 3-Pin 5V adaptor
1x Plug tool
1x Allen key

Technical data radiator

L x W x H	391,5 x 124 x 30mm (+/- 3%)
Material cooling fins, pre-chambers & channels	copper
Material threads	brass
Material outer housing	stainless steel
Threads	2x G1/4"
Possible fan size	120mm
Possible fan assembly	3x one-sided / 6x both-sided
Pressure tested	0,8 Bar
Maximum working temperature	60°C
Fin density	18 FPI

Technical data cooler with pump

L x W x H	64 x 79 x 54,3mm
Material cooler bottom	nickel plated copper
Material cooler top & reservoir	nylon, acrylic
Threads	2x G1/4“ (+ 1x Fillport G1/4“)
Pump type	DC-LT2
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
Pressure tested	0,8 Bar
Maximum working temperature	60°C

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Technical data fans

L x W x H	120 x 120 x 25mm
Speed	0-2500 rpm (+/- 10%)
Bearing	Sleeve Bearing
Connection	4-Pin PWM
Cable length	40cm
Voltage	12V DC
Current consumption	0,65A (0,72 max)
Static pressure	3,17 mm/H_2O
Max. air flow	118,9 m^3/h
Noise	max. 31,5 dB(A)
Number of digital aRGB LEDs	20

Technical data liquid

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

Technical data quick-release coupling

Dimensions	95 x 27mm
Material	Nylon
Tube size	12,7/7,6mm
Color	black

Technical data connectors

Dimensions (connection straight)	24 x 18mm
Quantity (connection straight)	4x
Dimensions (connection 90°)	35 x 27 x 17mm
Tube size	12,7/7,6mm
Material	brass

Technical data tube

Length	40cm
Material	TPV (EPDM/PP)
Tube size	12,7/7,6mm
Hardness grade	35 Shore-A to 50 Shore-D
Maximum working temperature	-50 to +155°C
Color	black

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Manual	13074_Alphacool_Eisbaer_Pro_HPE_Aurora_360_CPU_AIO_Manual.pdf
Safety data sheet	13074_Alphacool_Eisbaer_Pro_HPE_Aurora_360_CPU_AIO_SDS.pdf
Product pictures	13074_Alphacool_Eisbaer_Pro_HPE_Aurora_360_CPU_AIO_pics.zip
EU-DoC / CE / RoHS	Alphacool_EuDoc_CE_RoHS_13074.pdf

Packaging dimensions per unit

L x W x H	435 x 255 x 140 mm
Weight	3520 g

Other data

Certificates	CE, FC, ROHS
EAN	4250197130745
Customs code	84195080900
Guarantee	3 years

Article text

The Eisbaer Pro HPE Aurora 360 CPU AIO water cooling features the extremely powerful NexXxos HPE Performance all-copper radiator equipped with the high-throughput Aurora Rise 120mm fans. All of the components used come from the classic DIY water cooling range and are also used for the most part in the enterprise products for servers. The Eisbaer LT Aurora can be expanded with additional components thanks to the quick-release fastener. Alphacool's Eisbaer Pro HPE Aurora 360 CPU AIO is a high performance all-in-one water cooling system that is as easy to install as an AIO, but offers the performance of a pre-assembled and pre-filled custom loop.

New HPE Radiator!

The NexXxos ST30 HPE Radiator uses the same materials as previous NexXxos models, but takes it a step further technically. Due to the condensed internal structure, the number of water channels and copper fins could be increased. Thus, a larger volume of water is in direct contact with the cooling fins and the heat transfer is enormously improved. The higher number of fin rows and their shortening also makes much more efficient use of the cooling surface. Comparison tests with the conventional NexXxos radiator have shown that a performance increase of 4.5K is possible when using the HPE radiator. At higher ambient temperatures and higher fan speeds, the performance gap with the normal NexXxoS radiators even increases progressively, reaching a possible performance increase of up to 6K.

Cooler & Pump

The cold plate bottom covers the entire surface of the respective processors. The area of the cooling fins exceeds all known processor cores with an area of around 55 x 42mm. This ensures that all hotspots of a CPU are directly covered and thus optimally cooled. The cooling fins are 0.4mm thick and also have an optimal distance of 0.4mm between them. In total there are 58 cooling fins on the bottom of the cooler. The bottom of the cooler is only 3mm thick, which allows the heat to reach the water and be dissipated as quickly as possible. The Eisbaer Pro Aurora cooler uses the very compact and small DC-LT 2 pump. It offers enough power to integrate other components such as a GPU water cooler or radiator into the water circuit.

Fan

The Alphacool Rise Aurora fan offers a wide control range as well as superior Digital aRGB LED lighting. The individually controllable 5V aRGB LEDs paired with the fan's special design create unique effects. The fan can be controlled from 0 to 2500 rpm via the 4-pin PWM connector. Additionally, it offers a Zero control, which allows the fan to be regulated down to 0 RPM and then starts at approximately 350 RPM. At 800 rpm, the fan is nearly silent, but still offers good airflow (118.9 m^3/h) paired with high static pressure (3.17mm/H2O).

DIY connections and ES hoses

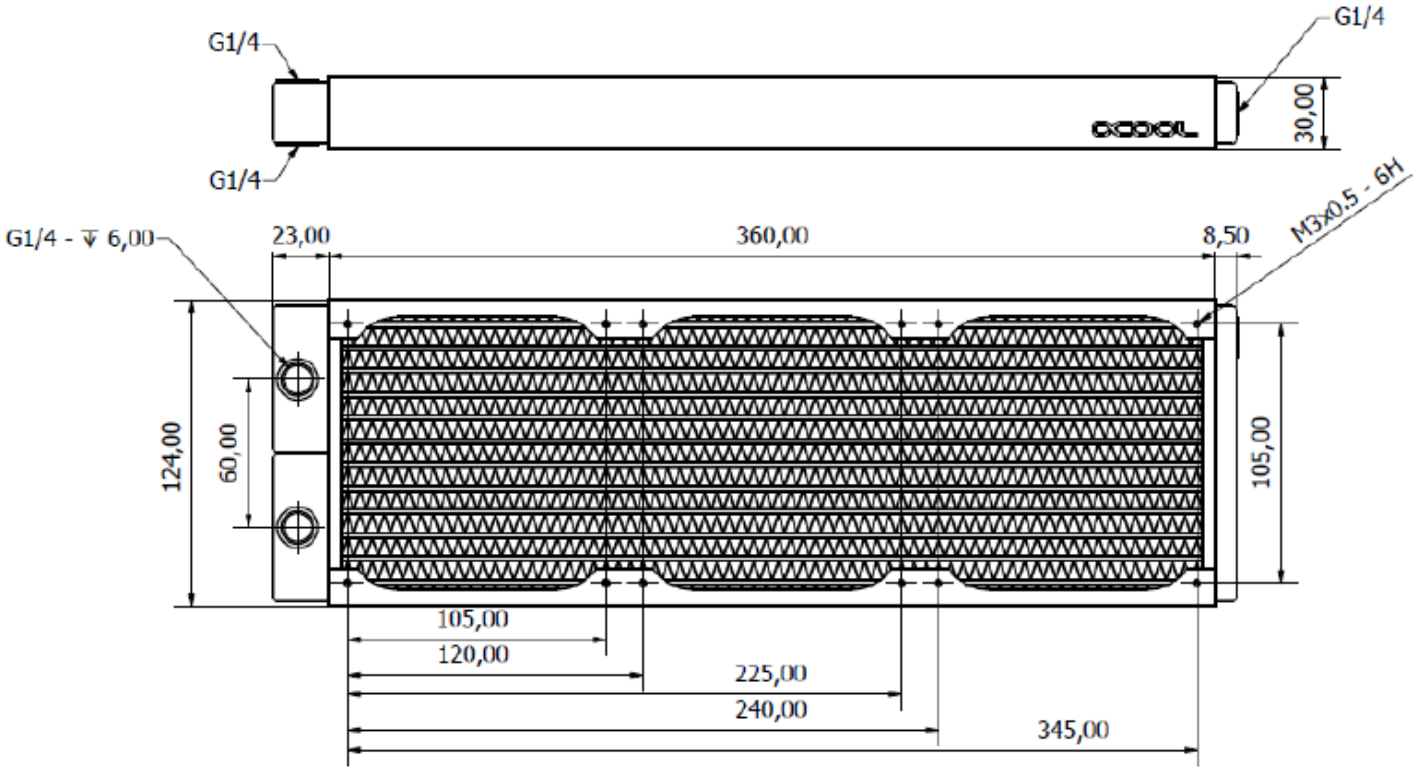
The hose connections are from the normal DIY segment and therefore use a G1/4" thread. Thus, it is very easy to replace them. The black TPV hose comes, like the connectors, from the Alphacool ES series which is primarily installed in servers and workstations. The hose does not contain any plasticizers and, unlike classic PVC hoses, does not deform at high temperatures. The quick connector is not made of heavy brass, but of extremely light, durable and robust nylon. The quick disconnect is compatible with many other models in the Alphacool product line.

Full Digital aRGB Illumination

The cooler pump assembly and fans are fully equipped with Digital RGB LEDs, also known as addressable RGB or aRGB. Extensive effects can be set with the included controller or a Digital RGB controller on the motherboard. For easier control via a controller, the fans and also the pump can be connected in series as a daisy chain. This enables a neat wiring of the individual LED components.

With the Alphacool LGA 4677 Mounting Bracket (article no.: 13764), this cooler is also compatible with the Intel socket LGA 4677.

Figure (1)


G1/4
G1/4
G1/4
30,00
G1/4 - ⌀ 6,00
23,00
360,00
8,50
M3x0.5 - 6H
124,00
60,00
105,00
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225,00
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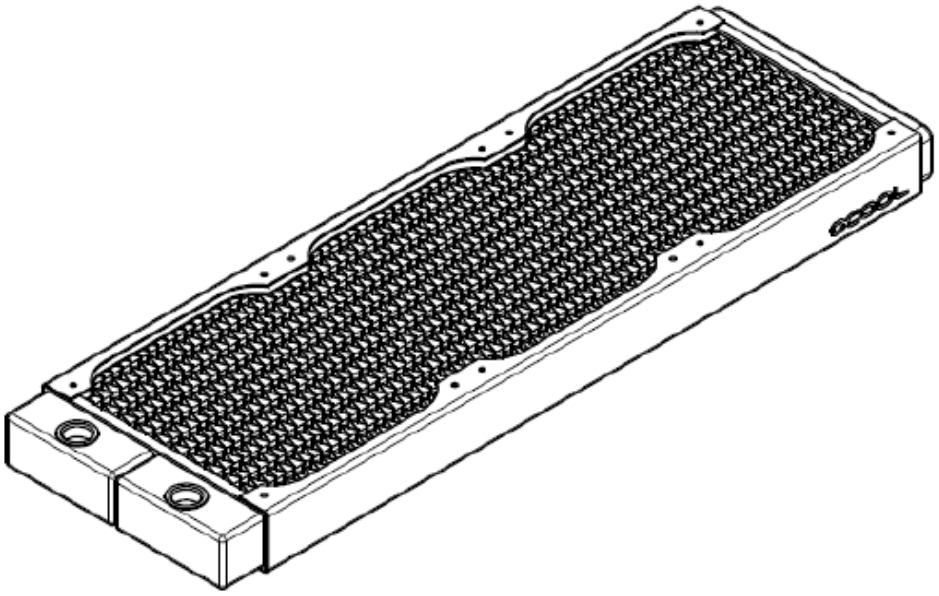
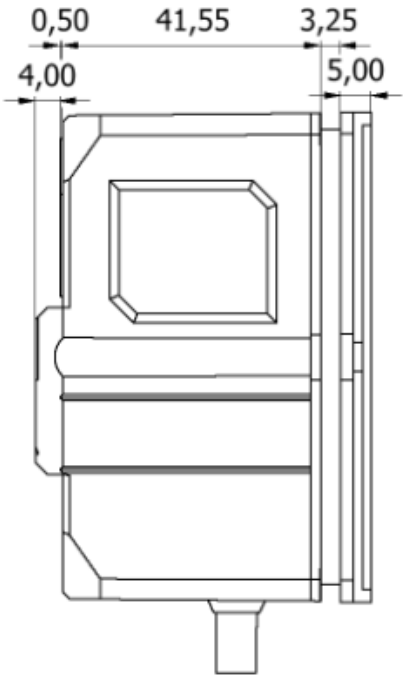
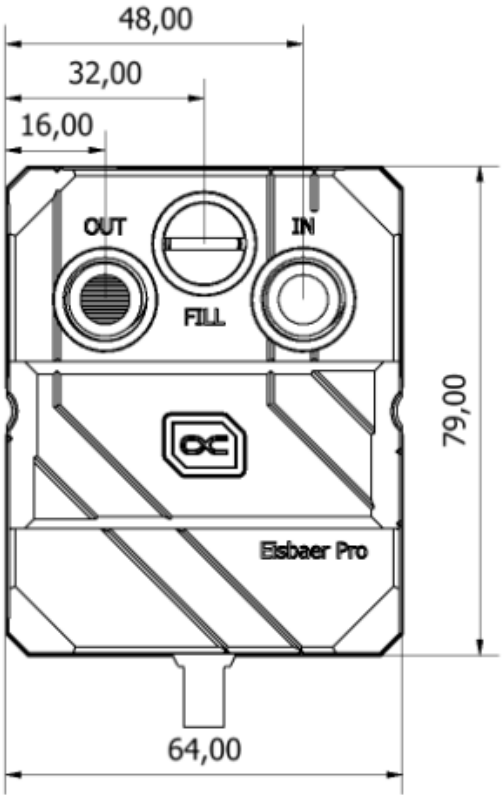
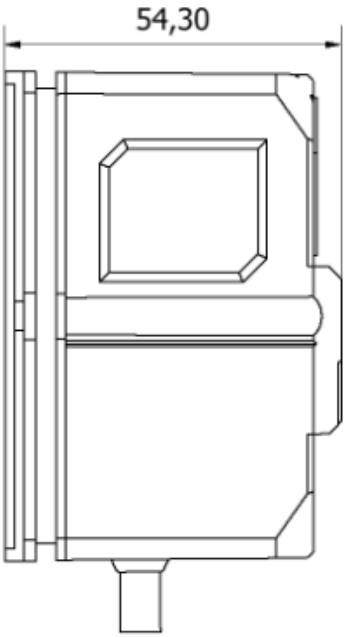


Figure (2)







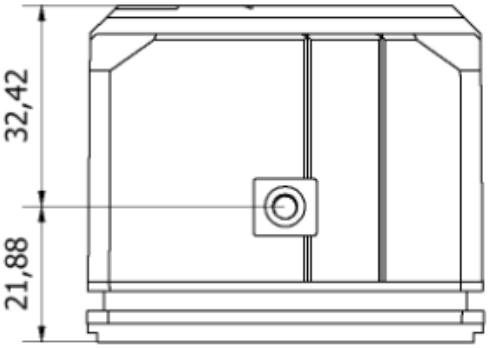


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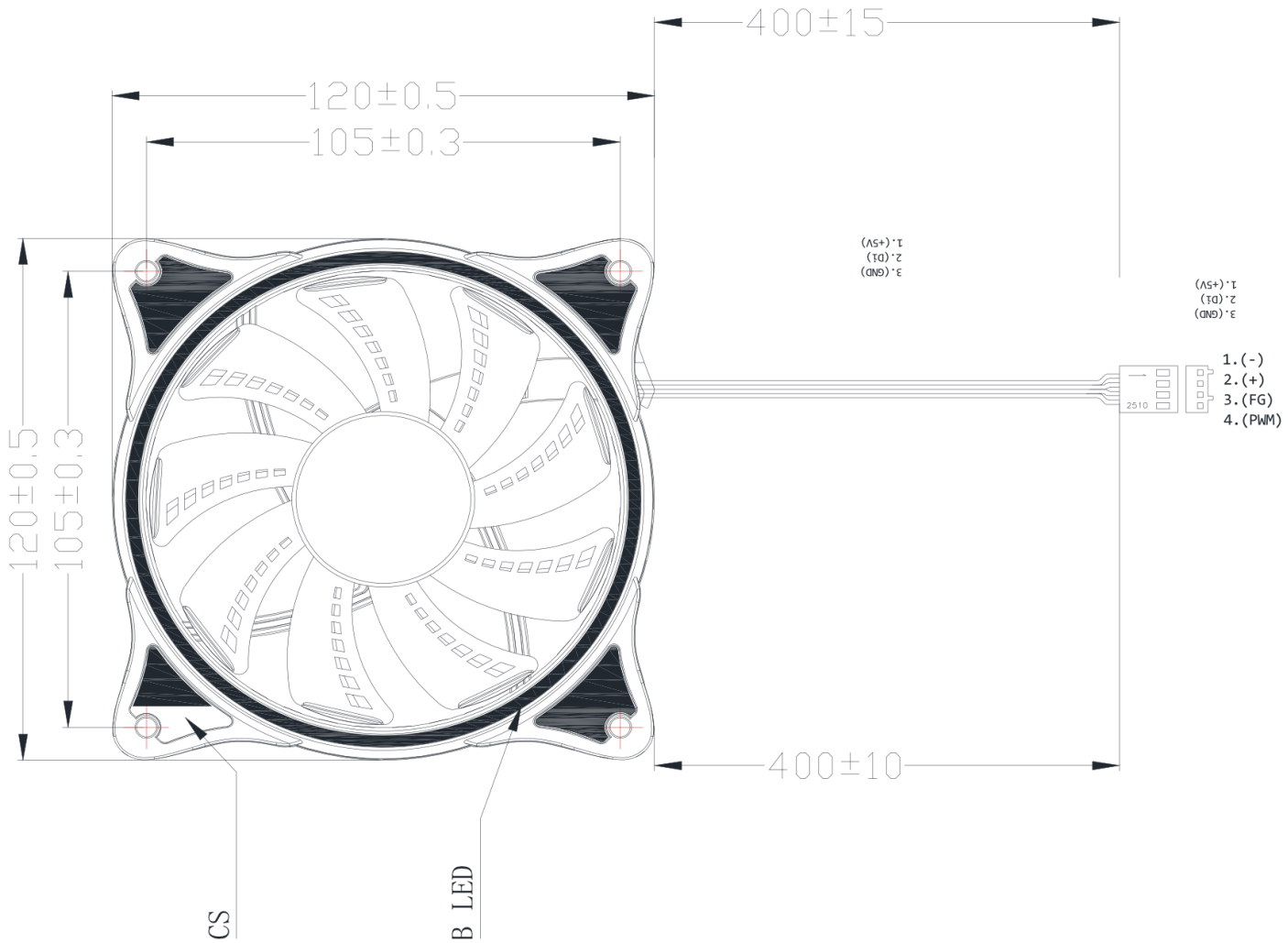
Figure (3)


400±15
120±0.5
105±0.3
120±0.5
105±0.3
400±10
CS
B LED
1.(+5V)
2.(DI)
3.(GND)
1.(+5V)
2.(DI)
3.(GND)
2510
1.(-)
2.(+)
3.(FG)
4.(PWM)