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Alphacool Core Ocean T38 AIO 420mm

Alphacool article number: 13054

Quick Info

With the Core Ocean AiO, Alphacool presents an all-in-one solution that, thanks to its excellent price-performance ratio, enables entry into performance-oriented CPU water cooling. The choice of components and the design of the Core Ocean enable a long service life with low maintenance for water cooling of all common mainstream sockets from AMD and Intel.

- Compatible with all mainstream sockets from AMD and Intel
- High performance, low maintenance, durable
- Brilliant digital aRGB LED illumination

Compatibility

AMD: AM4 / AM5
Intel: LGA 1150 / LGA 1200 / LGA 1700 / LGA 1851 / LGA 2066

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Scope of delivery

1x Alphacool Core Ocean T38 AIO 420mm
2x LGA 2066, LGA 115x, 1200, 1700 Bracket
2x AM4 / AM5 Bracket
1x Backplate
1x Thermal paste
4x Springs
4x AM4 / AM5 Screws
4x LGA 115x, LGA 1200, 1700 Screws
4x LGA 2066 Screws
4x 2mm Washers
4x 0,5mm Washers
12x UNC6-32x6 Screws
12x UNC6-32x30 Screws
3x 140x140x25mm Fan

Technical data radiator

L x W x H	460 x 140 x 38mm
Material cooling fins, channels & prechamber	3003 Aluminium
Material outer housing & threads	3003 Aluminium
Fins per Inch	20
Fan size	140mm
Fan slots	3 one-sided / 6 double-sided
Color	black

Technical data fans

L x W x H	140 x 140 x 25mm
Bearing Type	hydraulic Bearing
Rated Voltage	DC 12V
Operating Voltage	DC 7-14V
Start-up Voltage	7V
Rated Current	0.26 (Max. 0.3) A
Rated Power	3.12 (Max. 3.6) W
Rated Speed	0 - 2000rpm/min (±10%)
Max. Air Flow	92.3CFM
Max.Static Pressure	2.53mm-H2O
Noise level (rated voltage, mute room, distance 1m)	34.3 (Max. 36) dBA
MTBF	50000hrs at 25°C
Speed Control Mode	PWM
Connection & control	4-pin PWM (cable 40cm)
Auto-Restart	yes
Tachometer Output	yes
Color	black

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Technical data cooler & pump

L x W x H	70,2 x 70,2 x 46mm
Material cooler bottom	copper
Material pump housing	Synthetic material (ABS+PC)
Fin structure cooler bottom	0,1 x 0,1mm
Material pump bearing & shaft	ceramics
Starting voltage	> DC 6V
Rated power	7.1W
Noise level	35Db
Rated Current	0.59A (±10% MAX)
Speed	2500~3500 (±10% RPM)
Power supply Digital aRGB	3-pin 5V (male & female, cable length 30cm)
Number of aRGB LEDs	12
Power supply pump	4-Pin JST (Kabellänge 30cm)

Technical data tubes

Material	FEP, black with weave cover
Length	400mm

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Manual	13054_Alphacool_Core_Ocean_T38_AIO_420mm_Manual.pdf
Safety data sheet	13054_Alphacool_Core_Ocean_T38_AIO_420mm_SDS.pdf
Product pictures	13054_Alphacool_Core_Ocean_T38_AIO_420mm_pics.zip
EU-DoC / CE / RoHS	Alphacool_EuDoc_CE_RoHS_13054.pdf

Packaging dimensions per unit

L x W x H	525 x 225 x 165 mm
Weight	2960 g

Other data

Certificates	CE, FC, RoHS
EAN	4250197130547
Customs code	84195080900
Guarantee	3 years

Article text

With the Core Ocean AiO, Alphacool presents an all-in-one solution that, thanks to its excellent price-performance ratio, enables entry into performance-oriented CPU water cooling. The difference to the Eisbaer CPU AiO is that the Ocean All-in-One is not expandable. Adding further components such as GPU coolers, radiators or expansion tanks is not intended here. But also not necessary! The choice of components and the design of the Core Ocean enable a long service life with low maintenance for water cooling of all common mainstream sockets from AMD and Intel.

Aluminium Radiator

Compared to Alphacool's full copper models, the T38 aluminium radiator has additional cooling channels. This technical design allows a significant increase in cooling capacity without restricting the water flow within the radiator. Due to the low height of 38mm, the radiator with single-sided fan assembly fits into the tightest case and enables high-performance water cooling of the CPU.

Core fan

The fan can be regulated from 0 to 2000 rpm via the 4-pin PWM connection. The cable is 40cm long. This allows the fan to be connected to the mainboard or a special controller without the need for additional adapter cables or extensions. At 2000 rpm, it provides an air flow of 92.3 CFM, together with a high static pressure of 2.53mm/H2O. This makes the fan perfect for mounting on radiators of a water cooling system.

Cooler & Pump

As with all Alphacool products, the radiator base is made of copper and is equipped with very fine cooling fins distributed over the entire base. A nozzle plate ensures an accelerated flow over the cooling fins, which increases the cooling performance. The water flow is optimised so that all areas of the cooler base are cooled evenly. The cooler is compatible with all common mainstream sockets from AMD and Intel. The built-in pump has a speed range of 2500 - 3500 RPM (+/- 10%) and can be controlled via PWM. The pump is connected to the mainboard or to an external controller via the existing 4-pin fan connector. This allows the speed range of the pump to be controlled and monitored.

Hoses & Connections

The FEP hoses are 40cm long, sleeved and very flexible. The rotatable 360° connections to the cooler and to the radiator are permanently installed and cannot be replaced. However, the combination of hoses and connectors allows a very variable positioning of the AiO even in the tightest PC case.

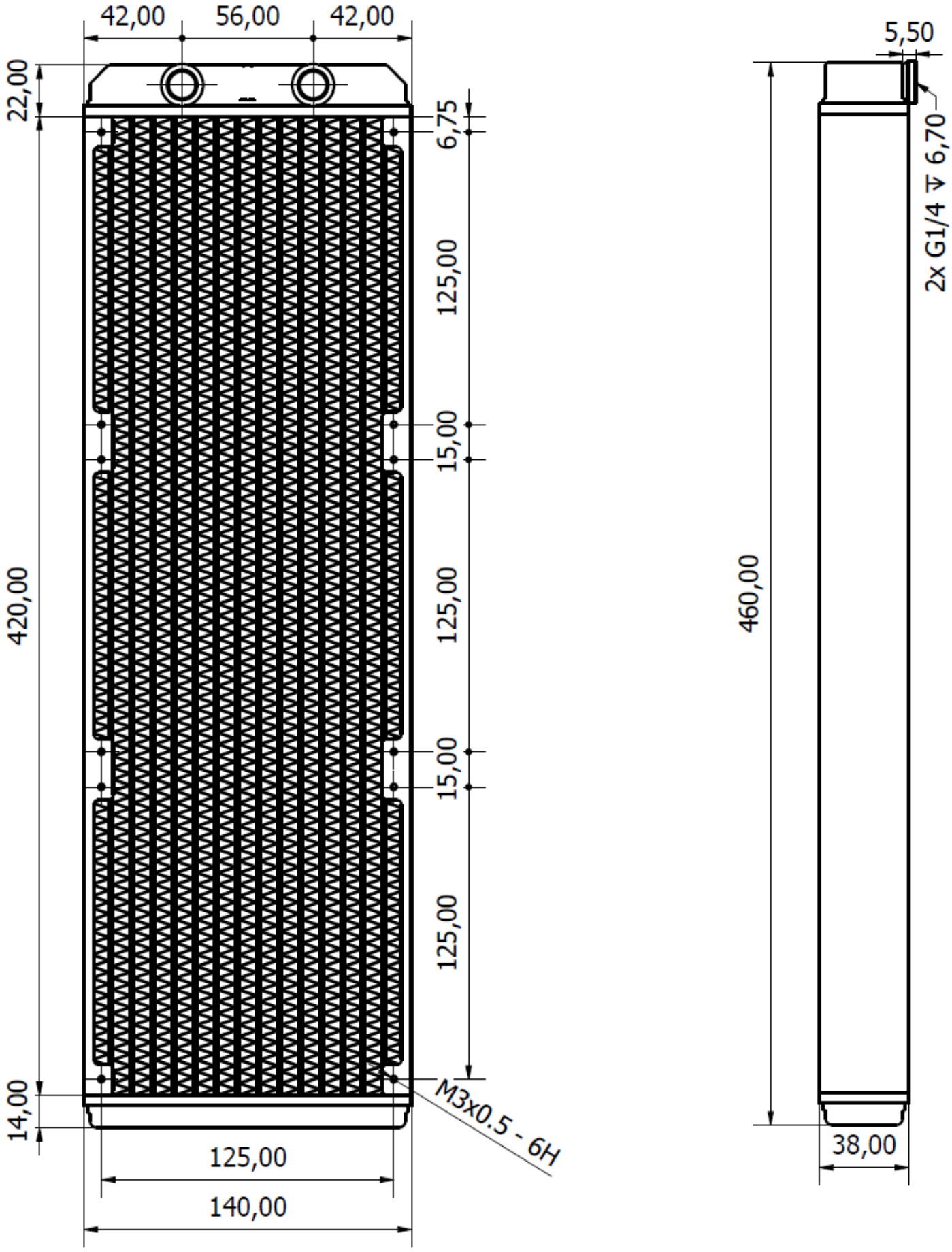
Illumination

12 digitally addressable 5V RGB LEDs are installed in the pump housing, which create a unique, very noble-looking illumination. The digital aRGB LED lighting is connected via a JST 3-pin connector. To control the lighting, the 3-pin female connector must be connected to a digital RGB controller (not included) or a digital RGB-capable mainboard. Additional digital RGB LEDs can be connected to the remaining 3-pin male connector.

Thermal compound

The thermal paste included in the delivery has a thermal conductivity of 7.5 W/mK. The thermal grease does not harden, is particularly suitable for high contact pressures and can be applied perfectly due to the optimally selected viscosity.

Figure (1)



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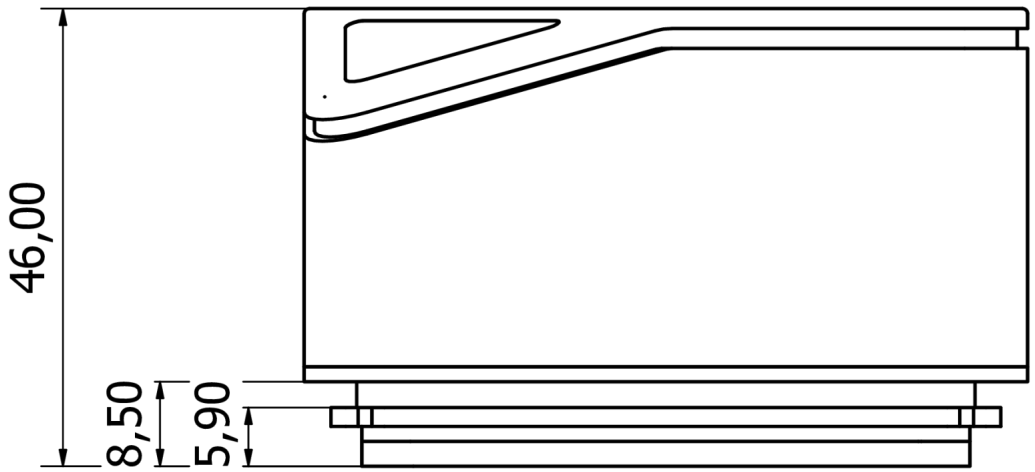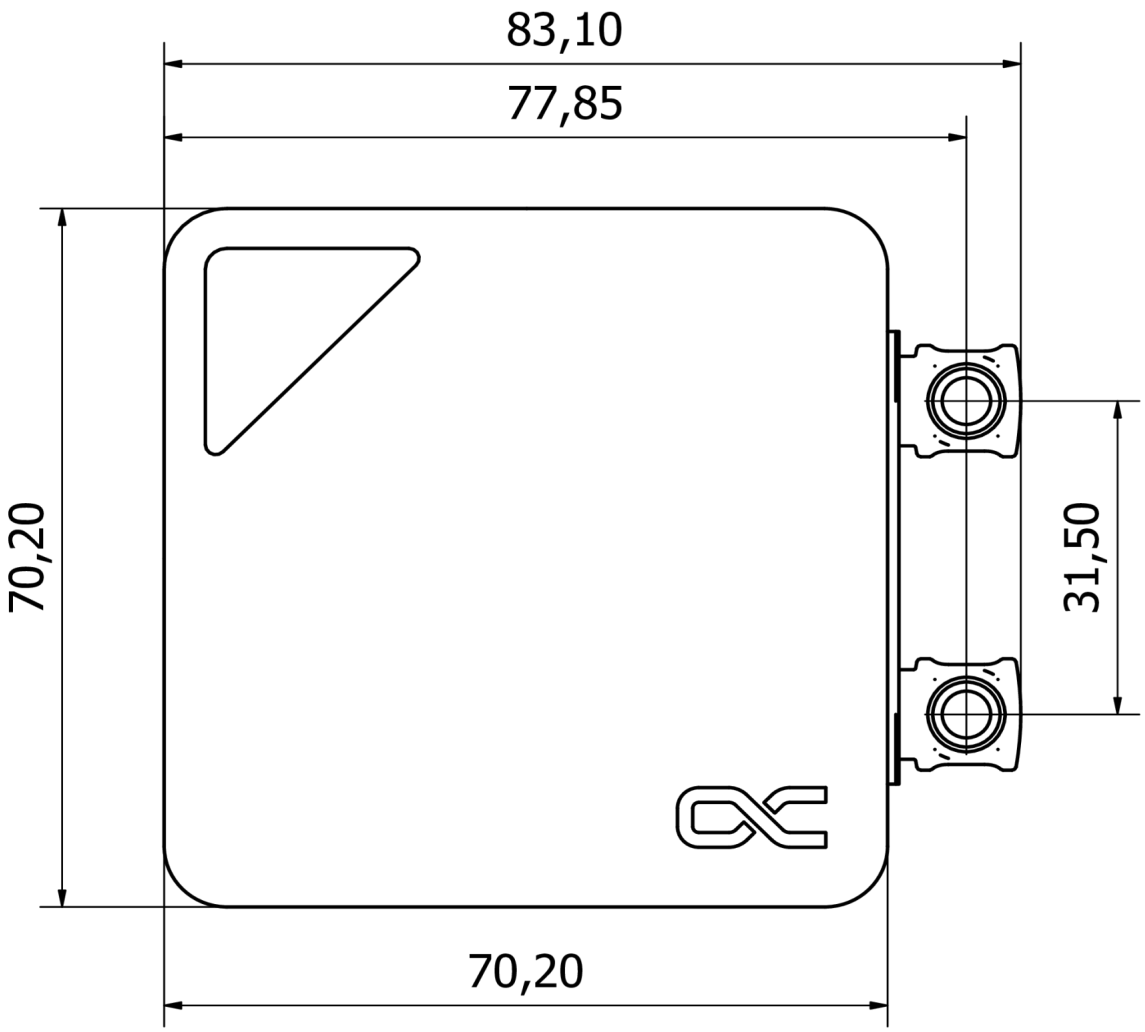
Figure (2)