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Alphacool NexXxoS UT60 Full Copper X-Flow 80mm Single Radiator

Alphacool article number: 14294

Quick Info

Alphacool is an internationally renowned company in the field of watercooling solutions for both industrial and end customer. Constantly innovating and improving both server and home solutions, Alphacool strives to create the perfect solution.

- Compatible with server racks in 2U format
- Solid copper radiator
- Many different connection options
- Patented countersunk screw plugs

Scope of delivery

1x Mounting material

Technical data

L x W x H	123 x 60 x 80 mm (+/- 3% tolerance in the range of the prechamber)
Quantity of cooling channels	21
Material cooling fins, pre-chambers & channels	copper
Material threads	brass
Material outer housing	stainless steel
Threads	6x G1/4" IN/OUT (max. 5mm thread length)
Possible fan size	80mm
Possible fan assembly	1x one-sided / 2x both-sided
Thread size fan mounting	M3
Pressure tested	0,8 Bar
Maximum working temperature	60°C
Fin density	10 FPI
Weight	523g
Color	black

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Manual	14294_Alphacool_NexXxoS_UT60_Full_Copper_X-Flow_80mm_Single_Radiator_Manual.pdf
Product pictures	14294_Alphacool_NexXxoS_UT60_Full_Copper_X-Flow_80mm_Single_Radiator_pics.zip
EU-DoC / CE / RoHS	Alphacool_EuDoc_CE_RoHS_14294.pdf

Packaging dimensions per unit

L x W x H	270 x 95 x 75 mm
Weight	523 g

Other data

Certificates	CE, FC, ROHS
EAN	4250197142946
Customs code	84195080900
Guarantee	10 years

Article text

Alphacool is an internationally renowned company in the field of watercooling solutions for both industrial and end customer. Constantly innovating and improving both server and home solutions, Alphacool strives to create the perfect solution.

Perfect for workstations and servers

The 80 mm NexXxoS radiators are specially designed for server racks and workstations. Due to their low height of only 80 mm and the special M3 mounting holes on the top and bottom, they're perfect for 1U server racks. Alternatively, the radiators can also be mounted in the classic way using the mounting locations of the fans. M3 screws are also required here.

No compromise on materials

Alphacool always uses copper in its NexXxoS radiators. Alphacool is the only manufacturer that uses pure copper for all water-bearing components. Starting with the end chambers, the water channels and the cooling fins, everything is made of pure copper. Only the connecting threads are made of brass, as pure copper would be too soft for the threads and would give way over time.

Outstanding cooling capacity

There are several approaches that Alphacool uses to increase the cooling capacity. Using copper ensures the best properties to dissipate the heat. Aluminium, which is often used in low-cost products, is not as good as copper in terms of heat capacity and thermal conductivity.
Compared to some other manufacturers, the copper fins are only thinly painted. This means that the cooling performance isn't affected at all unlike a thick coating of paint which would act as a insulator. The fin spacing is 10 FPI for optimal performance. This means that the fins are close enough together to create a large surface, but also far enough apart not to obstruct the air flow. In addition, all fins are designed to provide controlled air turbulence. This means that the air flowing through the fins is more efficient and is directed exactly where it is needed.

X-Flow instead of U-Flow

The water flow in classic PC radiators is U-shaped. This means that the water inlet and outlet are on the same side on the radiator. This has certain advantages in the normal PC, however, it is difficult to set up a reasonable cooling loop like this in an extremely flat server. Due to the X-Flow technology, the input and output are located on the opposite sides. This makes it very easy to create a loop in the server rack. For example, you could go out from one side, directly into a CPU, then into one or more graphics cards and the pump, then back to the radiator on the other side.

Versatile connection options

Each NexXxoS 80 mm X-Flow radiator has 3 ports on each end of the radiator. This means that almost any conceivable mounting position can be achieved. The connections are located on each side in the opposite position and then one at the head ends of the radiators.
Alphacool has developed special patented stop plugs that are flush with the radiator to avoid them fouling the case. Previous solutions always exceeded the length or width of the radiator because they were not countersunk.

If you are interested in a professional implementation of water cooling for your servers or workstations in your data centre, Alphacool also offers complete solutions with special reservoirs, pumps and coolers. These include highly optimized water coolers for workstation graphics cards and CPUs. To find out more about this, send us your request to: info@alphacool.com

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