

Alphacool NexXxoS XP3 Light Black V.2

Alphacool article number: 12164



Quick Info

Only few companies can look back to such a long history of experience and tradition in CPU water block development and manufacturing as Alphacool. In the young water cooling sector, from 2004 to 2007, Alphacool aced many tests with the NexXxos HP and NexXxos XP CPU water block series. A multitude of awards and 1st places were the reward for offering the best water block on the market. With the "Alphacool HF 14 Yellowstone", Alphacool continued water block development. Since the beginning of 2010, Alphacool has been developing and testing the successor for over 14 months. Never in company history had such an effort been made towards improvement of a product, but the goal was clear: The new Alphacool NexXxoS XP³ was not only being developed to better its predecessors, but also exceed the cooling performance of all other products on the market. Different tests have already proven that the goal has been achieved and that Alphacool has created a true flagship water block.

Compatibility

Intel: 775 / 1056 / 1155 / 1150 / 1151 / 1200 / 1700 / 2011 / 2011-3 / 2066

AMD: AM2 / AM2+ / AM3 / AM3+ / FM1 / FM2 / FM2+ / AM4 / AM5

Scope of delivery

- 1x Assembled CPU water block
- 1x Mount for Intel Mainboards
- 1x Mount for AMD Mainboards
- 1x Thermal compound and mounting material

Technical data

Dimensions CPU water block without bracket (LxWxH)	57 x 67 x 14mm
Dimensions CPU water block with bracket (LxWxH)	63 x 73 x 14mm
Weight	310g
Max working temperature	60°C
Material cooling plate	nickel plated copper
Material cooler top	Acetal
Connections	2 x G1/4"

Download links

Manual	12164_Alphacool_NexXoS_XP3_Light_Black_V.2_Manual.pdf
Product pictures	12164_Alphacool_NexXoS_XP3_Light_Black_V.2_pics.zip

Packaging dimensions per unit

L x W x H	186 x 122 x 28 mm
Weight	279 g

Other data

Certificates	CE, FC, RoHS
EAN	4250197121644
Customs code	84195080900

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Technical features

Cross-slotted structure

Having been patented for the NexXoS XP in 2004, the cross-slot technology in the cooling plate was developed even further. An even finer structure of fins and channels now ensures stunning performance. The remaining pins are 0.4x1mm wide and have a height of 2.5mm. With this technology, it is possible to transfer great amounts of thermal energy very quickly from cooling plate to coolant..

Backflow channels

The patented backflow channels were also improved and optimized for maximum flow rates. Coolant can now be drained very efficiently above the pin structure, reducing flow resistance and improving cooling performance.

Injection

A multitude of approaches for ideal coolant injection into the cooling structure exist, and many of them show great potential in computer simulation. Alphacool went one step further, and has actually realized many different technologies and tested them under real-life conditions. These prototypes were combined with different backflow possibilities, until an ideal solution was found: Slotted acentric injection in combination with backflow channels in opposite directions allowed a performance improvement which also worked on larger chips and Multi-core processors.

Coolant recirculation

Unlike many current water blocks, where the recirculation of the coolant was only seen as a secondary issue, the NexXoS XP³ was also optimized in this point. Hence it features an unusually large collection reservoir all along the pin structure of the water block. This allows coolant flow from all directions, removing it from the pin structure in a highly effective manner.

Size

Both in regard to cooling plate dimensions (56x56mm) as well as top plate dimensions (57x67mm, plus mount), the XP³ has grown to be a full-size water block. Main advantage of the larger dimensions is optimal cooling of multi-core processors.

Mount

The XP³ features a circumferential elevated strip, offering a secure hold for the mounting plate. This new feature allows switching of the cooling plate without having to disassemble and open the water block.

With water blocks from the competition, installation of a different mounting plate is often a hassle without the necessary technical know-how, and not many users have the experience to be able to disassemble a complicated water block and reassemble it correctly without damaging it.

Such worries are now thing of the past! Included with the water block come two mounting plates, one for installation Intel sockets, the other for use with AMD processors.

Versions

Two versions will be available upon release: For budget-oriented users, the affordable entry-level version with Acetal is the right choice. For those looking for something a bit more advances, a version with brass top and elegant black nickel plating is available.

Cooling performance of the Acetal version is only approximately 2°C behind the performance of the brass version, meaning that the Acetal version delivers top-notch performance at an affordable price.

The cooler is enclosed in foam rubber in the packaging to protect it from scratches and transport. There is a protective film on the underside which must be removed before installation.