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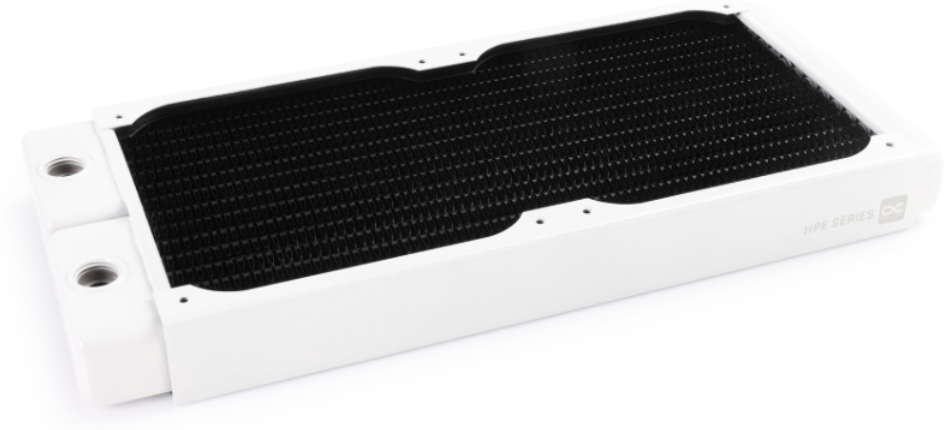
Alphacool HPE-30 Full Copper 240mm Radiator - White

Alphacool article number: 10223



Quick Info

For more than a decade, Alphacool has dominated the market with its Full Copper radiator series. Our extensive portfolio of radiator variants is unique worldwide, just like our manufacturing process, which enables us to craft all water-bearing parts and cooling fins from pure copper. Thanks to their exceptional performance, these radiators can effortlessly dissipate even extremely high waste heat, making them indispensable in many sectors of the cooling industry.

- 1.2x increased water throughput compared to NexXxos standard
- 20% more efficient heat transfer compared to NexXxos standard
- 100% of the internal structure is made of copper

Scope of delivery

1x Alphacool HPE-30 Full Copper Radiator
8x M3x6mm screws
8x M3x30mm screws
8x M3x35mm screws
1x Allen key

Technical data

L x W x H	271,5 x 124 x 30mm (+/- 3%)
Quantity of cooling channels	28
Material cooling fins, pre-chambers & channels	copper
Material threads	brass
Material outer housing	stainless steel
Threads	4x G1/4" IN/OUT & 1x Fill-/Drainport G1/4" (max. 5mm thread length)
Possible fan size	120mm
Possible fan assembly	2x one-sided / 4x both-sided
Thread size fan mounting	M3
Pressure tested	0,8 Bar
Maximum working temperature	60°C
Fin density	18 FPI
Weight	601g
Color	white

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Product pictures	10223_Alphacool_HPE-30_Full_Copper_240mm_Radiator_-_White_pics.zip
EU-DoC / CE / RoHS	Alphacool_EuDoc_CE_RoHS_10223.pdf

Packaging dimensions per unit

L x W x H	345 x 138 x 45 mm
Weight	789 g

Other data

Certificates	CE, FC, ROHS
EAN	4250197102230
Customs code	84195080900
Guarantee	10 years

We assume no responsibility for any typing errors. Alphacool International GmbH, Marienberger Strasse 1, 38122 Braunschweig Tel: (+49)0531 288 7400 Supportmail: info@alphacool.com

Article text

For more than a decade, Alphacool has dominated the market with its Full Copper radiator series. Our extensive portfolio of radiator variants is unique worldwide, just like our manufacturing process, which enables us to craft all water-bearing parts and cooling fins from pure copper. Thanks to their exceptional performance, these radiators can effortlessly dissipate even extremely high waste heat, making them indispensable in many sectors of the cooling industry.

The next step in evolution: HPE Full Copper Radiator!

The Full Copper HPE Radiator uses the same materials as the previous NexXxoS models but takes a technical step forward. With a denser internal structure, the number of water channels and copper fins has been increased. This design ensures a larger water volume is in direct contact with the cooling fins, significantly enhancing heat transfer. The increased number of fin rows and their shortening also results in a much more efficient utilization of the cooling surface. Comparison tests with the conventional NexXxoS radiator have demonstrated that the HPE radiator can achieve a performance improvement of 4.5K. At higher ambient temperatures and fan speeds, the performance gap between the HPE and standard NexXxoS radiators increases progressively, with possible performance gains of up to 6K.

Connection options & mounting

The HPE radiator features two IN or OUT connections with G1/4" threads in the pre-chamber area. On the opposite side, there is a fill or drain port for filling and draining the water circuit. The radiator comes with all necessary screws for case and fan installation. Additional screws are typically not required.

Safety first

The HPE radiator is equipped with special protective plates beneath all mounting holes to prevent screws from being inserted too deeply. This ensures the cooling fins and water channels underneath are protected from damage.

Patented screw plugs

All HPE radiators use Alphacool's patented screw plugs. Protruding screw plugs often prevent the radiator from being installed flush. Alphacool's screw plugs are fully recessed into the radiator, flush with its surface, allowing for easy and seamless installation in the case.