

Alphacool Eisblock Aurora Acryl RX 7900XTX Merc 310 with Backplate

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Quick Info

The next generation - the Alphacool Eisblock Aurora water cooler for Radeon RX 7XXX graphics cards. In order to dissipate the enormous heat of this graphics card generation in the best possible way, numerous optimizations have been made to the water cooler compared to the previous model. The fin structure was adapted and enables a very good water flow while increasing the cooling surface. The modified jet plate with improved inflow engine ensures an optimal distribution of the water on the cooling fins.

- Optimised fin structure enables very good water flow & increase of cooling surface
- Modified jet plate ensures optimal distribution of the water on the cooling fins
- Chrome-plated copper cooler
- Visually calm & simple design with digital aRGB illumination

Compatibility

- XFX Speedster MERC 310 Radeon RX 7900 XTX Black Edition, 24GB GDDR6, HDMI, 3x DP (RX-79XMERC9)
- XFX Speedster MERC 310 Radeon RX 7900 XT, 20GB GDDR6, HDMI, 3x DP (RX-79TMERCU9)
- XFX Speedster MERC 310 Radeon RX 7900 XT Black Edition, 20GB GDDR6, HDMI, 3x DP (RX-79TMERCB9)

Scope of delivery

1x Eisblock Aurora Acryl RX 7900XTX Merc 310	1x Putty tool
1x Backplate	8x M2x5mm Screw
3x 51x15x1mm Pad	3x 51x15x3mm Pad
8x M2x5mm Screw	1x 45x45x3mm GPU-Pad
1x 81x8x1mm Pad	1x 81x8x3mm Pad
1x 100x8x1mm Pad	1x 100x8x3mm Pad
9x EVA Washer	4x M2x11mm Screw
1x M2x5mm Screw	1x ARGB Adapter
1x M2 Nut	1x Plug tool
1x Thermal Grease	2x G1/4 Plug

Technical data cooler

L x W x H	287,10 x 135,20 x 34,20mm
Material cooler	chrome-plated copper
Material cooler top	acrylic
Threads	4 x G1/4"
Thickness cooling fins	0,4mm
Distance cooling fins	0,4mm
Illumination	digital aRGB LEDs
Power connector digital aRGB LEDs	3-Pin JST
Power digital aRGB LEDs	5V
Number of digital aRGB LEDs	12

Technical data backplate

L x W x H	287,10 x 110,70 x 6mm
Material	aluminium
Color	black

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Manual	13551_Alphacool_Eisblock_Aurora_Acryl_RX_7900XTX_Merc_310_with_Backplate_Manual.pdf
Product pictures	13551_Alphacool_Eisblock_Aurora_Acryl_RX_7900XTX_Merc_310_with_Backplate_pics.zip

Packaging dimensions per unit

L x W x H	350 x 175 x 45 mm
Weight	1500 g

Other data

Certificates	CE, FC, RoHS
EAN	4250197135511
Customs code	84195080900

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Technical Highlights

The fin structure of this Eisblock cooler generation was developed together with AMD board partners. The fin thickness is 0.4 mm, the distance between the cooling fins is 0.4 mm. This ensures a very good water flow while increasing the cooling surface. The jet plate has a revised inlay that spreads the water pressure better over the fins thus optimizing the heat absorption. The adjusted water inflow gives the water a better angle of inflow.

Chrome-plated copper

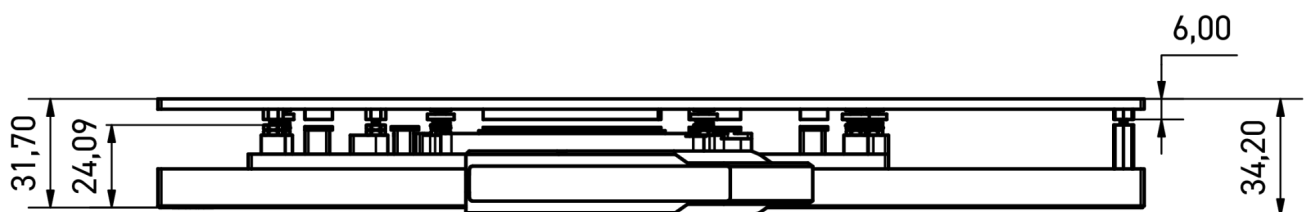
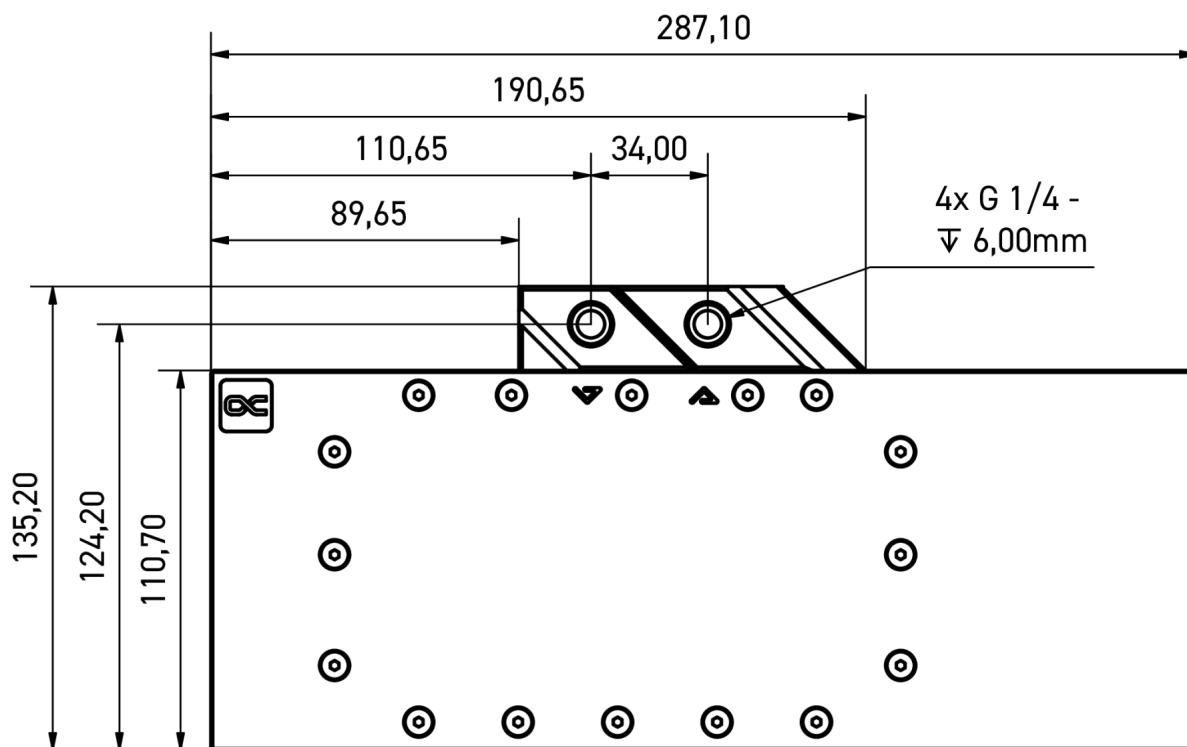
The cooler is made entirely of chrome-plated copper. A chrome plating is much harder than a nickel plating and therefore less sensitive to acids, scratches and damage. It completely eliminates the risk of chipping nickel plating. Additionally, chrome plating looks much more homogeneous and provides a shine that cannot be achieved by nickel plating. Chrome-plated coolers have previously only been used in the industrial sector in areas where extreme influences act on the coolers.

Design

The Aurora design of the Radeon RX 7XXX Eisblock generation is visually calmer and simpler. Only one O-ring runs around the entire cooler. The design around the cooling fins and jetplate makes for a cleaner look. The illumination of the digitally addressable RGB LEDs is even better distributed throughout the cooler as a result of the chrome plating. The terminal's design is in line with the classic Aurora design.

Thermal paste & thermal pads

The included thermal compound is Alphacool's Subzero. With a thermal conductivity of 16 W/mK, it is one of the highest performing thermal pastes on the market. The electrically non-conductive thermal compound is particularly well suited for high contact pressures, but can still be processed perfectly due to its viscosity of 850.000 TF. Alphacool Soft Pads with 1mm thickness are used on the voltage converter and the graphics memory. The thermal conductivity of the pads is 7 W/mK. The pads for the back of the PCB are 3mm thick and have a thermal conductivity of 3 W/mK.



General tolerance: $\pm 0,25$ mm
Dimension in millimeter