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# EK-Quantum Vector<sup>2</sup> FE RTX 4090 D-RGB - Nickel + Plexi

\$270.99

## **Product Images**

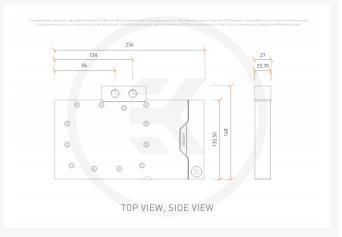












#### **Short Description**

The new Vector<sup>2</sup> water blocks effortlessly solve the issue of excessive heat generation during high load on the GPU core, voltage regulation module, and the GDDR6X VRAM of the Founders Edition RTX 4090 Graphic cards.

## Description

## Details

# High-Performance GPU Cooling

The new Vector<sup>2</sup> water blocks effortlessly solve the issue of excessive heat generation during high load on the GPU core, voltage regulation module, and the GDDR6X VRAM of the Founders Edition RTX 4090 Graphic cards.

## Backplate Included



#### **Features**

The package now contains the following:

- A high-performance GPU water block of the latest generation
- Premium quality CNC-machined backplate
- Mounting mechanism
- Thermal paste
- Thermal pads
- Custom-made Single Slot GPU Bracket
- GPU and PCI power cable release tool

A black, full-coverage backplate is included with the GPU water block. Its distinctive L-shaped profile encloses the entire GPU while, at the same time, increasing the cooling surface area. The backplate also comes with pre-installed captive backplate screws that simplify the installation. They ensure that the correct size screw is always used where it is needed.

#### Technical and Visual Master Piece

The look of the next-gen water blocks is dominated by minimalistic straight lines. An 11mm thick copper cold plate is used for all Vector<sup>2</sup> GPU water blocks. For Plexi versions, D-RGB Lighting is now deployed on the longest edge of the water block for improved fidelity and brightness from every viewing angle. The LED PCB is concealed inside a clean aluminum extrusion.



# EK-Matrix7 Support - For Easier Loop Assembly and Straight Lines

Matrix7 standardizes the dimensions of the products, including the port position and spacing, making liquid cooling loop assembly more intuitive and easier. EK-Quantum Vector<sup>2</sup> GPU water blocks follow the EK-Matrix7 standard, making them seamlessly integrate with the upcoming 2nd generation of EK-Reflection distribution plates. This brings perfect alignment of ports in both horizontal and vertical positions, meaning less time used for planning the loop, bending tubes, and the end result will still be an epic build.



## EK-Quantum Vector<sup>2</sup> FE RTX 4090 D-RGB - Nickel + Plexi

The EK-Quantum Vector<sup>2</sup> FE RTX 4090 D-RGB - Nickel + Plexi GPU water block + backplate set is compatible with:

• Founders Edition NVIDIA GeForce RTX 4090

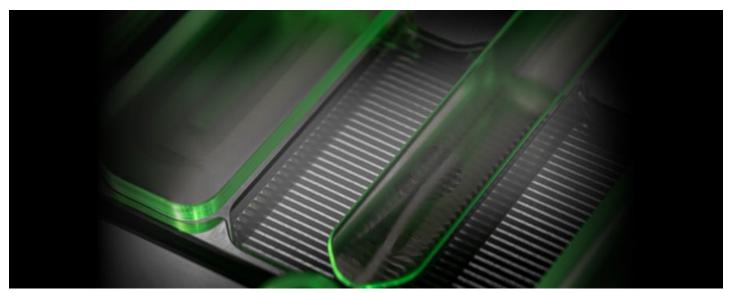
For a precise compatibility match of this water block, we recommend you refer to the EK Cooling Configurator.

## New Cooling Engine - For Best Cooling In Every Scenario

The Vector water block actively cools the GPU, VRAM, power stages, and passively the PCB hotspots that are

found on the backside of the GPU core, VRAM, and the VRM (voltage regulation module) through the backplate.

The implemented Vector<sup>2</sup> cooling engine uses a novel 3D machined acrylic insert to improve flow distribution and thermal performance. This new cooling engine is based on an Open Split-Flow design, but the asymmetric shape of the jet insert helps distribute an even flow between the first and last copper fins. The fin structure geometry has been optimized to provide even flow distribution with minimal losses and optimal performances even when used in reversed water flow scenarios. It is also characterized by low hydraulic flow restriction, meaning it can be used with weaker water pumps or pumps running on low-speed settings and still achieve top performance.



Great care was taken to achieve a symmetrical flow domain by utilizing an internal bridge to secondary components. This was done to ensure the cooling of secondary components without sacrificing flow distribution over the GPU core.

#### Premium Materials and Clever Engineering for Longevity and Top Performance

All Vector<sup>2</sup> GPU water blocks use a thick 11mm copper coldplate with an acetal terminal attached directly to it to create a robust assembly. A single o-ring design is used to create a seal between the cold plate and the water block top, reducing the number of failure points. This also means that you have seen the end of stainless steel bridge plates that were utilized on GPU water blocks before. This simple construction provides confidence during customization and maintenance. Tactile magnetic covers are used to conceal the terminal screws, which allows rotation of the branding when the GPU is inverted in the case.

The cold plate is CNC-machined out of high-quality, pure electrolytic copper which is then nickel-plated, while its top is CNC-machined out of glass-like cast acrylic. The black anodized backplate has a new L-shaped profile that touches the base of the water block and encloses the entire GPU while increasing the cooling surface leading to even better performance.

## Included Backplate

For the first time, captive backplate screws are added to the backplate. They simplify installation, ensuring the correct length is always used where it is needed to avoid any user error or second-guessing.

The backplate improves the overall aesthetics of your graphics cards and also provides additional passive cooling for the backside of the printed circuit board VRM, core, and VRAM sections.

## Rotatable Magnetic Covers

Sleek magnetic covers are used to conceal the terminal screws, which allows rotation of the branding when the GPU water block and active backplate enclosure are inverted in the case or being used on a vertical GPU mount.



## Addressable D-RGB Compatibility

Addressable D-RGB LED lighting is deployed on the longest edge of the water block for improved uniformity and brightness. The PCB and diodes are concealed inside a clean aluminum extrusion. The individually addressable RGB LED is compatible with popular RGB sync technologies from all major motherboard manufacturers. The arrow marking on the 3-pin D-RGB LED connector is to be aligned with the +5V marking on the D-RGB (addressable) header (Pinout: +5V | Data | Blocked | Ground).









## Vector<sup>2</sup> Water Blocks Won an iF Design Award

EK's premium water blocks from the Quantum Vector<sup>2</sup> product line boasts an iF Design Awards for 2022. These prestigious awards signify top-tier design levels delivered by our products to both consumers and the design community. Not only do Vector<sup>2</sup> water blocks have aesthetically pleasing looks to deserve these awards, but they also bring patent-pending technologies and valuable features to the table.

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## **Specifications**

#### **Technical Specification:**

- Dimensions (L x H x W): : 236.3 x 148 x 27mm

- D-RGB LED count: 12

- D-RGB cable length: 50cm

- D-RGB connector 3-pin 5V digital LED header (Pinout: +5V | Data | Blocked | Ground)

Made in Slovenia - Europe!

#### PLEASE NOTE:

- Due to an immense variety of fittings/barbs available on the market and no prescribed standards, we guarantee compatibility only for connectors bought from our website.
- Factory backplates are not compatible with this water block!
- This product should NOT be installed with any aluminum Fluid Gaming parts!
- The use of specifically engineered coolants that contain corrosion, scale, and biological inhibitors is mandatory to prevent damage to your nickel-plated water block! EK is offering a selection of such products in the coolants section.
- Only compatible with Active Backplate in a Nickel + Plexi finish due to D-RGB implementation.

### Additional Info

Nickel Plexi
G1/4
Nvidia GeForce

## Additional Information

Brand	EK Waterblocks
SKU	EK-QUANT-VEC2-FE-4090-DRGB-NP
Weight	7.7500
Color	Black
Vga	Nvidia Founders Edition RTX 4090
Block GPU Type	Nvidia
Block Style	Nickel-Plexi
Vendor SKU/EAN	3831109900703



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