

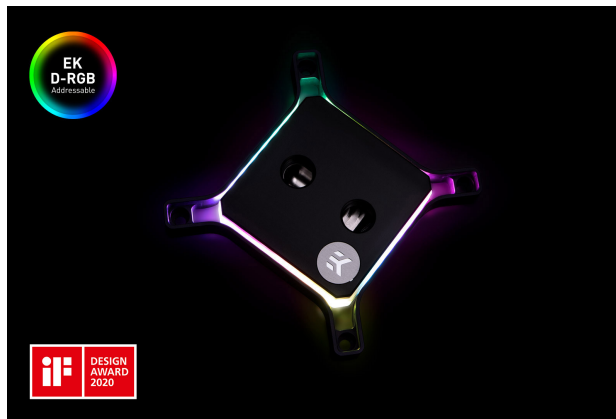


# EK-Quantum Magnitude D-RGB - 1700 Nickel + Acetal

\$259.99

## Product Images





## Short Description

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The EK-Quantum Magnitude is the ultimate bespoke CPU water block from EK® that brings the highest cooling performance with the lowest possible flow restriction.

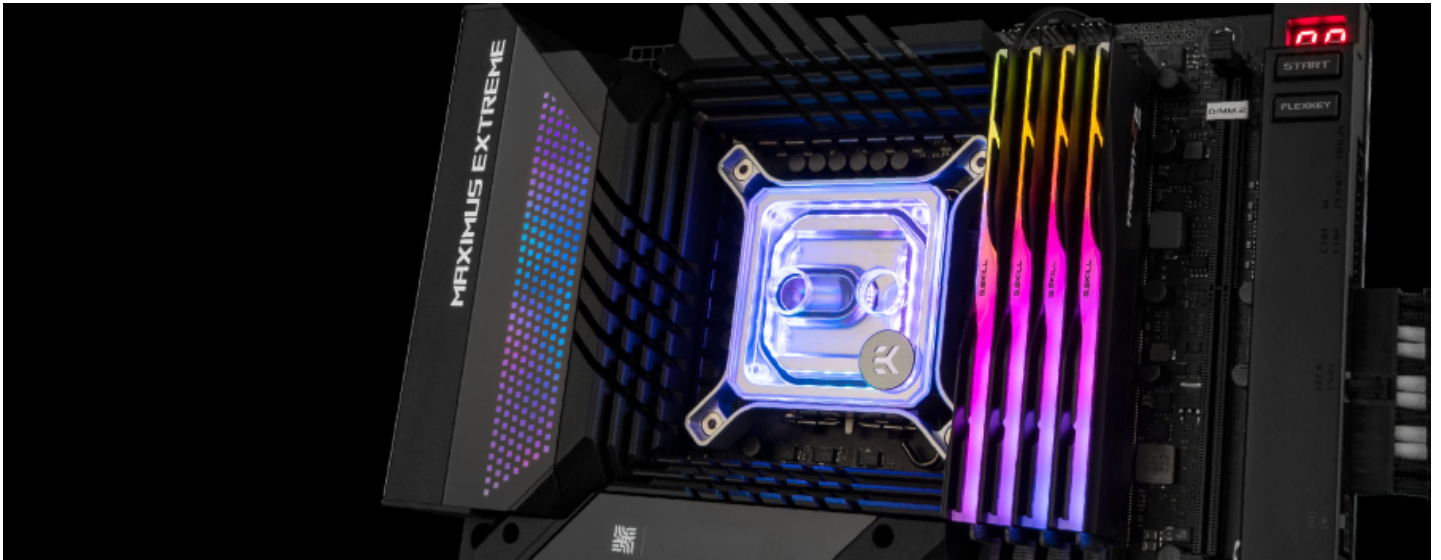
## Description

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The EK-Quantum Magnitude is the ultimate bespoke CPU water block from EK® that brings the highest cooling performance with the lowest possible flow restriction. The 1700 version of the water block is using a specific combination of flow distribution insert, mounting pressure, and cold plate geometry tailored for the IHS and die layout of Intel® 12th Generation Core CPUs.

Different from any mounting structure used by other water blocks that are usually black and mundane plates, the design accentuates an integrated X-shaped, three-dimensional frame with premium finishes that firmly cradles the main body in place while the screws are morphed into a sophisticated design detail.

Specialized manufacturing techniques were deployed to create this truly unique product. Not a single component of Magnitude was made using mass production techniques; instead, every single piece was CNC machined separately, out of a solid piece of material. This version of the water block features a nickel-plated copper cold plate with a high-grade glass-like top CNC machined out of cast acrylic.



A CNC machined solid brass insert made it possible to significantly enlarge and optimize the cooling engine. Compared to previous generations of water blocks, the fin array has a 50% bigger surface area, all contained in a smaller footprint to ensure maximum compatibility even with mITX motherboards. The copper cold plate uses 0.40mm wide microchannels and 0.26mm thick microfins to maximize the thermal transfer with minimal flow restriction.

Since EK-Quantum Magnitude was engineered from the ground up for each specific socket, the 1700 version features an insert that directs flow evenly over the CPU die which is used in combination with a cold plate geometry that is specific to 1700 socket processors. One more feature of the Intel-based Magnitude CPU water block is the reversible insert that can accommodate easier tube routing. It allows the user to swap the inlet and outlet port, by simply rotating the brass insert piece by 180°.

The aesthetic interchangeable inner frame is also machined out of a single piece of brass, which is subsequently nickel-plated. The aesthetic frame can be replaced with color-anodized aluminum variants that perfectly match EK-Quantum Torque fitting lineup or with a white POM acetal piece that can be used as a light dispersion element for addressable D-RGB LEDs. The aesthetic interchangeable [inner frames are sold separately](#).

Elegantly concealed under the aesthetic inner frame is a LED strip boasting the incredible 30, individually addressable D-RGB diodes that shine inward and illuminate the translucent top. The addressable D-RGB is using an industry-standard 3-pin 5V digital LED connector (Pinout: +5V, Data, Blocked, Ground).

The mounting mechanism is a three-dimensional X-shaped aluminum piece that makes the screws a seamless part of the water block. Strong edges and chamfers root this award-winning icon firmly among the EK-Quantum line. Did we say award-winning?



EK-Quantum Magnitude is bearing the [prestigious iF Design award](#) for its bold and different approach to the CPU water block mounting mechanism.

The cold plate of the Magnitude water block is intentionally machined into a convex shape to align with the concave shape of the CPU IHS. However, if you are interested in a flat cold plate that works perfectly with lapped CPUs or aftermarket IHSs, EK is providing a special, flat bare copper as well as nickel-plated copper [cold plates that are sold separately](#).

The Magnitude is supplied with an additional, thicker jet plate. If the user concludes that his CPU IHS is exceptionally concave (poor thermal paste spread after mounting), the curvature of the water block cold plate can be adjusted by using this secondary jet plate. It will make the center of the contact area bow by an additional 0.1mm outwards, for it to make better contact with the IHS.

## Specifications

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Technical specifications:

- D-RGB cable length: 50cm
- D-RGB connector standard 3-pin (+5V, D, Blocked, Ground)

CPU socket compatibility:

- Intel LGA-1700

Enclosed:

- EK-Quantum Magnitude Water Block
- Mounting mechanism with all necessary springs, screws, and washers
- Stock Jet plate (pre-installed) - 0.6C
- Thermal Grizzly Hydronaut (1.0g) Thermal Paste

Made in Slovenia, EU

PLEASE NOTE:

- 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 [coolant](#) section.
- This product should NOT be installed with any aluminum EK Fluid Gaming parts!
- The arrow marking on the 3-pin LED connector is to be aligned with the +5V marking on the D-RGB/A-RGB header.
- Using the correct in and out ports is mandatory for best performance. If you require to swap the ports, please rotate the insert.

## Additional Information

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Brand	EK Waterblocks
SKU	EK-MAG-DRGB-1700-NA
Weight	2.5000
Color	Black
CPU Series	Intel LGA 1700
Block CPU Type	Intel
Block Style	Nickel-Acetal
Vendor SKU/EAN	3831109861813

