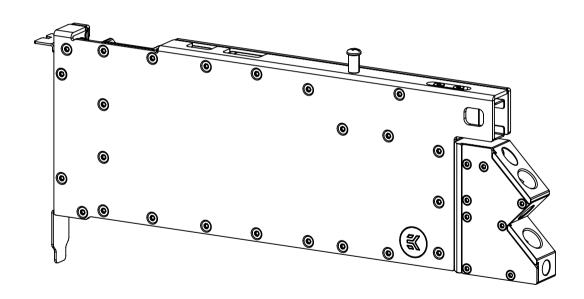
# EK-Pro RTX A5000 Rack - Ni + Inox



**GPU WATER BLOCK** 



If this product is made from aluminum and can be only used with other aluminum liquid cooling components, such as Al fittings, water blocks and radiators. Mixing aluminum with copper and brass products can cause galvanic corrosion of the metal and render liquid cooling equipment useless. Such misuse is not covered by warranty.

Before you start using this product, please follow these basic guidelines:

Please carefully read the manual before beginning with the installation process!

Please remove your graphics card from the computer to assure safest mounting process in order to prevent any possible damages to your GPU and/or graphics card circuit board (PCB).

The EK Fittings require only a small amount of force to screw them firmly in place since the liquid seal is ensured by the rubber O-ring gaskets.

The use of corrosion inhibiting coolants is always recommended for liquid cooling systems, and mandatory for nickel plated water blocks!

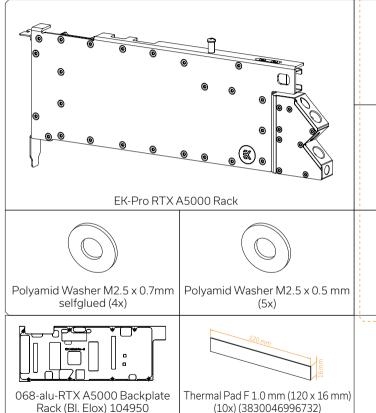
Do not use pure distilled water! For best results EK recommends the use of EK-CryoFuel coolants!

Make sure to thoroughly bleed air out of your water block, or you will not reach optimal performance!

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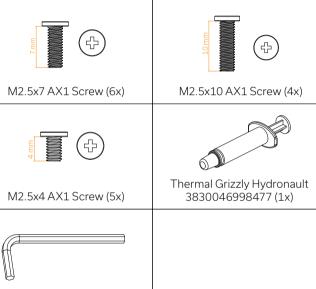
## **BOX CONTENTS**



#### 068-Mounting RTX A5000

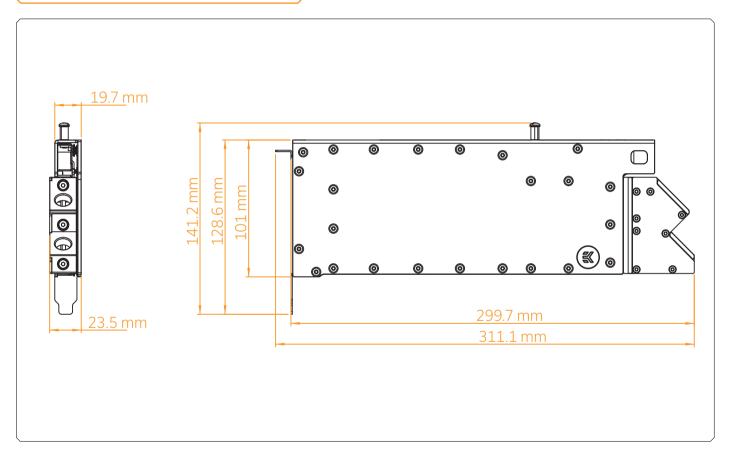
Allen Key 2 mm (1 x)

Note: There are additional screws in the mounting kit.

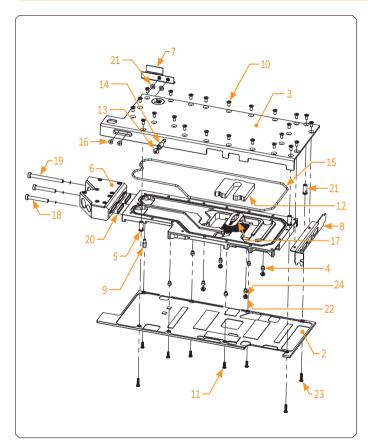


Screw size guide (1x) 103012

# WATER BLOCK DIMENSIONS



## WATER BLOCK SPECIFICATIONS AND MAIN PARTS



#### **Technical Specification:**

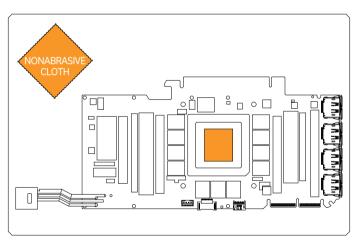
- Dimensions (LxHxW): 311.1 x 141.2 x 23.5 mm

Pos.	EAN	Description	Qty.
1	104955	RTX A5000 Coldplate - rack	1
2	104949	RTX A5000 Backplate - rack	1
3	104956	RTX A5000 Top - rack	1
4	102696	Standoff M3.5/M2.5 x 2.5	8
5	101436	Standoff M3/M2.5 x 12.0	3
6	3831109861042	EK-FC Pro Terminal Angled 45 deg	1
7	105106	Power adapter	1
8	103698	RTX A5000 bracket	1
9	102697	Standoff M3.5/M2.5 x 6.60	1
10	103090	Screw ISO M3 x 6	24
11	9049	Screw M2.5x7	5
12	104647	GPU insert	1
13	8483	Screw ISO 7380 - UNC6-32 x 5	1
14	102490	Pro GPU Bracket standoff M4	1
15	105047	O-ring 166.75 x 2	1
16	9029	Screw M3 x 6 DIN7991	2
17	102549	GPU Jet	1
18	8323	Screw M4 x 28 DIN7984	2
19	101878	Screw M4 x 45 DIN7984	1
20	5155	O-ring 15 x 1	2
21	8627	Washer POLYAMID M2.5 0.7mm selfglued	5
22	9047	Screw M2.5 x 4	4
23	104344	Screw M2.5 x 10	3
24	8623	Washer POLYAMID M2.5 0.5mm	4

### PREPARING THE GRAPHICS CARD

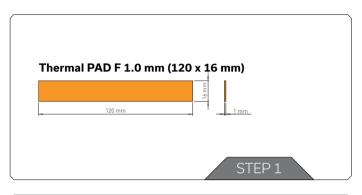
Place your graphics card on the flat surface and carefully remove the stock cooler. Do not forget to unplug all fan connectors. Pay attention to the following steps when installing the **EK-RTX A5000 Rack** water block onto your graphics card.

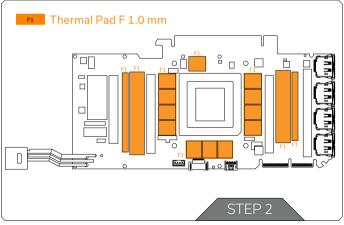
### **CLEANING THE PCB**



Wipe off the remains of the original thermal compound using a nonabrasive cloth or Q-tip, as shown in the sample image, until the components and circuit board are completely clean. EK recommends the use of denatured alcohol for removing TIM leftovers. After that, remove all remaining stock thermal pads from the PCB.

### **CUTTING AND PLACING THERMAL PADS**





#### STEP 1

Your GPU water block comes with thermal pads that have to be cut into smaller pieces to cover all the VRM components, such as COILs, MOSFETs, and drivers.

You must remove the protective foil from both sides of the thermal pad before installation.



You must remove the protective foil from both sides of the thermal pad before installation.

Thermal pads:

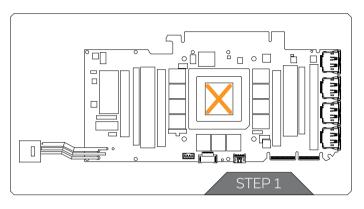
10x Thermal Pad F 1.0 mm - (120 x 16 mm) EAN: 3830046996732

#### STEP 2

Once cut to size, thermal pads should be placed on the PCB, as illustrated below. EK made sure to provide you with more than an adequate quantity of thermal pads to complete this Step.



### **CUTTING AND PLACING THERMAL PADS**



#### STEP 1

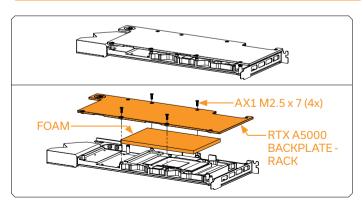
Apply the enclosed EK-TIM Ectotherm thermal grease (thermal compound) on the GPU heat spreader – IHS – as shown in the image. The layer of the thermal compound must be thin and even over the entire surface of the IHS.

The excessive or uneven application of thermal grease may lead to poor performance!

For this Step, you will need:



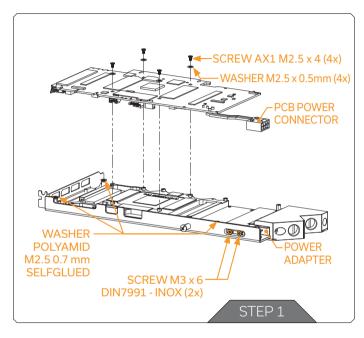
### **UNPACKING AND REASSEMBLYING**



After unboxing the preinstalled water block, carefully put it on soft surface. Untighten four (4) screws AX1 M2.5 x 7 and remove foam and RTX A5000 Backplate – rack. Untightened four (4) screws AX1 M2.5 x 7 and foam will not be needed anymore.



### **INSTALLING THE WATER BLOCK**



This procedure is the same for all full-cover water blocks.

#### STEP 1

#### MOUNTING PCB ON THE WATER BLOCK

Firstly, stick three (3) Washer POLYAMID M2.5 0.7 mm selfglued, on the top of 3 the biggest standoffs.

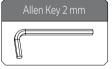
Carefully position the graphic card on water block with preinstalled standoffs. During this process, make sure you have aligned mounting holes of the PCB with holes of the water block.

Unscrew two (2) preinstalled M3 x 6 DIN7991 screws to properly place the PCB power connector in power adapter. After placement is done, tighten them on place again.



Pay attention not to use too much force when pressing the PCB down to the block since chip dies are prone to cracking.

Tighten four (4) screws AX1 M2.5  $\times$  4 with belonging 4 Washers M2.5  $\times$  0.5 as shown in the picture. Tighten the screws evenly using the Phillips head screwdriver.

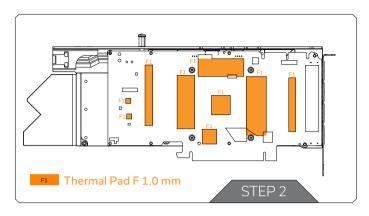












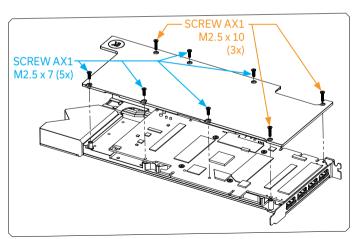
# STEP 2 MOUNTING BACKPLATE ON PCB

Again, cut thermal pads to needed size. Thermal pads should be placed on the back of PCB, as illustrated below. EK made sure to provide you with more than an adequate quantity of thermal pads to complete this Step.

For this Step, you will need:



### ATTACHING THE BACKPLATE TO THE GRAPHICS CARD



Use three (3) M2.5  $\times$  10 AX1 Screws and five (5) M2.5  $\times$  7 AX1 Screws. Tighten the screws evenly using the Phillips head screwdriver.







### **CHECKING FOR CONTACT**

If necessary, temporarily remove the water block to check for uniform surface contact between the block and components. Pay special attention to the VRM section of the graphics card. Check whether the water block makes contact with the intended integrated circuit. Then repeat Steps from the previous section to re-attach the block.



In case you fail to obtain good contact, please check again or contact our support service at https://www.ekwb.com/customer-support/.

### **INSERTING THE GRAPHICS CARD INTO THE CHASSIS**

Carefully lift your graphics card with the installed water block and insert it into your PC's motherboard PClexpress expansion slot. Please keep in mind that your graphics card is heavier than before it was equipped with the water block.



You need to be very careful when handling the graphics card. Avoid all unnecessary manipulation of the water block assembly that might damage your card or water block

### **TESTING THE LOOP**

To ensure the installation of EK components was successful, we recommend you perform a 24-hour leak test.

When your loop is complete and filled with coolant, connect the pump to a PSU outside your system. Do not connect power to any of the other components. Turn on the PSU and let the pump run continuously.

Inspect all parts of the loop, and in case the coolant leaks, fix the issue and repeat the testing process. To prevent possible damage, please ensure that all hardware is dry before the system is powered on.

# **SUPPORT AND SERVICE**

In case you need assistance or wish to order spare parts or a new mounting mechanism, please contact:

https://www.ekwb.com/customer-support/

For spare parts orders, refer to the page with "WATER BLOCK SPECIFICATIONS AND MAIN PARTS" where you can find the EAN number of each part you might need.

Include the EAN number with quantity in your request. Mounting Mechanism EAN can be found under "BOX CONTENTS"

Thermal pads are readily available in the EK shop

## **SOCIAL MEDIA**

- **f** EKWaterBlocks
- @EKWaterBlocks
- ekwaterblocks
- EKWBofficial
- ekwaterblocks

