

# **EK Fluid Works**

Cascade 4U8G Barebone

#### **Professional Liquid Cooled Rack Mount Case**

Experience unparalleled performance and reliability with our cutting-edge rack-mounted liquid-cooled server case. Designed for scalability and durability, it ensures efficient cooling, seamless expansion, and hassle-free maintenance for high-demand workloads.

#### Optimized for:

- Data Science
- Machine Learning & Deep Learning
- Scientific Computing
- AI LLM, GM, IRM, RM...

#### **Quick Specs:**

- Supports Up to 8 GPUs / GeForce 50-Series Ready
- Efficient Water-Cooling Technology
- Maximized Performance & Reliability
- Redundant Power Supply
- Chassis Designed by SilverStone
- Future-Proof and Easily Expandable
- Industry-Grade Durability
- · Quick and Easy Servicing



#### **Innovation Sets Us Apart**



#### **SUPPORTS UP TO 8 GPUS**

Designed for top-tier performance, this 4U workstation accommodates up to 8 full-height, full-width liquid-cooled GPUs, including next-generation Nvidia graphics cards. Water cooling allows the server rack to be fitted with twice as many graphics cards as a traditional air-cooled system. Giving you maximum compute in the smallest form factor possible.



#### REDUNDANT POWER SUPPLY

A failsafe design with a redundant power supply guarantees uninterrupted operation, even under heavy loads



## FUTURE-PROOF WITH GEFORCE 50-SERIES GPU SUPPORT

Built to adapt to evolving needs, it supports dualand single-socket motherboards, high-performance CPUs from Intel®, AMD®, and Ampere®, and the latest NVIDIA GeForce 50-Series GPUs for next-level performance and scalability.

### Why Liquid Cooling?

#### **UNPARALLELED COOLING PERFORMANCE**

Water is more effective at removing heat, resulting in lower sustained operating temperatures.

#### QUIET OPERATION

Larger fans move more air at lower speeds and are almost imperceptible under normal operation.

#### **GREATER PERFORMANCE OUTPUT**

Eliminating thermal throttling removes bottlenecks and increases performance output.

#### **INCREASED COMPUTE DENSITY**

Liquid cooled GPUs occupy less space, allowing 2x - 3x compute power in the same cubic footprint.

#### **LONGER LIFESPAN**

Liquid cooling eliminates thermal fatigue, allowing components to stay cooler and last longer.

### Cascade 4U8G Barebone



|              | SilveStone 4U8G-FF-CASCADE  |  |
|--------------|---|--|
| Case         | Model No.:  | SST-4U8G-FF-CASCADE  |
|              | Chassis form factor:  | 4U   |
|              | Motherboard:  | SSI-EEB (12.63" x 13") (12.4" x 14")   |
|              | Expansion Slot:   | Standard PCI Expansion Slots x8  |
|              | Front I/O Port:   | USB-Type C x 1<br>USB-A x 2<br>Power Button<br>Reset Button<br>+Motheboard I/O |
|              | Indicators:   | Power LED x 1: Blue<br>HDD Access x 1: Green<br>LAN LED x 2: Green             |
|              | Expansion Slot:   | 435mm (W) x 176mm (H) x 720mm (D)<br>17.13" (W) x 6.93" (H) x 28.35" (D)       |
|              | Main Metal Thickness:   | 1.0~1.2mm  |
|              | EK Liquid-Cooling Kit   |  |
| Cooling      | Pump:   | 2x Laing D5  |
|              | Radiators:  | 360 mm   |
|              | Tubes:  | EK ZMT 10/16   |
|              | Fans:   | 3x 120 mm  |
|              | Manifold:   | 8x GPU, 2x CPU   |
|              | GPU Cooling   | GPU Block  |
|              | CPU Cooling   | CPU Block  |
|              | SilverStone SST-GM2000C-PF  |  |
| Power Supply | Туре:   | CRPS 4+1   |
|              | Output Power:   | 5x 2000W Platinum  |
|              | 1 or 2 CPU Supported  |  |
| CPU          | AMD®  | Threadripper® Series<br>EPYC® Series   |
|              | Intel®  | Xeon® Series   |
|              | Up to 8 GPU Supported   |  |
| GPU          | Nvidia® GeForce® Series / <b>50-Series Ready</b><br>Nvidia® Professional<br>AMD® Radeon® Series |  |

#### Who Is It For?

This workstation is purpose-built for demanding applications, including:

- Al and Machine Learning: For training and inference of cutting-edge algorithms.
- High-End 3D Rendering: Perfect for complex animations and visualization projects.
- Scientific Simulations: Handles compute-intensive workloads with ease.
- Cybersecurity & Forensics: Designed for secure, high-performance operations in specialized labs.
- Photogrammetry: For creating high quality 3D models and digital twins



# Compact High-Performance Design Designed to maximize

computational performance in minimal space, this 4U rackmount workstation provides unprecedented density for liquid-cooled components. With support for up to 8 full-length GPUs and a compact footprint, it delivers top-tier performance while reducing operational costs.



#### **Collaboration of Industry Leaders**

#### **CHASSIS DESIGNED BY SILVERSTONE**

Developed in collaboration with SilverStone, the chassis combines innovative design with robust performance. This rack is off-the-shelf ready and tailored for professional-grade workloads.

#### **LIQUID-COOLING BY EK**

Engineered by EK, the liquid-cooling system delivers unparalleled thermal efficiency, ensuring optimal performance and extended component lifespan. Featuring precision-engineered blocks, a high-efficiency manifold, and advanced quick-disconnect fittings, it minimizes maintenance complexity while maximizing reliability and cooling capacity.