



# NVIDIA RTX 4000 Ada 20GB vs NVIDIA GeForce RTX 4090 24GB

Side by side datacenter GPU specifications from the Flopper.io database.

## OVERVIEW

|                  | NVIDIA RTX 4000 Ada 20GB | NVIDIA GeForce RTX 4090 24GB |
|------------------|--------------------------|------------------------------|
| FP32 TFLOPS      | 26.7                     | 82.6                         |
| VRAM             | 20 GB                    | 24 GB                        |
| Memory Bandwidth | 360 GB/s                 | 1.0 TB/s                     |
| TDP              | 130 W                    | 450 W                        |

## PERFORMANCE BY PRECISION

| Precision | NVIDIA RTX 4000 Ada 20GB peak TFLOPS (dense) | NVIDIA GeForce RTX 4090 24GB peak TFLOPS (dense) |
|-----------|----------------------------------------------|--------------------------------------------------|
| FP64      | 0.4                                          | 1.3                                              |
| FP32      | 26.7                                         | 82.6                                             |
| TF32      | —                                            | 82.6                                             |
| BF16      | —                                            | 165.2                                            |
| FP16      | —                                            | 165.2                                            |
| FP8       | 213.8                                        | 330.3                                            |
| FP6       | —                                            | —                                                |
| FP4       | —                                            | —                                                |
| INT8      | —                                            | 660.6                                            |

## SPECIFICATIONS

|                 | NVIDIA RTX 4000 Ada 20GB | NVIDIA GeForce RTX 4090 24GB |
|-----------------|--------------------------|------------------------------|
| Architecture    | Ada Lovelace             | Ada Lovelace                 |
| Process Node    | 4nm                      | 4nm                          |
| Launch Year     | 2023                     | 2022                         |
| Form Factor     | PCIe                     | PCIe                         |
| Memory Type     | GDDR6                    | —                            |
| Interface Width | 160-bit                  | —                            |
| Interconnect    | —                        | —                            |

|                 | NVIDIA RTX 4000 Ada 20GB | NVIDIA GeForce RTX 4090 24GB |
|-----------------|--------------------------|------------------------------|
| TDP             | 130 W                    | 450 W                        |
| FP32 Efficiency | 0.21 TFLOPS/W            | 0.18 TFLOPS/W                |