



# NVIDIA GeForce RTX 4080 16GB vs NVIDIA GeForce RTX 4090 24GB

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

## OVERVIEW

|                  | NVIDIA GeForce RTX 4080 16GB | NVIDIA GeForce RTX 4090 24GB |
|------------------|------------------------------|------------------------------|
| FP32 TFLOPS      | 48.7                         | 82.6                         |
| VRAM             | 16 GB                        | 24 GB                        |
| Memory Bandwidth | 717 GB/s                     | 1.0 TB/s                     |
| TDP              | 320 W                        | 450 W                        |

## PERFORMANCE BY PRECISION

| Precision | NVIDIA GeForce RTX 4080 16GB peak TFLOPS (dense) | NVIDIA GeForce RTX 4090 24GB peak TFLOPS (dense) |
|-----------|--------------------------------------------------|--------------------------------------------------|
| INT8      | 195.0                                            | 330.3                                            |
| FP8       | 195.0                                            | 330.3                                            |
| FP16      | 97.5                                             | 165.2                                            |
| BF16      | 97.5                                             | 165.2                                            |
| TF32      | 48.7                                             | 82.6                                             |
| FP32      | 48.7                                             | 82.6                                             |
| FP64      | 0.7                                              | 1.3                                              |

## SPECIFICATIONS

|                 | NVIDIA GeForce RTX 4080 16GB | NVIDIA GeForce RTX 4090 24GB |
|-----------------|------------------------------|------------------------------|
| Architecture    | Ada Lovelace                 | Ada Lovelace                 |
| Process Node    | 4nm                          | 4nm                          |
| Launch Year     | 2022                         | 2022                         |
| Form Factor     | PCIe                         | PCIe                         |
| Memory Type     | —                            | —                            |
| Interface Width | —                            | —                            |
| Interconnect    | —                            | —                            |

|                 | NVIDIA GeForce RTX 4080 16GB | NVIDIA GeForce RTX 4090 24GB |
|-----------------|------------------------------|------------------------------|
| TDP             | 320 W                        | 450 W                        |
| FP32 Efficiency | 0.15 TFLOPS/W                | 0.18 TFLOPS/W                |