



# NVIDIA GeForce RTX 4090 24GB vs NVIDIA L40 48GB

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

## OVERVIEW

|                  | NVIDIA GeForce RTX 4090 24GB | NVIDIA L40 48GB |
|------------------|------------------------------|-----------------|
| FP32 TFLOPS      | 82.6                         | 90.5            |
| VRAM             | 24 GB                        | 48 GB           |
| Memory Bandwidth | 1.0 TB/s                     | 864 GB/s        |
| TDP              | 450 W                        | 300 W           |

## PERFORMANCE BY PRECISION

| Precision | NVIDIA GeForce RTX 4090 24GB peak TFLOPS (dense) | NVIDIA L40 48GB peak TFLOPS (dense) |
|-----------|--------------------------------------------------|-------------------------------------|
| FP64      | 1.3                                              | —                                   |
| FP32      | 82.6                                             | 90.5                                |
| TF32      | 82.6                                             | 90.5                                |
| BF16      | 165.2                                            | 181.1                               |
| FP16      | 165.2                                            | 181.1                               |
| FP8       | 330.3                                            | 362.0                               |
| FP6       | —                                                | —                                   |
| FP4       | —                                                | —                                   |
| INT8      | 660.6                                            | 362.0                               |
| INT4      | —                                                | 724.0                               |

## SPECIFICATIONS

|                 | NVIDIA GeForce RTX 4090 24GB | NVIDIA L40 48GB |
|-----------------|------------------------------|-----------------|
| Architecture    | Ada Lovelace                 | Ada Lovelace    |
| Process Node    | 4nm                          | 4nm             |
| Launch Year     | 2022                         | 2023            |
| Form Factor     | PCIe                         | PCIe            |
| Memory Type     | —                            | GDDR6           |
| Interface Width | —                            | —               |

|                 | NVIDIA GeForce RTX 4090 24GB | NVIDIA L40 48GB |
|-----------------|------------------------------|-----------------|
| Interconnect    | —                            | —               |
| TDP             | 450 W                        | 300 W           |
| FP32 Efficiency | 0.18 TFLOPS/W                | 0.30 TFLOPS/W   |