

# NVIDIA RTX PRO 6000 Blackwell Server Edition vs NVIDIA GeForce RTX 5090 D 32GB

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

## OVERVIEW

|                  | NVIDIA RTX PRO 6000 Blackwell Server Edition | NVIDIA GeForce RTX 5090 D 32GB |
|------------------|----------------------------------------------|--------------------------------|
| FP32 TFLOPS      | 120.0                                        | 104.8                          |
| VRAM             | 96 GB                                        | 32 GB                          |
| Memory Bandwidth | 1.6 TB/s                                     | —                              |
| TDP              | 600 W                                        | 575 W                          |

## PERFORMANCE BY PRECISION

| Precision | NVIDIA RTX PRO 6000 Blackwell Server Edition peak TFLOPS (dense) | NVIDIA GeForce RTX 5090 D 32GB peak TFLOPS (dense) |
|-----------|------------------------------------------------------------------|----------------------------------------------------|
| FP64      | —                                                                | 1.6                                                |
| FP32      | 120.0                                                            | 104.8                                              |
| TF32      | 234.0                                                            | —                                                  |
| BF16      | —                                                                | —                                                  |
| FP16      | —                                                                | —                                                  |
| FP8       | —                                                                | —                                                  |
| FP6       | —                                                                | —                                                  |
| FP4       | —                                                                | 1187.5                                             |
| INT8      | —                                                                | —                                                  |

## SPECIFICATIONS

|              | NVIDIA RTX PRO 6000 Blackwell Server Edition | NVIDIA GeForce RTX 5090 D 32GB |
|--------------|----------------------------------------------|--------------------------------|
| Architecture | Blackwell                                    | Blackwell                      |
| Process Node | 4nm                                          | 4nm                            |
| Launch Year  | 2025                                         | 2025                           |
| Form Factor  | PCIe                                         | PCIe                           |
| Memory Type  | GDDR7                                        | GDDR7                          |

|                 | NVIDIA RTX PRO 6000 Blackwell Server Edition | NVIDIA GeForce RTX 5090 D 32GB |
|-----------------|----------------------------------------------|--------------------------------|
| Interface Width | 512-bit                                      | 512-bit                        |
| Interconnect    | —                                            | —                              |
| TDP             | 600 W                                        | 575 W                          |
| FP32 Efficiency | 0.20 TFLOPS/W                                | 0.18 TFLOPS/W                  |