



# NVIDIA RTX 4000 SFF Ada 20GB

Ada Lovelace

PCIe

2023

4nm

## OVERVIEW

|                     |                     |                              |             |
|---------------------|---------------------|------------------------------|-------------|
| 19.2<br>FP32 TFLOPS | 20 GB<br>VRAM GDDR6 | 280 GB/s<br>Memory Bandwidth | 70 W<br>TDP |
|---------------------|---------------------|------------------------------|-------------|

## PERFORMANCE METRICS

| Precision | Peak (dense) | 2:4 Sparse    | Bits | Type     |
|-----------|--------------|---------------|------|----------|
| FP64      | 0.3          | N/A           | 64   | Standard |
| FP32      | 19.2         | N/A           | 32   | Standard |
| TF32      | —            | not published | —    | Standard |
| BF16      | —            | not published | —    | Standard |
| FP16      | —            | not published | —    | Standard |
| FP8       | 153.4        | 306.8         | 8    | Standard |
| FP6       | —            | not published | —    | Standard |
| FP4       | —            | not published | —    | Standard |
| INT8      | —            | not published | —    | Standard |

## MEMORY SPECIFICATIONS

|                 |          |                 |               |
|-----------------|----------|-----------------|---------------|
| Capacity        | 20 GB    | TDP             | 70 W          |
| Type            | GDDR6    | Max Power       | 70 W          |
| Bandwidth       | 280 GB/s | FP32 Efficiency | 0.27 TFLOPS/W |
| Interface Width | 160-bit  | FP16 Efficiency | —             |

## POWER & EFFICIENCY

## HARDWARE DETAILS

|                   |                            |                   |
|-------------------|----------------------------|-------------------|
| Vendor: NVIDIA    | Architecture: Ada Lovelace | Process Node: 4nm |
| Form Factor: PCIe | Launch Year: 2023          | Variant: 20GB     |

## COMPUTE ENGINE

|                   |                             |         |
|-------------------|-----------------------------|---------|
| CUDA Cores: 6,144 | Tensor Cores: 192 (4th Gen) | SMs: 48 |
|-------------------|-----------------------------|---------|

## INTERCONNECT

|               |
|---------------|
| PCIe: 4.0 x16 |
|---------------|

ENTERPRISE FEATURES

ECC: **Yes**

Sparsity: **Yes**