



## SPECIFICATIONS

|                            |   |
|----------------------------|---|
| Marketing Name             | GeForce RTX™ 5090 32G VANGUARD OC   |
| Model Name                 | G5090-32VGC   |
| Graphics Processing Unit   | NVIDIA® GeForce RTX™ 5090   |
| Interface                  | PCI Express® Gen 5  |
| Cores                      | 21760 Units   |
| Core Clocks                | Extreme Performance: 2497 MHz (MSI Center)<br>Boost: 2482 MHz (GAMING & SILENT Mode)                                    |
| Memory Clock Speed         | 28 Gbps   |
| Memory                     | 32GB GDDR7  |
| Memory Bus                 | 512bit  |
| Output                     | DisplayPort x 3 (v2.1b)<br>HDMI™ x 1 (As specified in HDMI™ 2.1b: up to 4K 480Hz or 8K 120Hz with DSC, Gaming VRR, HDR) |
| HDCP Support               | Y   |
| Power consumption          | 575W  |
| Power connectors           | 16-pin x 1 (ATX 3.1 PSU recommended)  |
| Recommended PSU            | 1000W   |
| Card Dimension(mm)         | 357 x 151 x 76 mm   |
| Weight (Card / Package)    | 2707 g / 3302 g   |
| DirectX Version Support    | 12 Ultimate   |
| OpenGL Version Support     | 4.6   |
| Maximum Displays           | 4   |
| G-SYNC™ technology         | Y   |
| Digital Maximum Resolution | 7680 x 4320   |
| Mic-in/Headphone-out       | 1/1   |

## CONNECTIONS



1. DisplayPort
2. HDMI™

## FEATURES



### HYPER FROZR THERMAL DESIGN

An apex evolution of advanced thermal design that delivers unparalleled cooling and quiet operation.



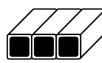
### STORMFORCE FAN

Seven fan blades, claw texturing, and a circular arc are designed for optimal airflow with minimal noise.



### Advanced Vapor Chamber

Built-in Vapor Chamber swiftly transfers heat from the GPU and VRAM to the core pipe for optimal dissipation.



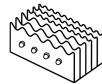
### Core Pipes

Core Pipes feature a square design to maximize contact with the GPU baseplate for optimal thermal management.



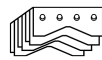
### Filled Fins

Updated heat pipe pathing has allowed more space for additional heatsink fins.



### Wave Curved 4.0

Precision-engineered wave edges with a high-low fin design enhance airflow and reduce turbulence.



### Air Antegrade Fin 2.0

The fins feature a V-shaped cutout and a high-low design at the airflow passthrough to optimize flow efficiency.



### Metal Backplate

A reinforcing metal backplate with airflow vents and thermal pads enhances cooling.



### Dual BIOS

Dual BIOS lets you set the priority to full performance in GAMING mode or low noise in SILENT mode.



### MSI Center

The exclusive MSI Center software lets you monitor, tweak and optimize MSI products in real-time.