



## 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
Core Clocks	Extreme Performance: 2497 MHz (MSI Center) Boost: 2482 MHz (GAMING & SILENT Mode)
CUDA® CORES	21760 Units
Memory Speed	28 Gbps
Memory	32GB GDDR7
Memory Bus	512bit
Output	DisplayPort x 3 (v2.1b) 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

## CONNECTIONS



1. DisplayPort
2. HDMI™

## FEATURES



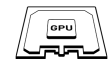
### HYPER FROZR THERMAL DESIGN

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.



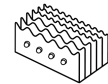
### Core Pipes

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



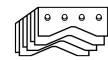
### Filled Fins

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.