



## SPECIFICATIONS

<b>Graphics Processing Unit</b>	NVIDIA® GeForce RTX™ 4090
<b>Interface</b>	PCI Express® Gen 4
<b>Cores</b>	16384 Units
<b>Core Clocks</b>	Extreme Performance: 2640 MHz (MSI Center) Boost: 2625 MHz (GAMING & SILENT Mode)
<b>Memory Speed</b>	21 Gbps
<b>Memory</b>	24GB GDDR6X
<b>Memory Bus</b>	384-bit
<b>Output</b>	DisplayPort x 3 (v1.4a) HDMI™ x 1 (Supports 4K@120Hz HDR, 8K@60Hz HDR, and Variable Refresh Rate as specified in HDMI™ 2.1a)
<b>HDCP Support</b>	Y
<b>Power consumption</b>	Silent mode: 450W Gaming mode: 480W
<b>Power connectors</b>	16-pin x 1
<b>Recommended PSU</b>	1000W (Min. 850W)
<b>Card Dimension (mm)</b>	Card: 280 x 140 x 43 mm radiator + fan: 274 x 121 x 55 mm Tube length: L470 ± 10 x D11.2 mm
<b>Weight (Card / Package)</b>	2353 g / 3837 g
<b>DirectX Version Support</b>	12 Ultimate
<b>OpenGL Version Support</b>	4.6
<b>Maximum Displays</b>	4
<b>G-SYNC® technology</b>	Y
<b>Digital Maximum Resolution</b>	7680x4320
<b>Mic-in/Headphone-out</b>	1/1

## FEATURES

- Zero Froz**  
 Zero Froz is the calm before the storm, keeping fans still and maintaining silence until cooling is needed.
- Superior Cooling**  
 The GPU is kept cool by closed loop liquid cooler while the memory and VRM's are cooled by a radial fan.
- TORX FAN 5.0**  
 Fan blades linked by ring arcs and a fan cowl work together to stabilize and maintain high-pressure airflow.
- Micro-Fin Copper Base**  
 A copper base with fine micro-fins immersed in the liquid stream effectively transfers heat away from the VRAM and GPU.
- Aluminum Heat Radiator**  
 Easy to install 240mm black aluminum radiator to reduce fan demand and dissipate heat efficiently.
- Quick And Easy Installation**  
 Upgrade to the power of liquid-cooled graphics in one minute or less.
- 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.

## CONNECTIONS

