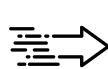




## FEATURES



### Blazing Speeds

Optimized for the PCIe Gen4 interface.



### 3D NAND Flash

3D NAND Flash technology brings dense storage in a compact design and allows storage capacities up to 4TB.



### Security & Reliability

Built-in data security and error-correction capabilities extend the longevity of the NAND flash storage.



### Low Latency Gaming

Enjoy minimal latency in smooth gameplay and loading games with optimized high-performance bandwidth and throughput.



### Nonstop Creativity Booster

Keep up nonstop productivity by opening up images, movies, documents, and heavy-duty applications at lightning speeds.



### MSI Center

Monitor SSD health status and key performance metrics in real time via MSI Center for stable and reliable system performance.



### Optimal M.2 SSD

Designed in the M.2 2280 form factor, MSI SSDs are easy to install into external enclosures, desktops, or laptops.



### 5 Years Warranty

MSI stands by the quality and reliability of their SSD's with a 5 year limited warranty.

## SPECIFICATIONS

<b>Model Name</b>	SPATIUM M461 PCIe 4.0 NVMe M.2			
<b>Capacity</b>	500GB	1TB	2TB	4TB
<b>Controller</b>	PHISON E21T			
<b>Flash Memory</b>	3D NAND			
<b>Form Factor</b>	M.2 2280			
<b>Interface</b>	PCIe Gen4x4, NVMe 1.4			
<b>Compatibility</b>	PCIe Gen4 / Gen3 / Gen2 / Gen1			
<b>Dimensions</b>	80.00mm (L) x 22.00mm (W) x 2.15mm (H)			
<b>Sequential Read up to (MB/s)</b>	4700	5000	5000	5000
<b>Sequential Write up to (MB/s)</b>	1700	3200	4200	4200
<b>Random Read 4KB up to (IOPS)</b>	320,000	630,000	680,000	600,000
<b>Random Write 4KB up to (IOPS)</b>	400,000	750,000	880,000	850,000
<b>Maximum Operating Power (W)</b>	3.7	4.1	4.4	5.1
<b>Idle Power PS3 (mW)</b>	50			
<b>Low Power L1.2 (mW)</b>	5			
<b>Operating Temperatures</b>	0°C - 70°C			
<b>Storage Temperatures</b>	-40°C - 85°C			
<b>Terabytes Written (TBW)</b>	110	250	450	900
<b>Mean Time Between Failure (MTBF)</b>	Up to 1,500,000 Hours			
<b>Limited Warranty</b>	5 Years, or the coverage for the maximum TBW as stated, whichever comes first.			
<b>Advanced Features</b>	TRIM (Performance Optimization, OS Support required) SMART (Self-Monitoring, Analysis and Reporting Technology) LDPC (Low Density Parity Check) ECC Algorithm End to End Data Path Protection APST (Autonomous Power State Transition) Pyrite (Encryption, Data Security)			

## TEST CONFIGURATION

Sequential and random performance, and power consumption were measured with the system configurations listed below. All performance data was tested with the SSD as a secondary drive.

<b>Interface</b>	PCIe Gen4x4
<b>Operating System</b>	Windows 11 Pro 22H2 OS Build 22621.963
<b>CPU</b>	13 <sup>th</sup> Gen Intel Core i9-13900F @2.00GHz
<b>Memory</b>	Kingston DDR5-4800 16G x2
<b>Chipset</b>	MSI MPG Z790 CARBON WIFI
<b>Test Program</b>	Crystal Diskmark 8.04, ATTO Disk Benchmark V4.01.0f1, IO Meter v1.1.0