



SPECIFICATIONS

Model Name	M450 PCIe 4.0 NVMe M.2			
Capacity	250GB	500GB / 512GB	1TB	2TB
Controller	PHISON E19T			
Flash Memory	3D NAND			
Form Factor	M.2 2280			
Interface	PCIe Gen4x4, NVMe 1.4			
Compatibility	PCIe Gen4 / Gen3 / Gen2 / Gen1			
Dimensions	80.00mm (L) x 22.00mm (W) x 2.15mm (H)			
Sequential Read up to (MB/s)	3500	3600	3600	3300
Sequential Write up to (MB/s)	1200	2300	3000	3000
Random Read 4KB up to (IOPS)	150,000	300,000	420,000	380,000
Random Write 4KB up to (IOPS)	300,000	550,000	550,000	540,000
Maximum Operating Power (W)	3.4	4.8	4.0	4.5
Idle Power PS3 (mW)	40			
Low Power L1.2 (mW)	5			
Operating Temperatures	0°C - 70°C			
Storage Temperatures	-40°C - 85°C			
Terabytes Written (TBW)	150	300	600	1200
Mean Time Between Failure (MTBF)	Up to 1,500,000 Hours			
Limited Warranty	5 Years, or the coverage for the maximum TBW as stated, whichever comes first.			
Advanced Features	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)			

FEATURES



Security & Reliability

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



5 Years Warranty

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



MSI Center

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



3D NAND Flash

3D NAND Flash technology brings dense storage in a compact design and allows storage capacities up to 2TB.



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.



Optimal M.2 SSD

22 x 80

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