

M400 | SATA | mSATA SSD

SMART Modular's M400 mSATA 2.5" SSDs are designed for demanding enterprise and industrial applications including servers, networking, and storage systems. It supports AES-256 hardware encryption and ATA security features as a Self-Encrypting Drive (SED), and integrates seamlessly into host systems without BIOS or driver modifications.

Built with Single Event Upset (SEU) protection for enhanced data integrity, the M400 helps safeguard against data corruption caused by radiation or voltage fluctuations in harsh environments. It also supports SMART's NVMsentry[™] firmware customization services—offering tailored features to meet specific customer requirements in reliability-critical deployments.



Features & Benefits

- 1 DWPD For Five Years
- SEU Mitigation
- SMART's Proprietary NVMSentry Firmware
- Quality of Service (QoS) with 3 Nines of Latency Consistency
- TCG OPAL 2.0 and AES 256 Encryption
- End-to-End Data Path Protection
- Support I-Temp (-40°C to +85°C)

Applications

- Embedded Computing
- Industrial
- Medical
- Transportation

Product Family Overview

Form Factor	Capacity	Sequential Performance
2.5" SSD	240GB to 1920GB	Up to 540MB/s Read Up to 520MB/s Write
M.2 2242 SSD	240GB to 960GB	
M.2 2280 SSD	240GB to 1920GB	
mSATA SSD	240GB to 1920GB	
Slim SATA SSD	240GB to 1920GB	

Specifications

	M400 SATA mSATA SSD	
NAND Type	eTLC	
Performance		
Host Interface Rate (maximum)	SATA 3.0 6Gb/s	
Capacities	240GB to 1920GB	
Sequential Read (maximum)	Up to 540 MB/s	
Sequential Write (maximum)	Up to 520 MB/s	
Random Read (maximum)	Up to 79K IOPS	
Random Write (maximum)	Up to 74K IOPS	
Reliability		
MTBF	> 2,000,000 hours	
	1920GB: 4237 TBW	
Endurance	960GB: 2114 TBW	
(JEDEC Enterprise Workload) ¹	480GB: 920 TBW	
	240GB: 471 TBW	
DWPD	1	
SafeDATA	-	
Error Correction	LDPC	
Data Security		
Encryption	AES-256, TCG OPAL 2.0	
Power		
Input Voltage	VCC: 3.3 V ± 5%	
Environmental		
Ohaali	1500 g half-sine, 0.5 msec, 1 shock along each axis,	
Shock	X, Y, Z in each direction	
Vibration	20G rms 80-2000Hz, 1.52mm 20-80Hz, 3 axis	
	Commercial: 0°C to +70°C	
Operating Temperature	Industrial: -40°C to +85°C	
Storage Temperature	-40°C to +85°C	
Humidity	40°C, Operation: 90% RH, Storage: 93% RH	
Physical		
Length	50.80 mm	
Width	29.85 mm	
Height	3.95 mm	

¹Endurance is directly related to the User Specific Workload.

SSMART Modular Technologies

For more information, please visit: www.smartm.com

*Product images are for promotional purposes only. Labels may not be representative of the actual product.

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Ordering Information

Part Number	Density		
M400 SATA mSATA SSD			
Commercial Operating Temperature (0°C to +70°C)			
SRMST1920FCM2AJ1	1920GB		
SRMST960GFCM2AJ1	960GB		
SRMST480GFCM2AJ1	480GB		
SRMST240GFCM2AJ1	240GB		
M400 SATA mSATA SSD			
Industrial Operating Temperature (-40°C to +85°C)			
SRMST1920FIM2AJ1	1920GB		
SRMST960GFIM2AJ1	960GB		
SRMST480GFIM2AJ1	480GB		
SRMST240GFIM2AJ1	240GB		