

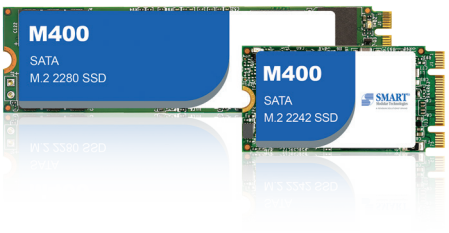
M400 | SATA | M.2 2242 & 2280 SSDs

SMART Modular's M400 SATA M.2 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.

In addition, M400 SATA M.2 2280 SSDs incorporate SMART's SafeDATA™ power-loss, data-protection technology for graceful handling of power fluctuations and sudden power loss events.

3D TLC



Features & Benefits

- 1 DWPD For Five Years
- SEU Mitigation
- SMART's Proprietary NVMSentry Firmware
- SafeDATA Power-Loss, Data-Protection Technology (M.2 2280)
- 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

- AI
- HPC
- Medical
- Surveillance

Product Family Overview

Form Factor	Capacity	Sequential Performance
2.5" SSD	240GB to 3840GB	Up to 540MB/s Read Up to 520MB/s Write
M.2 2242 SSD	240GB to 1920GB	
M.2 2280 SSD	240GB to 3840GB	
mSATA SSD	240GB to 3840GB	
Slim SATA SSD	240GB to 3840GB	

Specifications

	M.2 2242 SSD	M.2 2280 SSD
NAND Type	eTLC	
Performance		
Host Interface Rate (maximum)	SATA 3.0 6Gb/s	
Capacities	240GB to 1920GB	240GB to 3840GB
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	
Endurance (JEDEC Enterprise Workload)[1]	1920GB: 4237 TBW 960GB: 2114 TBW 480GB: 920 TBW 240GB: 471 TBW	3840GB: 7100 TBW 1920GB: 4237 TBW 960GB: 2114 TBW 480GB: 920 TBW 240GB: 471 TBW
DWPD	1	
SafeDATA	-	Optional
Error Correction	LDPC	
Data Security		
Encryption	AES-256, TCG OPAL 2.0	
Power		
Input Voltage	VCC: 3.3 V ± 5%	
Environmental		
Shock	1500 g half-sine, 0.5 msec, 1 shock along each axis, X, Y, Z in each direction	
Vibration	20G rms 80-2000Hz, 1.52mm 20-80Hz, 3 axis	
Operating Temperature	Commercial: 0°C to +70°C Industrial: -40°C to +85°C	
Storage Temperature	-40°C to +85°C	
Humidity	40°C, Operation: 90% RH, Storage: 93% RH	
Physical		
Length	42.0 mm	80.0 mm
Width	22.0 mm	22.0 mm
Height	3.65 mm	3.65 mm

[1]Endurance is directly related to the User Specific Workload.

Ordering Information

Part Number	Density
M400 | SATA | M.2 2242 SSD Commercial Operating Temperature (0°C to +70°C)	
SRM241920FCM2AJ1	1920GB
SRM24960GFCM2AJ1	960GB
SRM24480GFCM2AJ1	480GB
SRM24240GFCM2AJ1	240GB
M400 | SATA | M.2 2242 SSD Industrial Operating Temperature (-40°C to +85°C)	
SRM241920FIM2AJ1	1920GB
SRM24960GFIM2AJ1	960GB
SRM24480GFIM2AJ1	480GB
SRM24240GFIM2AJ1	240GB
M400 | SATA | M.2 2280 SSD Commercial Operating Temperature (0°C to +70°C)	
SRM283840FCM2AJ1	3840GB
SRM281920FCM2AJ1	1920GB
SRM28960GFCM2AJ1	960GB
SRM28480GFCM2AJ1	480GB
SRM28240GFCM2AJ1	240GB
M400 | SATA | M.2 2280 SSD Industrial Operating Temperature (-40°C to +85°C)	
SRM283840FIM2AJ1	3840GB
SRM281920FIM2AJ1	1920GB
SRM28960GFIM2AJ1	960GB
SRM28480GFIM2AJ1	480GB
SRM28240GFIM2AJ1	240GB
M400 | SATA | M.2 2280 SSD (SafeDATA) Commercial Operating Temperature (0°C to +70°C)	
SRM283840F1M2AJ1	3840GB
SRM281920F1M2AJ1	1920GB
SRM28960GF1M2AJ1	960GB
SRM28480GF1M2AJ1	480GB
SRM28240GF1M2AJ1	240GB
M400 | SATA | M.2 2280 SSD (SafeDATA) Industrial Operating Temperature (-40°C to +85°C)	
SRM283840F2M2AJ1	3840GB
SRM281920F2M2AJ1	1920GB
SRM28960GF2M2AJ1	960GB
SRM28480GF2M2AJ1	480GB
SRM28240GF2M2AJ1	240GB

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

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