M400 | SATA | 2.5" SSD

SMART Modular's M400 SATA 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.

In addition, M400 SATA 2.5" SSDs incorporate SMART's SafeDATA™ power-loss, data-protection technology for graceful handling of power fluctuations and sudden power loss events.

Features & Benefits

- 1 DWPD For Five Years
- SEU Mitigation
- SMART's Proprietary NVMSentry Firmware
- SafeDATA Power-Loss, Data-Protection Technology
- 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
- Data Center
- Industrial
- Networking
- Surveillance

Product Family Overview

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

Specifications

	M400 | SATA | 2.5" 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
Endurance (JEDEC Enterprise Workload)[1]	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: 5 V ± 10%
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	100.45 mm
Width	69.85 mm
Height	7 mm

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

Ordering Information

Part Number	Density
M400 | SATA | 2.5" SSD **Commercial Operating Temperature (0°C to +70°C)**	
SRS251920FCM2AJ1	1920GB
SRS25960GFCM2AJ1	960GB
SRS25480GFCM2AJ1	480GB
SRS25240GFCM2AJ1	240GB
M400 | SATA | 2.5" SSD **Industrial Operating Temperature (-40°C to +85°C)**	
SRS251920FIM2AJ1	1920GB
SRS25960GFIM2AJ1	960GB
SRS25480GFIM2AJ1	480GB
SRS25240GFIM2AJ1	240GB
M400 | SATA | 2.5" SSD (SafeDATA) **Commercial Operating Temperature (0°C to +70°C)**	
SRS251920F1M2AJ1	1920GB
SRS25960GF1M2AJ1	960GB
SRS25480GF1M2AJ1	480GB
SRS25240GF1M2AJ1	240GB
M400 | SATA | 2.5" SSD (SafeDATA) **Industrial Operating Temperature (-40°C to +85°C)**	
SRS251920F2M2AJ1	1920GB
SRS25960GF2M2AJ1	960GB
SRS25480GF2M2AJ1	480GB
SRS25240GF2M2AJ1	240GB

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

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