ME2 │ SATA │ 2.5" SSD

SMART's ME2 SATA 2.5" SSDs incorporate the latest generation 3D NAND-technology and SMART Modular's proprietary NVMSentry™ firmware to deliver high performance SSD products with endurance up to one drive writes per day (1 DWPD) for five years. The new ME2 SSDs offer better cost per bit over previous 64-layer and 96-layer NAND generations without sacrificing performance and reliability. Further optimization of the NVMSentry firmware also yields enhancements in read and write consistency over wide ranges of application workloads.

SMART's ME2 SATA 2.5" SSDs are available in both industrial and commercial temperature grades and have versions that implement SMART's SafeDATA™ power-loss, data-protection technology for graceful handling of power fluctuations and sudden power loss events.

Features & Benefits

- The Latest Generation 3D NAND Technology
- Quality of Service (QoS) with 3 Nines of Latency Consistency
- 1 DWPD For Five Years
- SEU Mitigation
- SMART's Proprietary NVMSentry Firmware
- SafeDATA Power-Loss, Data-Protection Technology
- 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 460MB/s Write
Slim SATA SSD	240GB to 1920GB	

Specifications

	ME2 | 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 460 MB/s
Random Read (maximum)	Up to 77K IOPS
Random Write (maximum)	Up to 70K IOPS
Reliability	
MTBF	> 2,000,000 hours
Endurance (JEDEC Enterprise Workload)[1]	1920GB: 3755 TBW 960GB: 2275 TBW 480GB: 1015 TBW 240GB: 510 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
ME2 | SATA | 2.5" SSD **Commercial Operating Temperature (0°C to +70°C)**	
SRS251920FCM2BC4	1920GB
SRS25960GFCM2BC4	960GB
SRS25480GFCM2BC4	480GB
SRS25240GFCM2BC4	240GB
ME2 | SATA | 2.5" SSD **Industrial Operating Temperature (-40°C to +85°C)**	
SRS251920FIM2BC4	1920GB
SRS25960GFIM2BC4	960GB
SRS25480GFIM2BC4	480GB
SRS25240GFIM2BC4	240GB
ME2 | SATA | 2.5" SSD (SafeDATA) **Commercial Operating Temperature (0°C to +70°C)**	
SRS251920F1M2AC4	1920GB
SRS25960GF1M2AC4	960GB
SRS25480GF1M2AC4	480GB
SRS25240GF1M2AC4	240GB
ME2 | SATA | 2.5" SSD (SafeDATA) **Industrial Operating Temperature (-40°C to +85°C)**	
SRS251920F2M2AC4	1920GB
SRS25960GF2M2AC4	960GB
SRS25480GF2M2AC4	480GB
SRS25240GF2M2AC4	240GB
ME2 | SATA | 2.5" SSD (SEU Mitigation) **Commercial Operating Temperature (0°C to +70°C)**	
SRS251920FCM2CC4	1920GB
SRS25960GFCM2CC4	960GB
SRS25480GFCM2CC4	480GB
SRS25240GFCM2CC4	240GB
ME2 | SATA | 2.5" SSD (SEU Mitigation) **Industrial Operating Temperature (-40°C to +85°C)**	
SRS251920FIM2CC4	1920GB
SRS25960GFIM2CC4	960GB
SRS25480GFIM2CC4	480GB
SRS25240GFIM2CC4	240GB

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SRS251920F1M2CC4	1920GB
SRS25960GF1M2CC4	960GB
SRS25480GF1M2CC4	480GB
SRS25240GF1M2CC4	240GB
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SRS25240GF2M2CC4	240GB

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

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