

Storage Solutions

XceedLite 2.5

MEMORY • FLASH • STORAGE • DISPLAYS • EMBEDDED



XceedLite 2.5" Storage Products

SMART Modular Technologies' industrial grade XceedLite2 2.5" solid state drives (SSDs) bring the advantages of non-volatile memory to embedded computing applications. Available with a SATA or PATA interface, the XceedLite2 SSDs provide low-power, high reliability, solid state storage in a 2.5" form factor and can be used as a direct replacement for a hard disk drive.

Available in capacities ranging from 1GB to 64GB, the XceedLite2 SSDs typically requires less than 1W at all densities. Low power requirements make the XceedLite2 SSDs well suited for mobile applications, where power savings can result in longer battery life. In fixed applications, lower power dissipation can also reduce the need and cost of cooling in blade server or server environments.

Featuring sustained throughputs of up to 72MB/s read and 55MB/s write, the XceedLite2 SSDs are well suited for use in embedded applications, such as medical devices, transportation systems, ruggedized mobile computing, and as the operating system boot drive in a wide range of embedded applications.

Industrial Grade Storage Solution

An industrial grade storage solution, the XceedLite2 SSDs support industrial temperature ranges (-40°C to 85°C) and leverage advanced on-board error detection and correction algorithms and static wear leveling to ensure years of reliable operation. By using only single-level cell (SLC) NAND flash technology, the industrial grade XceedLite2 SSDs offer higher performance and increased reliability over other technologies. The XceedLite2 SSDs come with a 3-year limited warranty.

The XceedLite2 SSDs are part of SMART's growing storage products portfolio of industrial grade SSD solutions. With a wide range of densities, performance, power requirements and interfaces, SMART storage products meet the needs of the most demanding applications.

Visit www.smartm.com for more storage products from SMART.

	Capacity (GB)	Performance (Sustained)
XceedLite2 2.5" SATA-II SSDs		
2.5" SATA-II	4, 8, 16, 32, 64	72MB/s Read 55MB/s Write
XceedLite2 2.5" PATA SSDs		
2.5" PATA	1, 2, 4, 8, 16, 32, 64	40MB/s Read 23MB/s Write

- Typically requires less than 1W active power at all densities
- Up to 72MB/s sustained read, 55MB/s write
- Available in industrial (-40°C to 85°C) operating temperature range
- Advanced flash management for enhanced reliability



	XceedLite 2 2.5" SATA	XceedLite 2 2.5" PATA
	(Preliminary)	
Performance		
Burst (MB/s)	300	100
Sustained (MB/s)	Up to 72/55MB/s R/W	Up to 40/23MB/s R/W
Capacity		
Min	4GB	1GB
Max	64GB	64GB
Reliability		
MTBF	1,550,969 hrs ¹	> 1,900,000 hrs ¹
Data Reliability	1 in 10 ¹⁴ bits read	
Data Retention	10 years @ 25°C	
Endurance	> 260 years @200GBytes/day write cycles, unlimited reads ²	
Power		
Input Voltage	5V +/- 5%	
Idle (Typ)	0.52 W	0.05 W
Operational (Typ)	0.945W (Read), 0.955 W (Write)	0.75 W (Read), 0.75W (Write)
Environmental		
Operating Temp	Commercial (0°C to 70°C), Industrial (-40°C to 85°C)	
Operating Shock ³	50g half-sine, 11msec, 3 shocks along each axis, X, Y, Z, in each direction	
Vibration ³	15g peak to peak	
Altitude ³ (ft)	80,000 (24,384 m)	
Relative Humidity ³	5% to 95% non-condensing, RH	
Conformal Coating	Not Available	
Storage Temp	-55°C to 95°C	
Physical		
Form Factor	2.5"	
Length (mm)	101.9	100.3
Width (mm)	69.85	69.9
Height (mm)	9.5	6.1
Connector	3Gb/s SATA-II	44-pin PATA

¹ Based on the RDF2000 UTE C80-810 Telecom Standard at 25°C

² Based on 64GB Drive

³ Based on MIL-STD-810F

Part Number	Capacity (GB)	Interface
XceedLite2 - 2.5" SATA SSD		
SG9STL2B4GA01y	4	3Gb/s SATA-II
SG9STL2B8GB01y	8	3Gb/s SATA-II
SG9STL2B16GB01y	16	3Gb/s SATA-II
SG9STL2B32GB01y	32	3Gb/s SATA-II
SG9STL2B64GB01y	64	3Gb/s SATA-II
XceedLite2 - 2.5" PATA SSD		
SG9IDE2F1GPHA4y	1	PATA
SG9IDE2F2GPHADy	2	PATA
SG9IDE2F4GPHACy	4	PATA
SG9IDE2F8GPHABy	8	PATA
SG9IDE2F16GPHABy	16	PATA
SG9IDE2F32GPHABy	32	PATA
SG9IDE2F64GPHABy	64	PATA

y (temperature)

y = null (0°C to 70°C, Commercial),

y = I (-40°C to 85°C, Industrial)