

# SMART's 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-II 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 designed 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](http://www.smartm.com) for more storage products from SMART.

## XCEEDLITE Product Family At-A-Glance

	Capacity (GB)	Performance (Sustained)
<b>XceedLite2 2.5" SATA</b>		
2.5" SATA-II	4, 8, 16, 32, 64	72MB/s Read 55MB/s Write
<b>XceedLite2 2.5" PATA</b>		
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
- Self-Monitoring Analysis and Reporting Technology (S.M.A.R.T.) support



	XceedLite 2 2.5" SATA	XceedLite 2 2.5" PATA
<b>Performance</b>		
Burst (MB/s)	300	100
Sustained (MB/s)	Up to 72/55MB/s R/W	Up to 40/23MB/s R/W
<b>Capacity</b>		
Min	4GB	1GB
Max	64GB	64GB
<b>Reliability</b>		
MTBF	1,550,969 hrs <sup>1,2</sup>	> 1,900,000 hrs <sup>1,2</sup>
Data Reliability	1 in 10 <sup>14</sup> bits read	
Data Retention	10 years @ 25°C	
Endurance	> 260 years @200GBytes/day write cycles, unlimited reads <sup>2</sup>	
<b>Power</b>		
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)
<b>Environmental</b>		
Operating Temp	Commercial (0°C to 70°C), Industrial (-40°C to 85°C)	
Operating Shock <sup>3</sup>	50g half-sine, 11msec, 3 shocks along each axis, X, Y, Z, in each direction	
Vibration <sup>3</sup>	16.4g rms, 10-2000 Hz, 3-axes	
Altitude <sup>3</sup> (ft)	80,000 (24,384 m)	
Relative Humidity <sup>3</sup>	5% to 95% non-condensing, RH	
Conformal Coating	Not Available	
Storage Temp	-55°C to 95°C	
<b>Physical</b>		
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
<b>XceedLite2 - 2.5" SATA SSD</b>		
SG9STL2B4GDz02	4	3Gb/s SATA-II
SG9STL2B8GCz02	8	3Gb/s SATA-II
SG9STL2B16GBz02	16	3Gb/s SATA-II
SG9STL2B32GBz02	32	3Gb/s SATA-II
SG9STL2B64GBz02	64	3Gb/s SATA-II
<b>XceedLite2 - 2.5" PATA SSD</b>		
SG9IDE2F1GPHA4z	1	PATA
SG9IDE2F2GPHADz	2	PATA
SG9IDE2F4GPHACz	4	PATA
SG9IDE2F8GPHABz	8	PATA
SG9IDE2F16GPHABz	16	PATA
SG9IDE2F32GPHABz	32	PATA
SG9IDE2F64GPHABz	64	PATA

z (temperature)

z = null (0°C to 70°C, Commercial),

z = I (-40°C to 85°C, Industrial)

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