

SMART's Storage Solutions

XceedUltra 2.5"

XceedUltra Storage Products

SMART Modular Technologies' industrial grade XceedUltra2 solid state drives (SSDs) deliver industry-leading performance, low power, high reliability and high capacity in a 2.5" and 3.5" form factors. Optimized for high-throughput data transfers, the XceedUltra2 SSDs are ideal for applications within the server, enterprise, and storage markets, such as video-on-demand (VoD), storage cache, and other data-intensive storage applications.

The XceedUltra2 SATA-II SSD delivers industry-leading sustained read/write performance of up to 135MB/s and 105MB/s, respectively, while operating with low power consumption (typically less than 2W in active mode). The XceedUltra2 SSD is a native SATA-II drive featuring a 3Gb/s maximum interface transfer rate and native command queuing (NCQ) support. The XceedUltra2 SSD also comes in a 3.5" SCSI configuration.

Industrial Grade Storage Solution

Designed to industrial grade specifications, the XceedUltra2 SSDs leverage advanced on-board error detection and correction algorithms, combined with static wear-leveling techniques, to ensure years of reliable operation. By using only single-level cell (SLC) NAND Flash technology, SMART increases the reliability and speed of the XceedUltra2 SSDs. SMART's industrial grade XceedUltra2 SSDs are available in both commercial (0°C to +70°C) and industrial (-40°C to +85°C) operating temperature ranges.

The XceedUltra2 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 additional information about SMART Storage Products.

XCEEDULTRA Product Family At-A-Glance

	Capacity (GB)	Performance (Sustained)
XceedUltra2		
2.5" SATA II	8, 16, 32, 64	135MB/s Read 105MB/s Write
3.5" SCSI (68- and 80-pin)	8, 16, 32, 64	55MB/s Read 50MB/s Write

Features

- **Low power – less than 2W in active mode**
- **Sustained throughput up to 135MB/s read, 105MB/s write**
- **Native SATA-II interface**
- **Industrial grade storage solution for demanding applications**
- **Advanced flash management for enhanced reliability and durability**



Specifications

	XceedUltra2	
	2.5" SATA II	3.5" SCSI (Preliminary)
Performance		
Burst (MB/s)	Up to 3Gb/s	
Sustained (MB/s)	135MB/s Read, 105MB/s Write	55MB/s Read, 50MB/s Write
Capacity		
Min	8GB	
Max	64GB	
Reliability		
MTBF	1,550,969 hrs ^{1,3}	1,550,969 hrs ^{1,4}
Data Reliability	1 in 10 ¹⁴ bits read	
Data Retention	> 10 years	
Endurance	> 260 years (@ 200GB/day write/erase cycles ¹)	
Power		
Input Voltage	5V +/- 5%	
Idle	1.25W (typ)	4.0W (max)
Operational	2 W Read, 2.2W Write (typ)	7.0W (max)
Environmental		
Operating Temp	Commercial (0°C to 70°C), Industrial (-40°C to 85°C)	
Operating Shock ²	50g half-sine, 11ms, 3 shocks along each axis, X, Y, Z, in each direction	
Vibration ²	16.4g rms ⁵	10.3g rms ⁵
Altitude ² (ft)	80,000 (24,384m)	
Relative Humidity ²	5% to 95% non-condensing	
Conformal Coating	Not Available	
Storage Temp	-55°C to 95°C	
Physical		
Form Factor	2.5"	3.5"
Length (mm)	101.9	146.6
Width (mm)	69.85	101.7
Height (mm)	9.5	25.53
Connector	3Gb/s SATA-II	68- or 80-pin SCSI, LVD and SE

¹ Based on 64GB Drive

² Based on MIL-STD-810F

³ Based on the RDF2000 UTE C80-810 Telecom Standard at 25°C

⁴ Based on Telcordia, Ground Benign Controlled at 25°C

⁵ 10-2000 Hz, 3 axes

Ordering Information

Part Number	Capacity (GB)	Interface
XceedUltra2 2.5" SATA		
SG9SAT2E8GDz01	8	3Gb/s SATA-II
SG9SAT2E16GCz01	16	3Gb/s SATA-II
SG9SAT2E32GBz01	32	3Gb/s SATA-II
SG9SAT2E64GBz01	64	3Gb/s SATA-II
XceedUltra2 3.5" SCSI		
S35FCU-8GzyyN	8	SCSI
S35FCU-16GzyyN	16	SCSI
S35FCU-32GzyyN	32	SCSI
S35FCU-64GzyyN	64	SCSI

z (temperature)

z = null (0°C to 70°C, Commercial) (SG9 only)

z = C (0°C to 70°C, Commercial) (S35FCU only)

z = I (-40°C to 85°C, Industrial)

yy (pin configuration)

01 = 68 Pins

02 = 80 Pins



Corporate Headquarters

39870 Eureka Dr.
Newark CA 94560
Tel: (+1) 800-956-7627
Tel: (+1) 510-623-1231
Fax: (+1) 510-623-1434
Email: info@smartm.com

Customer Service

Tel: (+1) 978-805-2100
Fax: (+1) 978-805-2357
Email: customers@smartm.com

Latin America

Tel: (+55) 11 4417-7200
Fax: (+55) 11 4417-7219
Email: sac@smartm.com

Europe

Phone: (+33) 1 43 54 58 80
Fax: (+33) 1 43 26 64 81
Email: euro.sales@smartm.com

Asia/Pacific

Phone: (+65) 6232-2858
Fax: (+65) 6232-2300
Email: infoasia@smartm.com



www.smartm.com