

Storage Solutions

XceedUltra 2.5"

MEMORY • FLASH • STORAGE • DISPLAYS • EMBEDDED

XceedUltra Storage Products

SMART Modular Technologies' industrial grade XceedUltra2 is a native SATA-II solid state drive (SSD) which delivers industry-leading performance, low power, high reliability and high capacity in a 2.5" form factor. Optimized for high-throughput data transfers, the XceedUltra2 SSD is 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 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.

Industrial Grade Storage Solution

Designed to industrial grade specifications, the XceedUltra2 SSD leverages 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 SSD. SMART's industrial grade XceedUltra2 SSD is available in both commercial (0°C to +70 °C) and extended (-25 °C to +75 °C) operating temperature ranges.

The XceedUltra2 SSD is 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

- **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	
Performance	
Burst (MB/s)	Up to 3Gb/s
Sustained (MB/s)	135MB/s Read, 105MB/s Write
Capacity	
Min	8GB
Max	64GB
Reliability	
MTBF	1,550,969 hrs ^{1,3}
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 (typical)	1.25 W
Operational (typical)	2W Read, 2.2W Write
Environmental	
Operating Temp	Commercial (0°C to 70°C), Extended (-25°C to 75°C)
Operating Shock ²	50g half-sine, 11ms, 3 shocks along each axis, X, Y, Z, in each direction ³
Vibration ²	16.4g rms, 10-2000 Hz, 3-axes ³
Altitude ² (ft)	80,000 (24,384 m)
Relative Humidity ²	5% to 95% non-condensing
Conformal Coating	Not Available
Storage Temp	-55°C to 95°C
Physical	
Form Factor	2.5"
Length (mm)	101.9
Width (mm)	69.85
Height (mm)	9.5
Connector	3Gb/s SATA-II

1 Based on 64GB Drive

2 Based on MIL-STD-810F

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

Ordering Information

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

z (temperature)

z = null (0°C to 70°C, Commercial),

z = I (-40°C to 85°C, Industrial)