

Storage Solutions

XceedUltraX

MEMORY • FLASH • STORAGE • DISPLAYS • EMBEDDED

XceedUltraX Storage Products

SMART Modular Technologies' XceedUltraX 2.5" Serial ATA (SATA) and Parallel ATA (PATA) solid state drives (SSDs) deliver high-performance and large capacity storage solutions. Optimized for embedded applications, these drives are ideal for applications found in aerospace, industrial automation, transportation, medical, defense and telecommunication industries. Additionally, applications also benefit from the high-reliability, durability and ruggedness of SMART's "true" industrial-grade SSD products.

Powered by the patent-pending ArrayPro™ Technology, XceedUltraX SSD products provide sustained read/write performance to meet the needs of high throughput applications such as flight data recorders, medical image capture, traffic surveillance and other video streaming.

SMART's 2.5" flash SSDs are available with SATA or PATA interfaces for easy integration into your applications. XceedUltraX SSD products are more reliable, offer superior performance, and require less power and cooling than hard disk drives (HDDs). Additionally, SMART's "true" industrial-grade SSDs are superior to traditional SSDs and HDDs in terms of ruggedness, resistance to shock and vibration, and environmental resilience – critical factors in many embedded applications.

True Industrial Grade

SMART's "true" industrial-grade XceedUltraX SSDs are set apart from the competition by rigorous verification and testing steps taken in all aspects of the product life cycle. During design phase, SMART implements failure mode and effects analysis (FMEA) procedures and qualifies all components to industrial standards. The design verification stage includes thorough design verification testing, HALT testing, environmental testing on operational devices and regulatory compliance certification. During manufacture, each individual drive is tested, including an 8-hour temperature burn-in test, to eliminate early device failure in the field. Finally, ongoing quality assurance methods, such as beta testing and closed-loop corrective action through failure analysis procedures, are standard business practices.

When high reliability, environmental durability, and advanced performance are part of your application requirements, look to SMART's "true" industrial-grade products for your storage solutions.

Product Family At-A-Glance

	Capacity (GB)	Performance (Sustained)
XceedUltraX		
2.5" SATA	32, 64, 128	70MB/s Read 55MB/s Write
2.5" PATA		
XceedUltraX2 (Preliminary)		
2.5" SATA	32, 64, 128	100MB/s Read 74MB/s Write

- **Highest SLC NAND flash capacity in a 9.5 mm height form factor**
- **Powered by ArrayPro performance engine**
- **True industrial grade storage solution for demanding applications**
- **Advanced flash management for enhanced reliability and durability**



Specifications

Ordering Information

	XceedUltraX		XceedUltraX2 2.5" SATA
	2.5" SATA	2.5" PATA	
Performance			
Burst (MB/s)	300MB/s R/W	100MB/s R/W	300MB/s R/W
Sustained (MB/s)	Up to 70/55MB/s R/W		Up to 100/74 MB/s R/W
Capacity			
Min	32GB		
Max	128GB		
Reliability			
MTBF	1,300,000 hrs (Based on Telcordia, Ground Benign, Controlled at 25°C) ¹		
Data Reliability	1 in 10 ¹⁴ bits read		
Data Retention	> 10 years		
Endurance	> 260 years (@ 200GB/day write/erase cycles, 64GB drive)		
Power			
Input Voltage	5V +/- 5%		
Idle (max)	1.4W	1.1W	4.3W
Operational (max)	3.9W	3.3W	5W
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 ³		
Vibration ²	16.4g rms, 10-2000 Hz random, 3-axes ³		
Altitude ² (ft)	80,000 (24,384 m)		
Relative Humidity ²	5% to 95% non-condensing		
Conformal Coating	Optional		
Storage Temp	-55°C to 95°C		
Physical			
Form Factor	2.5"		
Length (mm)	100.2		
Width (mm)	69.85		
Height (mm)	9.5		
Connector	3Gb/s SATA	44-pin, 2mm	3Gb/s SATA

¹ Based on 32GB Drive

² Based on MIL-STD-810F

³ Tested on 128GB Drive

ArrayPro is a trademark and EraSure is a registered trademark of Adtron Corporation. Adtron is the SSD Storage Products business and a wholly-owned subsidiary of SMART Modular Technologies. Learn more at www.adtron.com

Part Number	Capacity (GB)	Interface
XceedUltraX - 2.5" SSD with ArrayPro Technology		
A25FB-32Gtc30N	32	3Gbps SATA
A25FB-64Gtc30N	64	3Gbps SATA
A25FB-128Gtc30N	128	3Gbps SATA
I25FB-32Gtc30N	32	PATA
I25FB-64Gtc30N	64	PATA
I25FB-128Gtc30N	128	PATA
XceedUltraX2 - 2.5" SSD with ArrayPro Technology		
A25FBX-32Gtc33N	32	3Gbps SATA
A25FBX-64Gtc33N	64	3Gbps SATA
A25FBX-128Gtc33N	128	3Gbps SATA

t (temperature)

t = C (0°C to 70°C, Commercial),

t = I (-40°C to 85°C, Industrial)

c (conformal coating)

c = blank (no conformal coating),

c = C (with conformal coating)