

2.5" SSD

Targeted Product Portfolio, Engineered Specifically for Your Mission Critical Applications



Key Features

- MCU-based Power Loss Protection Design with Level 4 (data-in-flight) protection*
- Self Encrytion Drive SED with AES 256-bit Encryption, TCG OPAL 2.0*
- NSA-compliant Secure Erase*
- MIL-STD-810G standards*

* May vary by product and project support

ATP's shock/vibration-resistant industrial 2.5" SSDs are encased in durable enclosures for outstanding performance in challenging environments. The convenient 2.5" form factor and SATA III interface allow easy integration into SATA-based systems, while unique ATP technologies ensure extended endurance for long years of dependable use.

Power Loss Protection Design technology options combines hardware and/or firmware solutions to ensure that data is preserved and protected during a sudden power failure. The MCU design also protects the storage device from damage by allowing the power loss protection (PLP) to intelligently manage power challenges such as inrush current, input overvoltage, incorrect cache flushing and more.

ATP's 2.5" SSDs comply with US National Security Agency (NSA) and MIL-STD-810G standards. They support the S.M.A.R.T. ATA feature set and Advanced Wear Leveling algorithm for enhanced endurance.

Technologies & Add-On Services	S.M.A.R.T.	Hardware-based Power Loss Protection	Advanced Wear Leveling	AutoRefresh	Dynamic Data Refresh	Secure Erase	Industrial Temperature	Anti-Sulfur Resistors	Conformal Coating
Premium	•	•	•	•	•	•	•	Δ	Δ
Superior	•	•	•	•	•	•	Δ	Δ	Δ
	•		•	•	•				

Δ: Customization option available on a project basis.

Specifications

2.5" SSD								
Product Line		A800Pi	А700Рі	A600Si	A600Sc			
Interface		SATA III 6 Gb/s						
Flash Type		SLC	Pseudo SLC	Pseudo SLC MLC				
Form Factor		2.5"						
Operating	Operating Temperature (Tcase) ¹		o 85°C	-40°C to 85°C	0°C to 70°C			
Power Lo	Power Loss Protection Options		Hardware + Firmware Based or Firmware Based					
Optio	onal SED Features			AES 256-bit Encryption, TCG Opal 2.0				
	Capacity	8 GB to 256 GB	80 GB to 640 GB	64GB				
	Performance							
	Sequential Read (MB/s) up to	520	560	440				
Performance	Sequential Write (MB/s) up to	420	520	8	0			
	Random Read IOPS (4K, QD32) up to	76,000	95,000	38,400				
	Random Writes IOPS (4K, QD32) up to		86,000	19,900				
Endur	Endurance and Reliability							
Endu	rance (TBW)2 up to	21,333 TB	25,600 TB	145.5 TB	174.6 TB			
Reliat	pility MTBF @ 25°C	>2,000,000 hours						
Data l	Data Retention @ 30°C ³		5 years (with 10% P/E cycle)	5 years (with 10% P/E cycle)				
Reliabilit	Reliability Number of Insertions		10,000 minimum					
	Others							
Power Consumption		5V Input Power						
Dimensions: L x W x H (mm)		100 x 69.9 x 9.2	100 x 69.9 x 7/9.2	100 x 69.9 x 9.2				
Certifications		CE, FCC	CE, FCC,BSMI,RoHS, REACH	II,RoHS, REACH CE, FCC				
Warranty		5 y	rears	2 years				

Product Line		A600Si	A600Si A600Sc				
Interface		SATA III 6 Gb/s					
Flash Type		3D TLC					
	Form Factor		2.5"				
Operating	Operating Temperature (Tcase) ¹		-40°C to 85°C				
Power Lo	ss Protection Options	Hardware + Firmware Based or Firmware Based					
Optio	onal SED Features	AES 256-bit Encryption, TCG Opal 2.0					
	Capacity	120 GB to 1920 GB		32 GB to 512 GB			
	Performance						
	Sequential Read (MB/s) up to	560		560			
Performance	Sequential Write (MB/s) up to	500		440			
	Random Read IOPS (4K, QD32) up to	100,000		72,000			
	Random Writes IOPS (4K, QD32) up to	91,000		85,000			
Endura	ance and Reliability						
Endur	Endurance (TBW) ² up to		5,585 TB				
Reliab	Reliability MTBF @ 25°C		>2,000,000 hours				
Data F	Data Retention @ 30°C³		5 years (with 10% P/E cycle)				
Reliability	y Number of Insertions	10,000 minimum					
Others							
Power Consumption		5V Input Power					
Dimensions: L x W x H (mm)		100 x 69.9 x 7/9.2		100 x 69.9 x 7			
Certifications		CE, FCC,BSMI,RoHS, REACH		CE, FCC			
Warranty		2 years					

PRODUCT FLYER | 2.5" SSD

¹ Case Temperature, the composite temperature as indicated by SMART temperature attributes. ² Under highest Sequential write value. May vary by density, configuration and applications. ³ Data retention value may vary across different temperature ranges. It is based on experimental results and should be used only for reference.

Hot Items Ordering Information						
Product Line	Capacity ₁	Operating Temperature ₂	Power Loss Protection ₃	SED ₄	P/N	
A800Pi	8GB	-40°C to 85°C	Hardware + Firmware Based	-	AF8GSSCJ-VACXP	
A800Pi	16GB	-40°C to 85°C	Hardware + Firmware Based	-	AF16GSSCJ-VACXP	
A800Pi	32GB	-40°C to 85°C	Hardware + Firmware Based	-	AF32GSSCJ-VACXP	
A800Pi	64GB	-40°C to 85°C	Hardware + Firmware Based	-	AF64GSSCJ-VACXP	
A800Pi	128GB	-40°C to 85°C	Hardware + Firmware Based	-	AF128GSSCJ-VACXP	
A800Pi	256GB	-40°C to 85°C	Hardware + Firmware Based	-	AF256GSSCJ-VACXP	
A600Si	120GB	-40°C to 85°C	Hardware + Firmware Based	-	AF120GSTCJ-7BAIP	
A600Si	240GB	-40°C to 85°C	Hardware + Firmware Based	-	AF240GSTCJ-7BAIP	
A600Si	480GB	-40°C to 85°C	Hardware + Firmware Based	-	AF480GSTCJ-7BAIP	
A600Si	960GB	-40°C to 85°C	Hardware + Firmware Based	-	AF960GSTCJ-7BAIP	
A600Si	1.92TB	-40°C to 85°C	Hardware + Firmware Based	-	AF1T92STCJ-7BAIP	
A600Sc	120GB	0°C to 70°C	Hardware + Firmware Based	-	AF120GSTCJ-7BAXP	
A600Sc	240GB	0°C to 70°C	Hardware + Firmware Based	-	AF240GSTCJ-7BAXP	
A600Sc	480GB	0°C to 70°C	Hardware + Firmware Based	-	AF480GSTCJ-7BAXP	
A600Sc	960GB	0°C to 70°C	Hardware + Firmware Based	-	AF960GSTCJ-7BAXP	
A600Sc	1.92TB	0°C to 70°C	Hardware + Firmware Based	-	AF1T92STCJ-7BAXP	
A600Vc	32GB	0°C to 70°C	Firmware Based	_	AF32GSTCJ-2BAXX	
A600Vc	64GB	0°C to 70°C	Firmware Based	-	AF64GSTCJ-2BAXX	
A600Vc	128GB	0°C to 70°C	Firmware Based	-	AF128GSTCJ-2BAXX	
A600Vc	256GB	0°C to 70°C	Firmware Based	-	AF256GSTCJ-2BAXX	
A600Vc	512GB	0°C to 70°C	Firmware Based	_	AF512GSTCJ-2BAXX	

Product spec and its related information are subject to change without advance notice. Please refer to www.atpinc.com for latest information

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¹ Amount of actual usable storage that can be utilize.
² Refers to Case Temperature range during device operation, as indicated by SMART temperature attributes.
³ Hardware + Firmware based power loss protection design with Level 4 (data-in-flight) protection; Firmware based power loss protection design with Level 1 (data-at-rest) protection.
⁴ Allows data written to and read from the SSD to be constantly and automatically encrypted and decrypted. Conforms to TCG Opal 2.0 and uses AES 256-bit HW encryption.