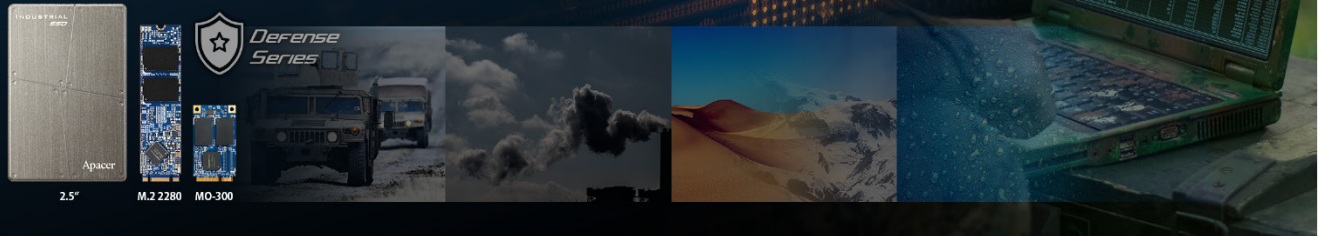


Industrial Rugged SSDs SV24D Defense Series

A complete Solution for Secure Data Protection and Extreme Environments.



SV24D Series

Product Features

- AES 256-bit Hardware Encryption
- Low-Density Parity-Check (LDPC) Code
- Over-provisioning
- DataRAID™
- DataDefender™
- SMART Read Refresh™

Security Features (optional)

- TCG Opal 2.0¹/Self Encrypting Drives (SEDs)
- Instant Keychange
- MIL Erase²
- Digital Destruction
- Write Protect

Implementation Methods (optional)

- Software command
- Hardware
 - Connector pin
 - Pin headers
 - Slide switch

SPECIFICATIONS

- Serial ATA Revision 3.2
- SATA 6 Gb/s interface
- ATA command set-4 (ACS-4)
- Backward compatible with SATA 1.5/3 Gb/s

	2.5"	M.2 2280	MO300
Configuration			
Capacity	120, 240, 480, 960, 1920GB		
NAND Flash Type	3D TLC		
Performance			
Sequential Read/Write (Max.)	560/495 MB/s		
4K Random Read/Write (Max.)	96,000/85,000 IOPS		
Reliability			
Endurance (Drive Writes Per Day: DWPD ³)(Max.)	Up to 3.25 DWPD at 1920GB		
MTBF	>5,000,000 hours		
Features (optional)			
<ul style="list-style-type: none"> • Thermal Throttling • Conformal Coating • Nano Coating • Sidefill • R-SATA • 30μ Gold Finger • Wide Temperature 			
Environment			
Operating Temperature	<ul style="list-style-type: none"> • Standard: 0°C to 70°C • Wide: -40°C to 85°C 		
Storage Temperature	-55°C to 100°C		
Power Requirement			
Supply Voltage	5.0 V ± 10%	3.3 V ± 5%	3.3 V ± 5%
Power Consumption⁴ (mA)			
Read	430 (rms)	660 (rms)	660 (rms)
Write	400 (rms)	615 (rms)	615 (rms)
Idle	70 (rms)	90 (rms)	90 (rms)
Peak	135 (rms)	280 (rms)	280 (rms)
Physical Characteristics			
Form Factor	2.5"	M.2 2280-D5-B-M	JEDEC MO-300
Dimensions (mm)	100.00 x 69.84 x 9.30	80.00 x 22.00 x 3.88	50.80 x 29.85 x 4.85

MIL-STD Environmental Test

Item	Test Methods
Shock	MIL-STD-202G, Condition A
	MIL-STD-883K, Condition B
Vibration	MIL-STD-810G, Method 514.6, Procedure I, Category 24
	MIL-STD-810G, Method 514.6, Procedure I, Category 7
Humidity	MIL-STD-810G, Method 507.5, Procedure II
High Temp.	MIL-STD-810G, Method 501.5, Procedure II
Low Temp.	MIL-STD-810G, Method 502.5, Method 501.5, Procedure II
Thermal Shock	MIL-STD-810G, Method 503.5, Procedure I-C
Altitude	MIL-STD-810G, Method 500.5, Procedure I
Salt Fog	MIL-STD-810G, Method 509.5, Procedure I
Radiation Test	MIL-STD-810G, Method 505.5, procedure II

1. TCG Opal 2.0 can only be triggered via software commands and cannot be implemented together with any of the other Security features.

2. Includes NSA9-12, DoD 5220.22-M, NSA Manual 130-2, USA-AF AFSSI 5020, USA-Army 380-19, USA Navy NAVSO P-5239-26, NISPOMSUP Chap 8, Sect. 8-501 and IREC (IRIG) 106.

3. DWPD (Drive Write Per Day) is calculated based on the number of times that user overwrites the entire capacity of an SSD per day of its lifetime during the warranty period.

4. The RMS value is measured with IOMeter 1GB Seq. Read/Write QD32/T1.