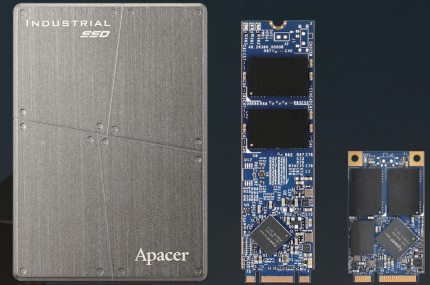


Defense Series SSD



Apacer knows that defense manufacturers have to meet some of the toughest standards for reliability in any industry. That's why we created our Defense SSD series. By default, all products in this series are tested to ensure they comply with humidity, altitude, thermal shock and thermal cycling tests. Our engineers carry out these tests at our factory in Taiwan using the latest equipment.

Military Test



Shock

MIL-STD-202G MIL-STD-883K

Vibration

MIL-STD-810G

Humidity

MIL-STD-810G Method 507.5

High/ Low Temp.

MIL-STD-810G Method 501.5
MIL-STD-810G Method 502.5

Thermal Shock

MIL-STD-810G Method 503.5 Procedure I-C

Altitude

MIL-STD-810G Method 500.6

Salt fog

MIL-STD-810G Method 509.5

Radiation Test

MIL-STD-810G Method 505.5 procedur 2

Defense SSD

Form Factor	2.5"	2.5"	M.2 2280	MO-300
Model Name	SS21D-25	SM23D-25	SM23D-M280	SM23D-300
NAND Flash Type	SLC	MLC	MLC	MLC
Capacity	32GB to 240GB	32GB to 1TB	32GB to 1TB	32GB to 512GB
Seq. R/W Performance (MB/sec)	530/445	560/510	560/510	560/510
IOPS R/W	76K	65K	63K	64K
AES-256	-	Yes	Yes	Yes
TCG Opal 2.0	-	Optional	Optional	Optional
Instant Keychange™	-	HW: Connector pin, pin headers; SW commands	HW: Connector pin; SW commands	HW: Switch, connector pin; SW commands
MIL Erase*	-	-	-	-
Digital Destruction	HW: Connector pin, pin headers; SW commands	HW: Connector pin, pin headers; SW commands	HW: Connector pin; SW commands	HW: Switch, connector pin; SW commands
Write Protect	-	-	-	-
30u Gold Finger	Optional	Optional	Optional	Optional
Sidefill	Optional	Optional	Yes	Yes
MTBF (hours)	5,000,000	5,000,000	5,000,000	5,000,000
Standard Operating Temperature (°C)	-40 ~ +85	-40 ~ +85	-40 ~ +85	-40 ~ +85
Storage Temperature (°C)	-55 ~ 100	-55 ~ 100	-55 ~ 100	-55 ~ 100

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