

SMART RUGGED SSD Product Comparison Chart

Rugged,
Reliable,
Secure
SSDs



	T5E	S5E	M4 & M4P	M1HC	M1 & M2
NAND Flash Type	3D TLC	SLC	MLC	MLC	MLC
Capacity Range	120GB-4TB	120GB-480GB	240GB - 2TB	240GB-1TB for M4 240-2TB for M4P	240GB - 2TB
Read/Write Performance	550MB/s Read 535MB/s Write	530MB/s Read 530MB/s Write	500MB/s Read, 260MB/s Write 525MB/s Read for M4P, 500MB/s Write for M4P	480MB/s Read, 480MB/s Write	525MB/s Read, 500MB/s Write
Applications					
Industrial	●	●	●	●	●
Defense	●	●	●	●	●
Data Recording	●	●	●	●	●
Mission Critical	●	●	●	●	
Surveillance	●	●	●	●	
Telemetry	●	●	●	●	
Reliability					
MTBF	2M hours, Telcordia 25°C	2M hours, Telcordia 25°C	>3M Hours >2M Hours for M4P	1.5M Hours	2M Hours
Data Reliability	1 in 10 ¹⁷ bits read	1 in 10 ¹⁷ bits read	1 in 10 ¹⁵ bits read for M4 1 in 10 ¹⁷ bits read for M4P	1 in 10 ¹⁵ bits read	1 in 10 ¹⁷ bits read
Data Retention	10 years @ 25°C	10 years @ 25°C	1 year @ 55°C 10 years @ 40°C for M4P	12 months @ 30°C	10 years @ 40°C
Endurance	1,000 Total Drive Writes	40,000 Total Drive Writes	1,200 total drive writes 2,100 total drive writes for M4P	2,000 total drive writes	2,100 total drive writes
Power Loss Protection	pFail	pFail	pFail	Fast Flush of Cached Data	Fast Flush of Cached Data for M1 pFail for M2
Warranty	1 Year	1 Year	1 Year	1 Year	1 Year
Environmental					
Operating Temperature	Industrial (-40° C to 85° C) Commercial (0° C to 70° C)	Industrial (-40° C to 85° C) Commercial (0° C to 70° C)	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Storage Temperature	-55°C to 95°C	-55°C to 95°C	-55°C to 95°C	-55°C to 95°C	-40°C to 85°C
Operating Shock	50 g half-sine, 11 ms, 3 shocks along each axis	50 g half-sine, 11 ms, 3 shocks along each axis	50 g half-sine, 11 ms, 3 shocks along each axis	1000 g half-sine, 0.5ms	50 g half-sine, 11ms, 3 shocks along each axis
Operating Vibration	16.4 g rms, 15-2,000 Hz for M4	16.4 g rms, 15-2,000 Hz for M4	16.4 g rms, 15-2,000 Hz for M4 16.4 g rms, 10-2,000 Hz for M4P	16.3 g rms, 10-2,000Hz	16.4 g rms, 15-2,000Hz
Relative Humidity	5%-95% non-condensing	5%-95% non-condensing	5%-95% non-condensing	5%-95% non-condensing	5%-95% non-condensing
Altitude	24,384m (80,000 ft)	24,384m (80,000 ft)	24,384m (80,000 ft)	30,480m (100,000 ft)	24,384m (80,000 ft)
Conformal Coating	Optional	Optional	Optional	Optional	Optional
Security (Protection & Data Elimination)					
ATA Password	■	■	■	■	■
AES 256b	■	■	■	■	■
Write Protect	■	■	■	■	
External HW Trigger	■	■	■	■	
Erase Key and Flash	■	■	■	■	■
Mil Erase Sequences					
NSA/CSS Manual 9-12	■	■	■	■	
DoD NISPOM 5220.22-M	■	■	■	■	
DoD NISPOM 5220.22-M-Sup 1	■	■	■	■	
NSA/CSS Manual 130-2	■	■	■	■	
Army AR 380-19	■	■	■	■	
Navy NAVSO P-5239-26	■	■	■	■	
Air Force AFSSI-5020	■	■	■	■	
Custom Sequence	■	■		■	

● Primary Application ■ Primary Security Feature

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