



Product Comparison Chart

Rugged, Reliable, Secure SSDs



| | T6CN | | | T6EN | | | T5EN | | T5E | | S5E | T5PF | T5PFLC |
|--|---|-----------------------------------|-----------------------------------|--|-----------------------------------|-----------------------------------|--|--|--|--|---|--|--|
| Interface | PCIe | | | PCIe | | | PCIe | | SATA | | SATA | SATA | SATA |
| Form Factor | E1.S | U.2 | M.2 2280 | E1.S | U.2 | M.2 2280 | U.2 | M.2 2280 | 2.5" | M.2 2280 | 2.5" | 2.5" | 2.5" |
| NAND Flash Type | 3D TLC | | | 3D TLC | | | 3D TLC | 3D TLC | 3D TLC | 3D TLC | SLC | 3D TLC | 3D TLC |
| Capacity | 960GB – 7,680GB | 960GB – 15,360GB | 960GB – 7680GB | 960GB – 7,680GB | 960GB – 15,360GB | 960GB – 7680GB | 3D TLC: 480GB - 7,680GB pSLC: 160GB - 2,560GB | 3D TLC: 480GB - 3,840GB pSLC: 160GB - 1,280GB | 3D TLC: 120GB - 3,840GB pSLC: 40GB - 1,280GB | 3D TLC: 120GB - 1,920GB pSLC: 40GB - 640GB | 60GB - 480GB | 480GB - 3,840GB | 2.5": 120GB - 1,920GB M.2: 240GB - 960GB |
| Sustained Read/Write Performance | 3,500MB/s Read 3,000MB/s Write | 3,500MB/s Read 3,000MB/s Write | 3,200MB/s Read 3,200MB/s Write | 3,500MB/s Read 3,000MB/s Write | 3,500MB/s Read 3,000MB/s Write | 3,200MB/s Read 3,200MB/s Write | 3,200MB/s Read, 1,600MB/s Write | | 520MB/s Read, 500MB/s Write | | 530MB/s Read, 490MB/s Write | 500MB/s Read, 470MB/s Write | 500MB/s Read, 470MB/s Write |
| Reliability | | | | | | | | | | | | | |
| MTBF | 2M Hours, Telcordia 20°C | | | 2M Hours, Telcordia 20°C | | | 2M hours, Telcordia 25°C | | 2M hours, Telcordia 25°C | | 2M Hours, Telcordia 25°C | 2M Hours, Telcordia 25°C ¹ | 2M Hours, Telcordia 25°C ¹ |
| Data Reliability | 1 in 10 ¹⁷ bits read | | | 1 in 10 ¹⁷ bits read | | | 1 in 10 ¹⁷ bits read | | 1 in 10 ¹⁷ bits read | | 1 in 10 ¹⁷ bits read | 1 in 10 ¹⁷ bits read | 1 in 10 ¹⁷ bits read |
| Data Retention | 10 years @ 25°C | | | 10 years @ 25°C | | | 10 years @ 25°C | | 10 years @ 25°C | | 10 years @ 25°C | 10 years @ 25°C | 10 years @ 25°C |
| Endurance | C-Temp: 16,800 TBW (with 15,360GB) I-Temp: 9,600 TBW (with 15,360GB) | | | I-Temp: 9,600 TBW (with 15,360GB) | | | 3D TLC: 625 TDW pSLC: 6,250 TDW | | 3D TLC: 1,000 TDW pSLC: 10,000 TDW | | 30,000 TDW | 2,100 TDW | 2,100 TDW |
| Power Loss Protection | U.2 & E1.S only | | | U.2 & E1.S only | | | pFail | No pFail | pFail | No pFail | pFail | pFail | No pFail |
| Warranty | 1 Year | | | 1 Year | | | 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) | | | Industrial (-40°C to 85°C) | | Industrial (-40°C to 85°C) Commercial (0°C to 70°C) | Industrial (-40°C to 85°C) | Industrial (-40°C to 85°C) | Industrial (-40°C to 85°C) | Industrial (-40°C to 85°C) Commercial (0°C to 70°C) |
| Storage Temperature | Commercial (-40°C to 85°C) Industrial (-50°C to 95°C) | | | Commercial (-40°C to 85°C) Industrial (-50°C to 95°C) | | | -55°C to 95°C | | -55°C to 95°C | | -55°C to 95°C | -55°C to 95°C | -55°C to 95°C |
| Operating Shock | 50G (11 ms duration, half sine wave) ³ | | | 50G (11 ms duration, half sine wave) ³ | | | 50g half-sine, 11 ms, 3 shocks along each axis ³ | | 50g half-sine, 11 ms, 3 shocks along each axis ³ | 50g half-sine, 11 ms, 3 shocks along each axis ³ | 50g half-sine, 11 ms, 3 shocks along each axis | 50g half-sine, 11 ms, 3 shocks along each axis ³ | 50g half-sine, 11 ms, 3 shocks along each axis ³ |
| Operating Vibration | 10G (peak, 10-2000Hz) ³ | | | 10G (peak, 10-2000Hz) ³ | | | 10g rms, 10-2000Hz ² | | 16.4g rms, 10-2,000 Hz | 10g rms, 10-2000Hz ² | 16.4g rms, 10-2,000 Hz | 16.4g rms, 10-2,000 Hz ² | 16.4g rms, 10-2,000 Hz ² |
| Relative Humidity | 5% - 95% non-condensing ³ | | | 5% - 95% non-condensing ³ | | | 5% - 95% non-condensing ³ | | 5% - 95% non-condensing | | 5% - 95% non-condensing | 5% - 95% non-condensing | 5% - 95% non-condensing |
| Altitude | 24,384 m (80,000 ft) ³ | | | 24,384 m (80,000 ft) ³ | | | 24,384 m (80,000 ft) ³ | | 24,384 m (80,000 ft) | | 24,384 m (80,000 ft) | 24,384 m (80,000 ft) | 24,384 m (80,000 ft) |
| Conformal Coating | Optional | | | Optional | | | Optional | | Optional | | Optional | Optional | Optional |
| Security (Protection & Data Elimination) | | | | | | | | | | | | | |
| ATA password | | ■ | | | | | | | ■ | ■ | ■ | ■ | ■ |
| AES 256b | | ■ | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Write Protect | | | | ■ | ■ | | ■ | ■ | Optional | ■ | ■ | ■ | |
| External HW trigger | | | | ■ | ■ | | ■ | ■ | | ■ | ■ | ■ | |
| Erase Key and flash | | | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | |
| TCG Opal 2.0 | | | | ■ | ■ | | ■ | ■ | | ■ | ■ | ■ | ■ |
| FIPS 140-2 | | | | | | | | | | | | ■ ⁴ | ■ ⁴ |
| MIL Erase Sequences | | | | | | | | | | | | | |
| NSA-9-12 | | | | ■ | ■ | | ■ | ■ | ■ | | ■ | | |
| DoD NISPOM 5220.22-M | | | | ■ | ■ | | ■ | ■ | ■ | | ■ | ■ | |
| DoD NISPOM 5220.22-M-Sup 1 | | | | ■ | ■ | | ■ | ■ | ■ | | ■ | ■ | |
| NSA/CSS Manual 130-2 | | | | ■ | ■ | | ■ | ■ | ■ | | ■ | ■ | |
| NSA/CSS Manual 9-12 | | | | ■ | ■ | | ■ | ■ | ■ | | ■ | ■ | |
| Army AR 380-19 | | | | ■ | ■ | | ■ | ■ | ■ | | ■ | ■ | |
| Navy NAVSO P-5239-26 | | | | ■ | ■ | | ■ | ■ | ■ | | ■ | ■ | |
| Air Force AFSSI-5020 | | | | ■ | ■ | | ■ | ■ | ■ | | ■ | ■ | |
| RCC –TG IRIG 106-07 | | | | ■ | ■ | | ■ | ■ | ■ | | ■ | ■ | |

¹Estimated. Official MTBF pending

²Based on 128 KByte block transfers and continuous, sequential writes to the drive. The number does not include file system overhead, which may vary depending on the file system. The total life span of the drive depends on both the write endurance numbers and MTBF. TDW → Total Drive Writes = (Terabytes Written) *1000 / (Drive Capacity GB)

³Design Specification. Testing Pending

⁴FIPS 140-2 Inside