



TRITON™ SOLID STATE HARD DRIVE || HC

FROM DESKTOP
TO EDGE OF
NETWORK

The Triton™ Solid State Hard Drive HC is a 2.5" form factor, high-capacity solid state hard drive (SSD) featuring the latest HyperLink NAND technology. With high performance and low latency, the Triton HC is the next evolution of digital storage.

With up to 100K IOPS, 4K Random R/W and an idle power usage of less than 1W, the Triton HC's use of HL NAND reduces overall power consumption while dramatically increasing performance. Furthermore, the state of the art power circuitry can handle sequential power outages without corruption.

The Triton HC SSD supports the SATA revision 3.0 interface standard at up to 6.0 Gb/s. Triton HC takes advantage of this standard by delivering sustained reads up to 540MB/s and sustained writes up to 500MB/s. A robust interface is ensured by integrated hardware support for on-the-fly, per sector error detection and correction. The resulting Bit Error Rate is less than one in a quadrillion bits read.

C&T's years of experience providing digital storage to the most demanding environments have fostered a legacy of manufacturing and distributing the most reliable solid state drives available.

Features

- Support of the SATA 3.0 specification at 6.0, 3.0, and 1.5 Gb/s
- OPAL 2.0 AES256 Encryption available
- Next generation HL-NAND architecture for exponential capacity growth with fixed per-GB pricing
- ATA8-ACS2; includes SCT (Smart Command Transport)
- Enhanced SMART ATA feature set
- Native Command Queuing (NCQ) command set
- Data set management TRIM command

Applications

- In-flight entertainment
- ISR MASINT, streaming video, hyperspectral imagery and ELINT recording
- Data centers
- Whenever non-C&T SSD's fail

Specifications

Performance	
Capacity	Type MLC/SLC MLC/SLC MLC Raw: 2048 GB, 4096 GB, 8192 GB Usable: 1843 GB, 3984 GB, 7372 GB
Sustained Read	Up to 540 MB/s
Sustained Write	Up to 500 MB/s
Random Read, 4KB blocks	100k
Random Write, 4KB blocks	80k Max / 20k Sustained
Read/Write Latency:	65µs/40µs (TYP)
Power	
Input Voltage	+5VDC ± 10%
Read Max	2TB, 4TB < 3.0W 8TB < 3.5W
Write Max	2TB, 4TB < 7.0W 8TB < 8.0W
Idle	< 1W
Reliability	
MTBF	1.5 million hours
Data Reliability	< 1 non-recoverable error in 10 ¹⁵ bits read
Data Retention	> 10 years when new
TBW (4TB) *Worst Case	1,969 MLC / 8,243 SLC
Wear-Leveling	Proprietary static and dynamic algorithms
Environment	
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +95°C
Humidity	5% - 95%
Shock	1,000 G/0.5ms
Vibration	16.3GRMS (Mil 810G)
Mechanical	
Dimensions (mm)	7mm (4TB SLC and 8TB MLC 15mm)

