



SATA 2.5" Drive
Self-Encrypting Drive (SED) with AES 256-bit
Encryption, TCG OPAL 2.0
MIL-STD-810G standards
All available NAND geometry
Industrial Temperature
Major NAND suppliers

Quantum Digital Technology industrial 2.5" SSDs are encased in aluminum enclosures for outstanding performance in rugged environments. The 2.5" form factor and SATA III interface allow easy installation into SATA-based systems. Quantum Digital Technologies enhanced endurance technologies will assure long years of dependable use.

Power Loss Protection technology options combines hardware and/or firmware solutions to ensure that data is preserved and protected during a sudden power failure. The design also protects the storage against data corruption by allowing the power loss protection (PLP) to manage power challenges such as inrush current, input overvoltage, incorrect cache flushing and more.

Quantum Digital Technology 2.5" SSDs comply with MIL-STD-810G standards. They support the S.M.A.R.T. ATA feature set and Advanced Wear Leveling algorithm for enhanced endurance.

Technologies & Add-On Services	Secure Erase	TCG Opal 2.0	Industrial Temperature	Anti-Sulfur Resistors	Conformal Coating
Custom	▲		▲	▲	▲

▲: Customization option available

Specifications

2.5" SSD			
Interface	SATA III 6 Gb/s		
Flash Type	SLC	3D TLC (pSLC mode)	3D TLC
Form Factor	2.5"		
Operating Temperature (Tcase) ¹	-40°C to +85°C		0°C to 70°C
Power Loss Protection Options	Hardware + Firmware Based		
Optional SED Features	-		AES 256-bit Encryption, TCG Opal 2.0
Capacity	8 GB to 256 GB	80 GB to 640 GB	120 GB to 1,920 GB
Performance			
Sequential Read (MB/s) up to	520	560	560
Sequential Write (MB/s) up to	420	520	520
Random Reads IOPS (4K, QD32) up to	76,000	90,000	100,000
Random Writes IOPS (4K, QD32) up to	74,000	88,000	91,000
Endurance and Reliability			
Endurance (TBW) ² up to	21,333 TB	38,400 TB	25,600 TB
Reliability MTBF @ 25 °C	>2,000,000 hours		
Reliability Number of Insertions	10,000 minimum		
Others			
Dimensions: L x W x H (mm)	100 x 69.9 x 9.2	100 x 69.9 x 7/9.2	
Certifications	CE, FCC	CE, FCC, BSMI, UKCA, RoHS, REACH	
Warranty	5 years		2 years

2.5" SSD			
Interface	SATA III 6 Gb/s		
Flash Type	3D TLC		
Form Factor	2.5"		
Operating Temperature	-40°C to 85°C	0°C to 70°C	0°C to 70°C
Power Loss Protection Options	Hardware + Firmware Based		Firmware Based
Optional SED Features	AES 256-bit Encryption, TCG Opal 2.0		-
Capacity	120 GB to 1,920 GB		32 GB to 1 TB
Performance			
Sequential Read (MB/s) up to	560		560
Sequential Write (MB/s) up to	520		525
Random Reads IOPS (4K, QD32) up to	100,000		72,000
Performance Random Writes IOPS (4K, QD32) up to	91,000		85,000
Endurance and Reliability			
Endurance (TBW) ² up to	5,585 TB		2,792 TB
Reliability MTBF @ 25 °C	>2,000,000 hours		
Reliability Number of Insertions	10,000 minimum		
Others			
Dimensions: L x W x H (mm)	100 x 69.9 x 7/9.2		100 x 69.9 x 7
Certifications	CE, FCC, BSMI, UKCA, RoHS, REACH		
Warranty	2 years		

SATA SSD

Capacity	Operating Temperature	Power Loss Protection	SED	P/N
	-40°C to 85°C	Hardware + Firmware Based	-	Custom
16GB	-40°C to 85°C	Hardware + Firmware Based	-	Custom
32GB	-40°C to 85°C	Hardware + Firmware Based	-	Custom
64GB	-40°C to 85°C	Hardware + Firmware Based	-	Custom
128GB	-40°C to 85°C	Hardware + Firmware Based	-	Custom
256GB	-40°C to 85°C	Hardware + Firmware Based	-	Custom
120GB	-40°C to 85°C	Hardware + Firmware Based	-	Custom
240GB	-40°C to 85°C	Hardware + Firmware Based	-	Custom
480GB	-40°C to 85°C	Hardware + Firmware Based	-	Custom
960GB	-40°C to 85°C	Hardware + Firmware Based	-	Custom
1.92TB	-40°C to 85°C	Hardware + Firmware Based	-	Custom
120GB	0°C to 70°C	Hardware + Firmware Based	-	Custom
240GB	0°C to 70°C	Hardware + Firmware Based	-	Custom
480GB	0°C to 70°C	Hardware + Firmware Based	-	Custom
960GB	0°C to 70°C	Hardware + Firmware Based	-	Custom
1.92TB	0°C to 70°C	Hardware + Firmware Based	-	Custom
32GB	0°C to 70°C	Firmware Based	-	Custom
64GB	0°C to 70°C	Firmware Based	-	Custom
128GB	0°C to 70°C	Firmware Based	-	Custom
256GB	0°C to 70°C	Firmware Based	-	Custom
512GB	0°C to 70°C	Firmware Based	-	Custom
128GB	0°C to 70°C	Firmware Based	-	Custom
256GB	0°C to 70°C	Firmware Based	-	Custom
512GB	0°C to 70°C	Firmware Based	-	Custom
1TB	0°C to 70°C	Firmware Based	-	Custom