2.5" Solid State Drive

SATA III 6Gb/s SSD220S

Transcend's SATA III 6Gb/s SSD220S uses the latest 3D NAND technology that features vertical, stacked expansion of storage cells. By using high-quality flash memory and enhanced firmware algorithms, the SSD220S delivers greater performance and reliability.

3D expansion to break through limits

Unlike planar NAND memory, 3D NAND flash features memory cells stacked vertically in multiple layers. 3D NAND overcomes density limitations of 2D planar NAND, and delivers a higher level of performance and endurance.

Performance boost for everyday computing

Taking full advantage of the SATA III 6Gb/s interface and built-in SLC caching technology, Transcend's SSD220S achieves exceptional transfer speeds of up to 550MB/s read and 500MB/s write.

Guaranteed endurance and reliability

Transcend's SSD220S offers great Terabytes Written (TBW) values (up to 320 TB) indicating the total amount of data you can write into the drive over its lifetime. It also features RAID engine and LDPC coding, Garbage Collection, Wear-leveling, and DevSleep.

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Features

- Up to 550 MB/s read; 500 MB/s write
- 3D NAND flash memory
- Engineered with a RAID engine and LDPC (Low-Density Parity Check) coding to ensure data integrity; built-in SLC caching technology for exceptional transfer speeds
- Supports DevSleep ultra low power state, S.M.A.R.T., TRIM, and NCQ commands
- Download the SSD Scope software from Transcend's official website

SSD Scope Software

Transcend SSD Scope is advanced, user-friendly software that makes it easy to ensure your Transcend SSD remains healthy, and continues to run fast and error-free by determining the condition and optimizing the performance of your drive.

Specification

Appearance

Dimensions	100 mm x 69.85 mm x 6.8 mm (3.94" x 2.75" x 0.28")
Weight	45 g (1.59 oz)

Storage

Flash Type	3D NAND flash
Capacity	120 GB / 240 GB / 480 GB / 960 GB

Operating Environment

Operating Temperature	0°C (32°F) ~ 70°C (158°F)
Operating Voltage	5V±10%

Performance

Sequential Read/Write (CrystalDiskMark, max.)	Read: 550 MB/s Write: 500 MB/s
4K Random Read/Write (IOmeter, max.)	Read: 65,000 IOPS Write: 75,000 IOPS
Mean Time Between Failures (MTBF)	2,000,000 hour(s)
Terabytes Written (Max.)	320 TB
Drive Writes Per Day (DWPD)	0.3 (3 yrs)
Note	Speed may vary due to host hardware, software, usage, and storage capacity.

Warranty

Certificate	CE/FCC/BSMI/KC/RCM
Warranty	Three-year Limited Warranty

Ordering Information

120GB	TS120GSSD220S
240GB	TS240GSSD220S
480GB	TS480GSSD220S
960GB	TS960GSSD220S

2.5" SSD Comparison

	SATA III 6Gb/s SSD220Q	SATA III 6Gb/s SSD230S	SATA III 6Gb/s SSD220S	SATA III 6Gb/s SSD370S
Appearance				
Dimensions	100 mm x 69.85 mm x 6.8 mm (3.94" x 2.75" x 0.28")			
Weight	45 g (1.59 oz)	53 g (1.87 oz)	45 g (1.59 oz)	57 g (2.01 oz)
Storage				
Flash Type	QLC NAND flash	3D NAND flash	3D NAND flash	MLC NAND flash
Capacity	500GB / 1TB	128GB ~ 2TB	120GB ~ 960GB	32GB ~ 1TB
Operating Environment				
Operating Temperature	0°C (32°F) ~ 70°C (158°F)			
Performance				
Sequential Read/Write (CrystalDiskMark)	550 MB/s 500 MB/s	560 MB/s 520 MB/s	550 MB/s 500 MB/s	530 MB/s 460 MB/s
4K Random Read/Write (IOmeter)	57,000 IOPS 59,000 IOPS	85,000 IOPS 89,000 IOPS	65,000 IOPS 75,000 IOPS	75,000 IOPS 75,000 IOPS
Mean Time Between Failures (MTBF)	2,000,000 hour(s)	2,000,000 hour(s)	2,000,000 hour(s)	2,000,000 hour(s)
Terabytes Written (TBW)	200 TB	1,120 TB	320 TB	2,940 TB
Drive Writes Per Day (DWPD)	0.19 (3 yrs)	0.3 (5 yrs)	0.3 (3 yrs)	2.5 (3 yrs)
Warranty				
Warranty	Three-year Limited Warranty	Five-year Limited Warranty	Three-year Limited Warranty	Three-year Limited Warranty
Technology				
TRIM & NCQ Command	✓	✓	✓	✓
S.M.A.R.T.	✓	✓	✓	✓
DDR3 DRAM Cache	−	✓	−	✓
Advanced Garbage Collection	✓	✓	✓	✓
DevSleep Mode	✓	✓	✓	✓
RAID Engine	✓	✓	✓	−
LDPC Coding	✓	✓	✓	−

*Speed may vary due to host hardware, software, usage, and storage capacity.