

Embedded Solutions



2.5" SATA & PATA SSDs

SSD475P

Transcend's SSD475P 2.5" SSD is a Power Loss Protection (PLP) SSD. During unexpected power outages, the built-in Polymer Hybrid EC capacitor provides power to the controller and DRAM cache, ensuring data integrity and storage reliability.

Transcend's SSD475P SSD features a SATA III 6Gb/s interface and 112-layer 3D NAND flash, delivering breakthrough density with capacities of up to 8TB to greatly improving storage efficiency. Its built-in DRAM cache enables fast random read and write speeds, and improves drive endurance. Transcend's SSD475P is also 100% chamber tested in-house for normal operating temperatures of 0°C~70°C. Furthermore, the drive ensures exceptional reliability with an Uncorrectable Bit Error Rate (UBER) of 10^{-17} , ensuring data integrity even under intensive workloads.

Hardware Features

- DRAM Cache embedded
- Endurance: 3K P/E cycles (Program/Erase cycles) guaranteed
- Power Loss Protection (PLP) to prevent data loss in the event of sudden power outage

Firmware Features

- Dynamic thermal throttling
- Built-in 4K LDPC ECC (Error Correction Code) functionality
- Advanced Global Wear-Leveling and Block management for reliability
- Advanced Garbage Collection
- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices

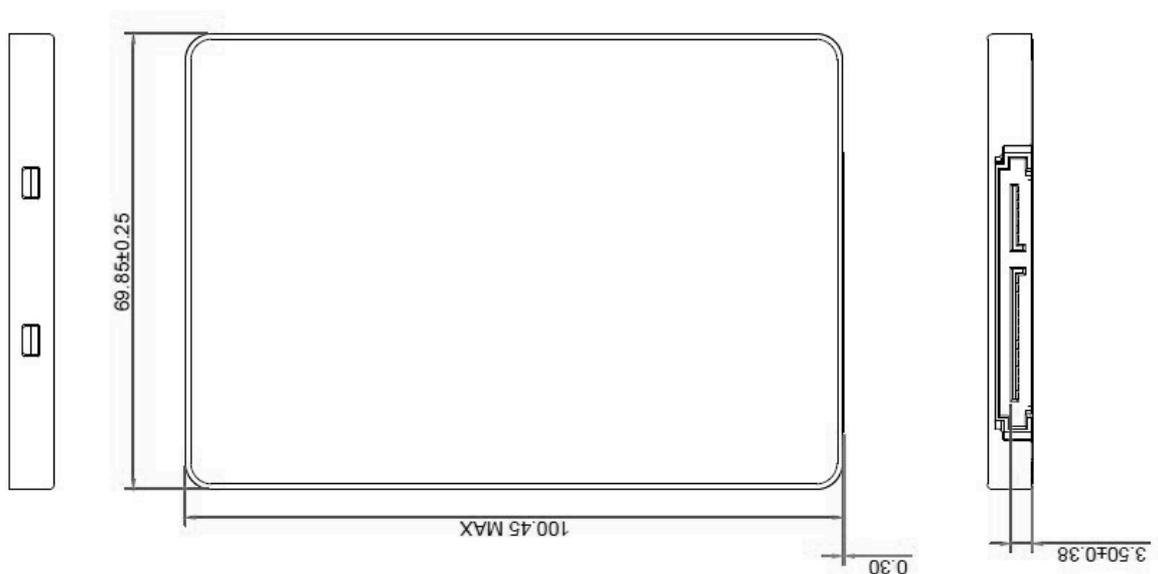
Ordering Information

2TB	TS2TSSD475P
4TB	TS4TSSD475P
8TB	TS8TSSD475P

Specifications

Appearance	Dimensions	100.45 mm x 69.85 mm x 7 mm (3.95" x 2.75" x 0.28")
	Weight	54 g (1.9 oz)
	Form Factor	2.5"
Interface	Bus Interface	SATA III 6Gb/s
Storage	Capacity	2 TB / 4 TB / 8 TB
	Flash Type	112-layer 3D NAND flash
Operating Environment	Operating Voltage	5V±5%
	Operating Temperature	Standard Temp. 0°C (32°F) ~ 70°C (158°F)
	Storage Temperature	-40°C (-40°F) ~ 85°C (185°F)
	Humidity	5% ~ 95%
	Shock	15 G, 11 ms, 3 axis
	Vibration (Operating)	20 G (peak-to-peak), 7 Hz ~ 2000 Hz (frequency)
Power	Power Consumption (Operation)	3.1 watt(s)
	Power Consumption (IDLE)	1.6 watt(s)
Performance	Read Speed (Max.)	Up to 560 MB/s
	Write Speed (Max.)	Up to 530 MB/s
	Sequential Read/Write (CrystalDiskMark)	Read: Up to 560 MB/s Write: Up to 530 MB/s
	4K Random Read/Write (IOMeter)	Read: Up to 96,000 IOPS Write: Up to 92,000 IOPS
	Mean Time Between Failures (MTBF)	3,000,000 hour(s)
	Terabytes Written (TBW)	Up to 19,830 TBW
	Drive Writes Per Day (DWPD)	2.26 (3 yrs)
Warranty	Certificate	CE / UKCA / FCC / BSMI
	Warranty	Three-year Limited Warranty

Mechanical Dimensions



Product specifications are subject to change without notice. Pictures shown may differ from actual products. Total accessible capacity varies depending on operating environment. Due to the complexity and variety of industrial applications, Transcend cannot guarantee 100% compatibility with all platforms and under all scenarios. For special applications and environments, it is strongly suggested that you contact Transcend beforehand for clarification.