

PCIe M.2 SSDs



PCIe SSD 250S

Exhibiting more than just ultra speeds, the PCIe SSD 250S delivers unbridled performance, low latency, and high stability for advanced video editors, gamers, and software engineers. Built with the PCI Express® Gen 4 x4 interface, 3D NAND flash, 8-channel controller, and a DRAM cache, the PCIe SSD 250S is ready to put excellence in your hands.



Stunningly fast

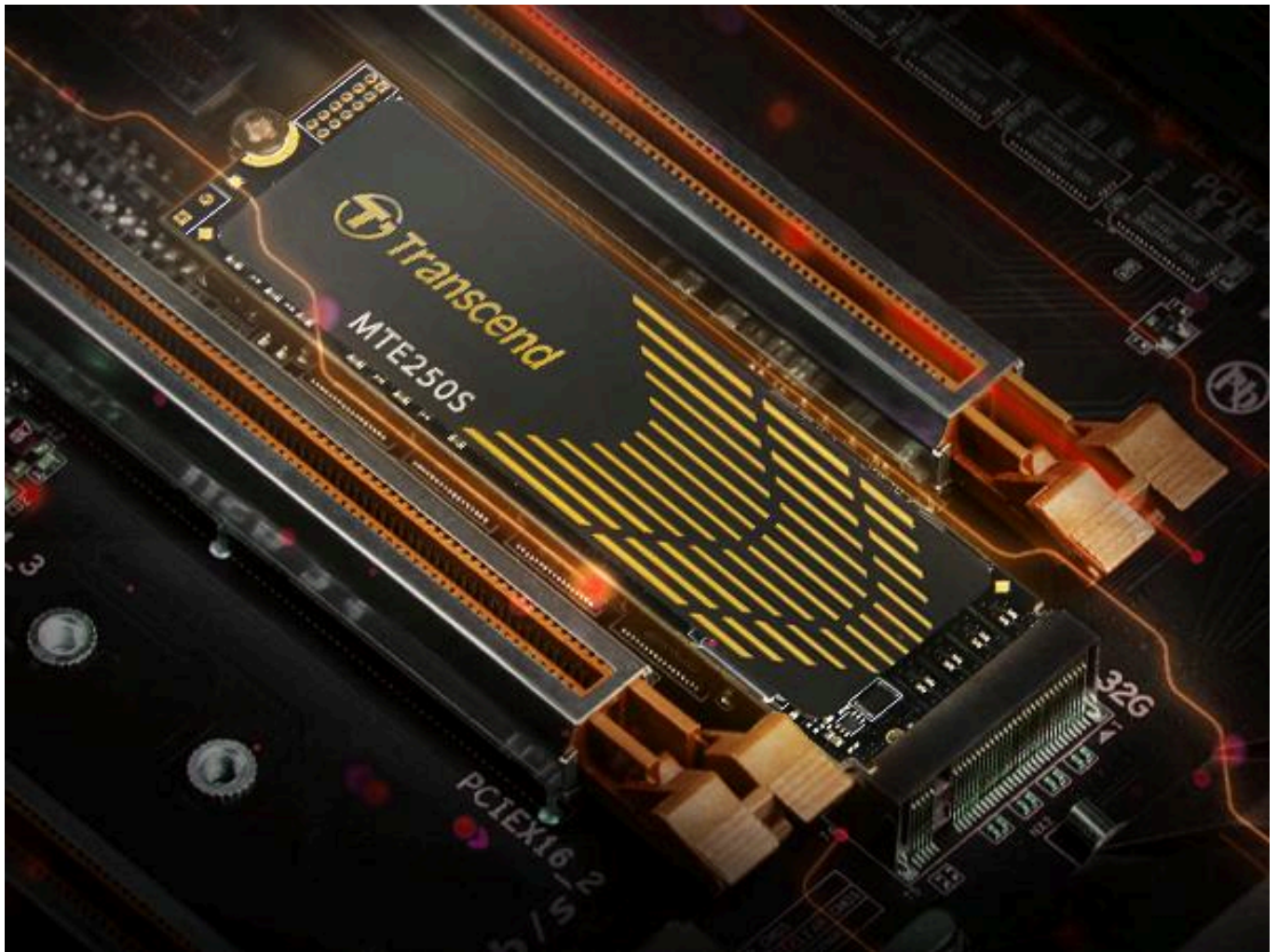
Transcend's PCIe SSD 250S complies with the latest NVMe 1.4 standard, supporting the PCIe™ Gen4 x4 interface, meaning four lanes transmit and receive data simultaneously. Its 8-channel controller delivers sequential R/W up to 7,500/6,700 MB/s, and IOPS up to 540K, delivering captivating performance and response time for desktops and laptops like never before.

Note: Performance is based on CrystalDiskMark v6.0.2.



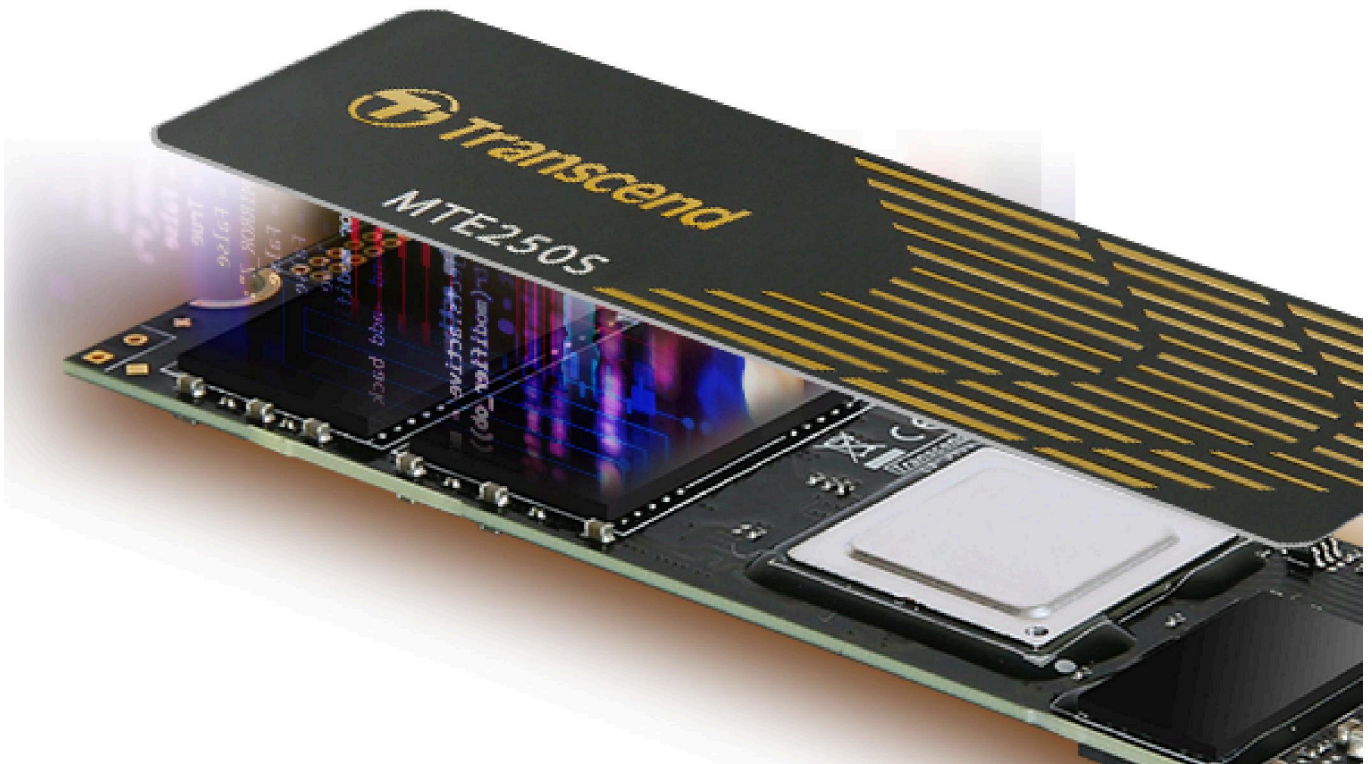
Level up with new-gen PCIe 4.0

The PCIe SSD 250S features the new PCIe 4.0 specification. It supports a bandwidth of 16 GT/s per lane as opposed to 8 GT/s per lane for PCIe 3.0. Downwards compatible with PCIe 3.0, PCIe 4.0 unleashes a higher processing speed for your computer and guarantees lower system latency. For content creators and gamers, this means a more seamless and immersive experience!



As cool as always

The PCIe SSD 250S has an integrated ultra-thin graphene heatsink to effectively improve the heat dissipation of the compact-sized SSD. The high conductivity of graphene quickly cools the system down, ensuring stable device performance.



Small in size, large in capacity

The PCIe SSD 250S comes in an M.2 2280 form factor. Despite its slim appearance, its capacity comes to 4TB, making it a great way for gamers, video editors, and software engineers to expand storage space!



Better endurance, higher reliability

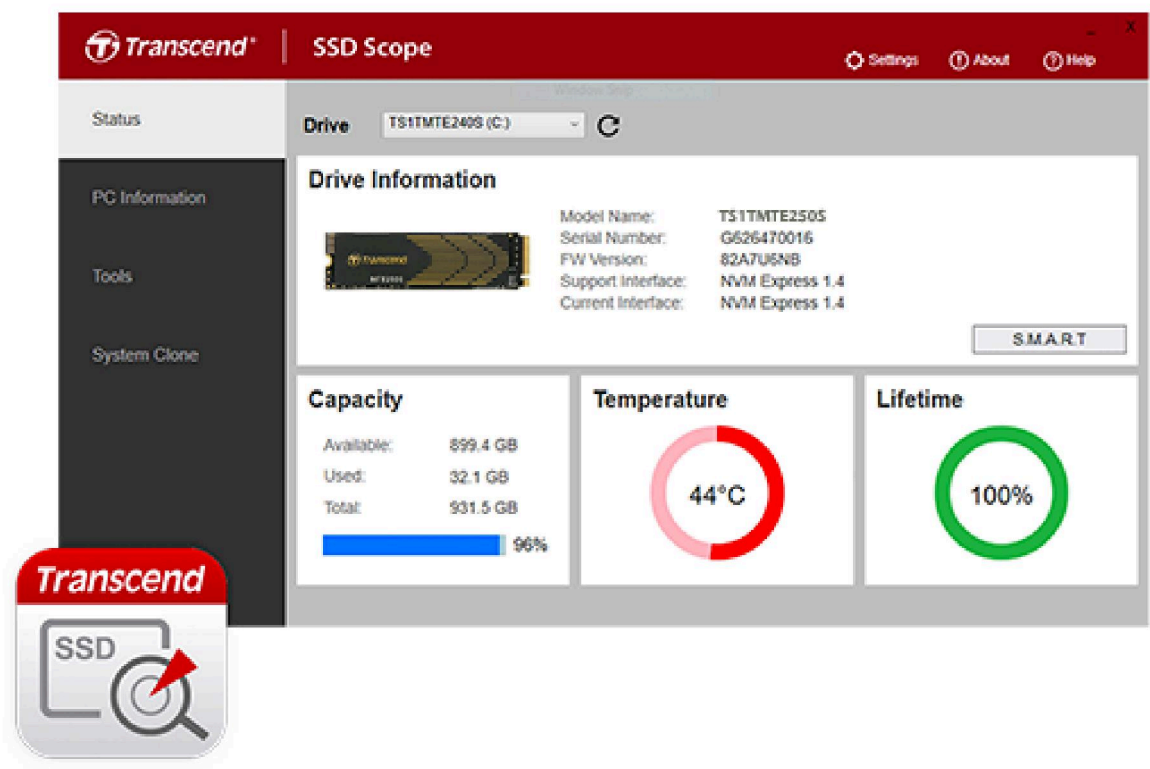
Transcend's PCIe SSD 250S is engineered with LDPC (Low-Density Parity Check) coding, a powerful ECC algorithm, to keep data secure. Engineered with a dynamic thermal throttling mechanism, the temperature is precisely monitored and controlled for the PCIe SSD 250S, delivering superior endurance and stability for high-end applications.



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.

[Learn more \(/support/software/ssd-scope\)](https://support.transcend-info.com/support/software/ssd-scope)



Guaranteed quality

The PCIe SSD 250S is covered by a five-year limited warranty. To ensure the utmost level of quality, Transcend SSDs undergo rigorous testing at all stages of production, including tests for vibration, temperature and humidity, speed, and functionality.

Specifications



Appearance

Dimensions	Double-sided 80 mm x 22 mm x 3.77 mm (3.15" x 0.87" x 0.15")
Weight	10 g (0.35 oz)
Type	M.2 2280

Interface

Bus Interface	NVMe PCIe Gen4 x4
---------------	-------------------

Storage

Flash Type	3D NAND flash
Capacity	1 TB / 2 TB / 4 TB

Operating Environment

Operating Temperature	0°C (32°F) ~ 70°C (158°F)
Operating Voltage	3.3V±5%

Performance

Sequential Read/Write (CrystalDiskMark)	4 TB	Up to 7,500/6,700 MB/s
	2 TB	Up to 7,100/6,500 MB/s
	1 TB	Up to 7,200/6,200 MB/s
4K Random Read/Write (IOmeter)	4 TB	Up to 540,000/440,000 IOPS
	2 TB	Up to 530,000/420,000 IOPS
	1 TB	Up to 530,000/420,000 IOPS
Terabytes Written (TBW)	4 TB	3120 TBW
	2 TB	1560 TBW
	1 TB	780 TBW
Mean Time Between Failures (MTBF)	3,000,000 hour(s)	
Drive Writes Per Day (DWPD)	0.43 (5 yrs)	
Note	<ul style="list-style-type: none">Speed may vary due to host hardware, software, usage, and storage capacity.The workload used to rate DWPD may be different from your actual workload, which may vary due to host hardware, software, usage, and storage capacity.Terabytes Written (TBW) expresses the endurance under the highest capacity.Some motherboards only provide PCIe x2 connections for the M.2 slot, creating a bottleneck on even the fastest drives.	

Warranty

Certificate	CE / UKCA / FCC / BSMI / KC / RCM
Warranty	Five-year Limited Warranty
Warranty Policy	<ul style="list-style-type: none">Please click here (/Warranty) for more information about the Transcend Warranty Policy.Warranty does not apply when SSD Scope's lifetime indicator displays 0% within the warranty coverage.Removal of heatsink may cause damage to the SSD not covered under Transcend's warranty policy.

System Requirement

Operating System	<ul style="list-style-type: none">Microsoft Windows 7 or laterLinux Kernel 2.6.31 or later
Note	Systems for use with the PCIe M.2 SSD must have an M.2 connector with only an M key. B-key connectors are not compatible. Improper insertion may lead to damage. Please click here (/Support/FAQ-1206) for more information.

Technology

S.M.A.R.T.	✓
Advanced Garbage Collection	✓
RAID Engine	✓
LDPC Coding	✓
DRAM Cache	✓

Awards



(<https://nl.hardware.info/artikel/10589/8/review-transcend-250s-4tb-ssd-tlc-geheugen-en-dram-cache-voor-275-euro-conclusie>)

Excellence
Hardware.info
Netherlands



(<https://nl.hardware.info/artikel/10533/review-transcend-250s250h-ssds-stap-richting-topniveau#besprokenproducten>)

Hardware Info Excellent Award
Hardware.info
Netherlands

Order Information

1TB

TS1TMTE250S

2TB

TS2TMTE250S

4TB

TS4TMTE250S



Product Sheet

(https://CDN.transcend-info.com/products/images/modelpic/1276/Transcend-MTE250S_4T.pdf)



Support

(</support/product/internal-ssd/mte250s>)



Compatibility

(</support/compatibility/product/internal-ssd/mte250s>)

Consumer Products

- Internal SSDs (</product/internal-ssd>)
- Portable SSDs (</product/portable-ssd>)
- External Hard Drives (</product/external-hard-drive>)
- Personal Cloud Storage (</product/personal-cloud>)
- Dashcams (</product/dashcam>)
- Body Cameras (</product/body-camera>)
- Memory Cards (</product/memory-card>)
- USB Flash Drives (</product/usb>)
- DRAM Modules (</product/dram-module>)
- Card Readers, DVD Writers & Accessories (</product/card-reader-accessory>)
- Customized Solutions (</products/oem.aspx>)

Embedded Solutions

- Embedded SSD Solutions (</Embedded/Product/ssd>)
- Embedded Flash Solutions (</Embedded/Product/flash>)
- Embedded Memory Cards (</Embedded/Product/memory-cards>)
- Embedded DRAM Modules (</Embedded/Product/modules>)
- Technologies (</Embedded/Technologies>)
- Applications (</Embedded/Applications>)
- Software Solutions (</Embedded/Software>)
- Resource Download (</embedded/download>)

Support

- Product Support (</support/service>)
- Software Download (</support/software>)
- Compatibility (</support/compatibility>)
- Warranty Policy (</warranty>)
- Warranty Check (</support/verification>)
- Where to Buy (</support/buy>)
- Partner Center (</partnercenter/>)

About Us

- Company Profile (</about/company-profile>)
- Advantage (</about/advantage>)
- Awards (</about/awards>)
- Investor Relations (</about/investor-relations>)
- Shareholder Services (</about/shareholder-services>)
- Sustainable Development (/about/social_responsibility)
- Press (</about/press>)
- Green Initiatives (</about/green-initiatives>)
- Contact Us (</support/contact>)