

Embedded Solutions



microSD Cards

USD470T & USD470I

Transcend's USD470T memory cards are built with high-quality BiCS8 218-layer 3D NAND flash and enhanced firmware technologies, delivering high-speed data transfer and long-term reliability for industrial applications and embedded systems. Featuring up to 3K program/erase cycles, the cards offer enhanced stability and endurance to meet the demands of long-duration operations in smart surveillance, edge computing, in-vehicle systems, and industrial automation equipment.

Transcend also offers the wide-temperature USD470I memory cards, capable of stable operation in temperatures ranging from -40°C to 85°C, ensuring outstanding performance for industrial systems in mission-critical and intensive applications.

Hardware Features

- Electrostatic protection (ESD IEC 61000-4-2)
- Compliant with SD specification 6.1
- Compliant with UHS-I
- Compliant with Application Performance Class 2 (A2)
- Compliant with Video Speed Class 30 (V30)

Firmware Features

- Wear-Leveling
- Supports S.M.A.R.T. function to conduct health monitoring, analysis, and reporting for storage devices
- Early Move
- Built-in 2K LDPC ECC (Error Correction Code) functionality

Ordering Information

128GB	TS128GUSD470T
	TS128GUSD470I

256GB	TS256GUSD470T
	TS256GUSD470I

512GB	TS512GUSD470T
	TS512GUSD470I

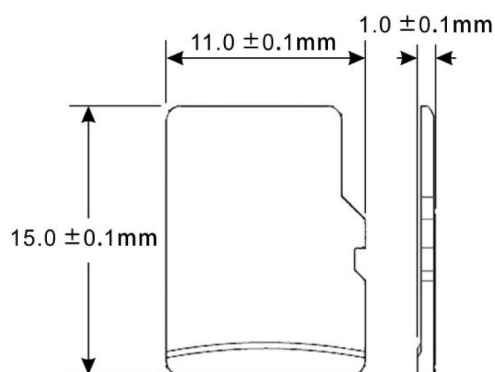
1TB	TS1TUSD470T
	TS1TUSD470I

*Scope Pro is available on Windows OS only when the [RDF5](#) is used with the SD/microSD cards.

Specifications

Appearance	Dimensions	11 mm x 15 mm x 1 mm (0.43" x 0.59" x 0.04")
	Form Factor	microSD flash card
Storage	Flash Type	218-layer 3D NAND flash
	Capacity	128 GB / 256 GB / 512 GB / 1 TB
Operating Environment	Operating Voltage	2.7V ~ 3.6V
	Drop Test	1.5m free fall
	Operating Temperature	Standard Temp. -25°C (-13°F) ~ 85°C (185°F) Wide Temp. -40°C (-40°F) ~ 85°C (185°F)
	Storage Temperature	-40°C (-40°F) ~ 85°C (185°F)
	Humidity	0% ~ 95%
	Shock	Acceleration: 490 m/s ² (standard holding time: 11 ms, semi-sine wave, velocity change: 3.44 m/s)
	Vibration (Operating)	20 G (peak-to-peak), 20 Hz ~ 2,000 Hz (frequency)
Power	Power Consumption (Max.)	2.88 watt(s)
Performance	Read Speed (Max.)	Up to 100 MB/s
	Write Speed (Max.)	Up to 85 MB/s
	Terabytes Written (TBW)	Up to 2,920 TBW
Warranty	Certificate	CE / UKCA / FCC
	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.