Industrial microSD Memory Card

Ideal for Extreme Conditions

Kingston's Industrial microSD card is designed and tested to withstand the most demanding environmental factors. With an operating temperature of -40°C to 85°C, it can operate normally even in extreme desert heat and sub-zero conditions. The card utilises industry-leading pSLC mode to provide top transfer speeds of up to 100MB/s read and 80MB/s write[1]. It is rated up to 1920 TBW[2] with 30K P/E cycles and has a built-in feature set specific to endurance, performance and industrial needs. Kingston's Industrial microSD ships with a UHS-I SD adapter and is available in capacities from 8GB-64GB[3].

- Durable in extreme temperatures
- High endurance
- UHS-I Speed Class U3, V30, A1
- Industrial-grade built-in features

Specifications

Capacities[3]	8GB, 16GB, 32GB, 64GB
Speed[1]	Up to 100MB/s read, 80MB/s write
Performance[1]	Class 10, UHS-I, U3, V30, A1
Endurance[2]	Up to 1920 TBW 30K P/E cycles
NAND	TLC in pSLC mode
microSDHC card dimensions	11mm x 15mm x 1mm
SD adapter dimensions	24mm x 32mm x 2.1mm
Format	FAT32 for SDHC and ExFAT for SDXC
Operating & storage temperature	-40°C to 85°C
Voltage	3.3V
Industrial features	• Bad block management • Strong ECC engine • Power failure protection • Wear levelling • Auto-refresh read distribution protection • Dynamic data refresh • SiP – System in Package • Garbage collection • Health monitoring
Durability[4]	Waterproof Temperature proof Protected from airport x-rays
Thermal cycle testing	Interval testing completed at various extreme temperatures
Vigorous temperature humidity bias	Several hundred hours of testing to ensure durability at varying levels of humidity

Wide temp chamber testing	Completed on all SDCIT2 cards prior to production
Warranty[5]	3 years

Part Numbers Card (SD adapter included)

SDCIT2/8GB	SDCIT2/16GB	SDCIT2/32GB
SDCIT2/64GB		

Part Numbers Card (SD adapter not included)

SDCIT2/8GBSP	SDCIT2/16GBSP	SDCIT2/32GBSP
SDCIT2/64GBSP		

1. Speed may vary due to host and device configuration.

2. Terabytes Written (TBW) is derived from the endurance under the highest capacity and is based on internal metrics that quantify how much data can be written to a card in its lifespan.

3. Some of the listed capacity on a Flash storage device is used for formatting and other functions and thus is not available for data storage. As such, the actual available capacity for data storage is less than what is listed on the product. For more information go to Kingston's Flash Memory Guide.

4. IEC/EN 60529 IPX7 certified for protection against continual water submersion for up to 30 minutes and a depth of up to 1m. Withstands temperature range from -25°C to 85°C. Protected against X-ray exposure based on ISO7816-1 guidelines.

5. Kingston Flash Cards are designed and tested for compatibility with consumer-grade market products. It is recommended that you contact Kingston directly for any OEM opportunities or special use applications that are beyond the standard daily consumer usage. For more information on intended use, please refer to the Flash Memory Guide