Industrial Temperature microSD UHS-I

kingston.com/flash

Ideal for industrial applications and extreme conditions.

Kingston's Industrial Temperature microSD UHS-I has an operating temperature rating of -40°C to 85°C, making it suitable for harsh environments. Its high operating temperature rating means it stands up to extreme heat in the desert and in test and measurement situations where standard microSD cards may fail, while its low operating temperature rating allows for use in below freezing weather, where equipment may be left outside for extended periods of time. Its high insertion rating is ideal for applications in which the card will be frequently accessed and removed from host devices, and its MLC NAND allows for large amounts of data to be written to the card.

Kingston® tests these cards extensively during pre-production and new build qualifications. Cards must pass thermal cycle testing, with interval testing at various extreme temperatures; vigorous temperature humidity bias, comprised of several hundred hours of testing to ensure durability at different humidity levels; and wide temp chamber testing. In addition, these cards are tested to be waterproof[1], temperature proof[2], shock/vibration proof[3] and X-ray proof[4]. So you can rest assured your photos, videos and other important files will be protected.

With UHS-I Speed Class U1 speeds up to 90MB/s read and 45MB/s write, the card is ideal for applications requiring greater bandwidth when recording large datasets. Higher sustained write speeds ensure data integrity by reducing transmission stutter, and the card also offers faster upload times when transferring files to a PC. The smallest available SD card, it is the standard expandable storage option for many GPS, tablets, smartphones and industrial devices and, with the included adapter, can be used in standard size SDHC/SDXC host devices.

- Industrial grade card ideal for extreme conditions
- Extensively tested for industrial applications
- UHS-I Speed Class U1
- Small form factor

Waterproof[1]

Temperature proof[2]

Shock and vibration proof[3]

Protected from airport x-rays[4]

Features/specs on reverse ››

Industrial Temperature microSD UHS-I

FEATURES/ BENEFITS

> **Industrial-grade features** — The card's operating temperature rating of -40°C to 85°C makes it perfect for harsh environments. For durability, it's rated for 10,000 minimum insertions.

> **Tested for industrial applications** — Kingston uses wide and broad temperature testing so you can feel secure using the card in industrial applications.

> **UHS-I interface** — Its UHS-I interface offers higher sustained write speeds to ensure data integrity by reducing transmission stutter.

> **MLC NAND** — MLC NAND allows for large amounts of data to be written to the card.

SPECIFICATIONS

> **Capacities**[5] 8GB, 16GB, 32GB

> **Performance**[6] UHS-I Speed Class 1 (U1)

- 8GB: 90MB/s read and 20MB/s write,
- 16GB-32GB: 90MB/s read and 45MB/s write

> **microSD Dimensions** 11mm x 15mm x 1mm

> **SD Adapter Dimensions** 24mm x 32mm x 2.1mm

> **Format** FAT32 (microSDHC 8GB-32GB)

> **Operating & Storage Temperature** -40°C to 85°C

> **Voltage** 3.3V

> **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 SDCIT cards prior to production

> **Warranty**[7] 5 years

PART NUMBERS

SDCIT/8GB
SDCIT/16GB
SDCIT/32GB

Card only (SD adapter not included):
SDCIT/8GBSP
SDCIT/16GBSP
SDCIT/32GBSP

OPTIONAL ACCESSORIES

FCR-MLG4 – MobileLite G4, USB 3.0 Card Reader
FCR-HS4 – USB 3.0 All-in-One Media Reader

1 IEC/EN 60529 IPX7 certified for protection against continual water submersion up to 30 min. and depth up to 1m.

2 Withstands temperature range from -40°C to 85°C

3 Based on MIL-STD-883H, METHOD 2002.5 military standard test method.

4 Protected against X-ray exposure based on ISO7816-1 guidelines.

5 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 products. For more information, go to Kingston's Flash Memory Guide at kingston.com/flashguide.

6 Speed may vary due to host and device configuration.

7 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 at kingston.com/flashguide.