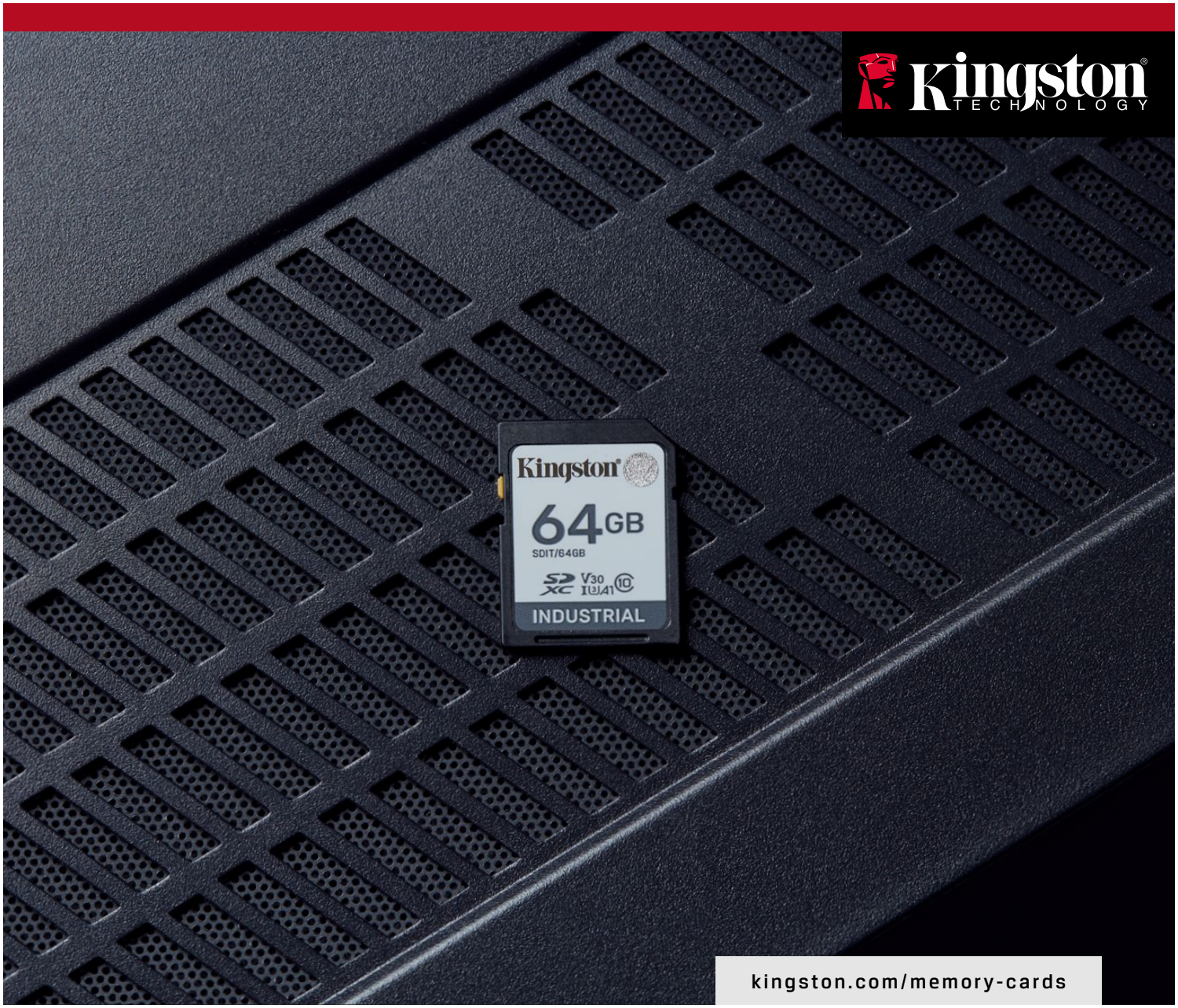

INDUSTRIAL SD MEMORY CARD

Tested to withstand extreme environmental factors

Kingston's Industrial SD card delivers superior endurance and reliability across industrial applications including automation, telecommunication, data systems, building management and POS systems. It is designed and tested to withstand the most demanding environmental factors. With an operating temperature of -40°C to 85°C, Kingston's Industrial SD card can operate normally in extended temperature ranges. The card utilises the industry-leading pSLC mode to provide reliable read/write speeds up to 100/80MB/s[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 SD 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

more ››

FEATURES / BENEFITS

Durable in extreme temperatures — Designed and tested to withstand an extended temperature range of -40°C to 85°C for use in harsh conditions.

High endurance and reliability — Up to 1920 TBW[2] and rated to endure 30K P/E cycles to meet requirements for a wide range of industrial applications.

UHS-I compliant — Read/write speeds up to 100/80MB/s[1] with U3, V30 and A1 support for Android-based applications.

Industrial-grade built-in features — Wear levelling, bad block management and an optional health monitoring tool to manage the lifespan of your card[4].

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

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
- Power failure protection
- Wear levelling
- Auto-refresh read distribution protection
- Dynamic data refresh
- SiP – system in package
- Garbage collection
- Health monitoring

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 SDIT cards prior to production

Warranty[4]
3 years

Waterproof[5] | Shock and vibration proof[7]

Temperature proof[6] | Protected from airport x-ray[8]

KINGSTON PART NUMBERS

Industrial SD Memory Card
SDIT/8GB
SDIT/16GB
SDIT/32GB
SDIT/64GB

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 is thus 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.
4. 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 standard daily consumer usage. For more information on intended use, please refer to the Flash Memory Guide.
5. IEC/EN 60529 IPX7 certified for protection against continual water submersion for up to 30 min and a depth of up to 1m.
6. Withstands temperature range from -40°C to 85°C.
7. Based on MIL-STD-883H, METHOD 2002.5 military-standard test method.
8. Protected against X-ray exposure based on ISO7816-1 guidelines.