

## **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 utilizes the industry-leading pSLC mode to provide reliable read speeds up to 100MB/s¹. It is rated up to 1920 TBW² with 30K P/E cycles and a built-in feature set specific to endurance, performance, and industrial needs. Kingston's Industrial SD is available in capacities from 8GB-64GB³.

- Durable in
   Extreme Temperatures
- > High Endurance
- > UHS-I Speed Class U3, V30, A1
- Industrial Grade
   Built-In Features

## **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<sup>2</sup> and rated to endure 30K P/E cycles to meet requirements for a wide range of industrial applications.

**UHS-I compliant** — Speeds up to 100MB/s<sup>1</sup> with U3, V30, and A1 support for Android based applications.

**Industrial grade built-in features** — Wear Leveling, Bad Block management and an optional health monitoring tool to manage the lifespan of your card<sup>4</sup>.

## **SPECIFICATIONS**

#### Capacities<sup>3</sup>

8GB, 16GB, 32GB, 64GB

#### Performance<sup>1</sup>

Class 10, UHS-I, U3, V30, A1

#### Endurance<sup>2</sup>

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 Leveling
- 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<sup>4</sup>

3 years



Shock and vibration proof<sup>7</sup>



Temperature proof<sup>6</sup>



Protected from airport x-ray8





## 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.
- Terabytes Written (TBW) is derived from the endurance under the highest capacity and is based on internal metrics that quantifies how much data can be written to a card in its lifespan.
- 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.
- 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 up to \ 30 \ min. \ and \ depth \ up to \ 1m \ and \ up to \ up to \ 1m \ and \ up to \ up \$
- 6. Withstands temperature range from -40°C to 85°
- 7. Based on MIL-STD-883H, METHOD 2002.5 military standard test method.
- 8. Protected against X-ray exposure based on ISO7816-1 guidelines.



