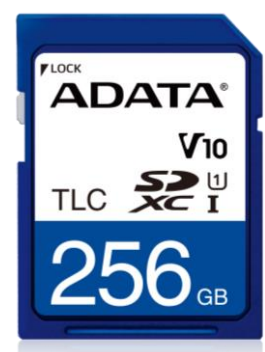## ADATA Industrial & Embedded Solutions

Memory Card

The ADATA ISDD33K industrial-grade SD card implements 3D TLC Flash, sports a 3K P/E cycle rating, and read and write speeds of up to 95/70MB per second. The ISDD33K is highly reliable and compatible as well as power efficient, and is ideally suited for applications such as medical devices, surveillance systems, point of sale systems. For excellent durability, the ISDD33K is built to withstand wide-temperature ranges (-40°C to 85°C). The ISDD33K also supports LDPC error correcting code and wear leveling technologies, and features ADATA's proprietary A$^+$ SLC technology for a long product lifespan.

Key Features

- P/E Cycle upgrade to 3K – improved endurance and reliability

- Large capacity up to 256GB

- Supports LDPC ECC error correcting

- Meets SD 5.1 specification

- Supports SD and SPI modes

- Industrial operating temperature: -40°C to 85°C

- Low power consumption: 0.5W

- Supports S.M.A.R.T., Wear Leveling, End-to-End Data Protection, A$^+$ SLC Mode

Target Applications

Surveillance / Automation / Gaming / Portable Devices / In-Vehicle / POS system

30μ Golden Finger	Anti-Sulfur Resistor	Conformal Coating	Wide Temperature	EDS & EMI Safe	Shock & Vibration Resistant	Power Fail Protection & Recovery	Wear Leveling	Secure Erase	TRIM	Low Power Consumption
—	—	—	●	●	●	●	●	●	—	●

● Supported   — Not available

Specifications

Model	ISDD33K
Interface	SD 5.1
Compatibility	SD 5.1
Dimensions (L x W x H)	32 x 24 x 2.1mm
Flash Type	3D TLC
Capacity	(TLC) 16GB / 32GB / 64GB / 128GB / 256GB (A$^+$ SLC) 4GB / 8GB / 16GB / 32GB / 64GB
Sequential Read (Max.)	95MB/s
Sequential Write (Max.)	70MB/s
Speed Class	UHS Speed : Class 1 Speed Class : Class 10 Video Speed Class : V10
Operating Temperature (Commercial)	-25°C to 85°C
Operating Temperature (Industrial)	-40°C to 85°C
Operating Voltage	3.3V $\pm$ 5%
Operating Humidity	5%-95% RH non-condensing
Power Consumption (Max.)	0.5W
MTBF (Est.)	>2,000,000 hours
Shock Resistance	1500G/0.5ms, Half Sine Wave
Vibration Resistance	20G (10-2000Hz)
Technologies	LDPC ECC, S.M.A.R.T., Wear Leveling, End-to-End Data Protection, Flash Protection, A$^+$ SLC Mode

Ordering Information

Capacity	3D TLC Commercial (-25°C to 85°C)	3D TLC Industrial (-40°C to 85°C)
16GB	ISDD33K-016GR	ISDD33K-016GP
32GB	ISDD33K-032GR	ISDD33K-032GP
64GB	ISDD33K-064GR	ISDD33K-064GP
128GB	ISDD33K-128GR	-
256GB	ISDD33K-256GR	-

Dimensions

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