



DuraFlash™

RD230 | SD 6.1 | SD Card

SMART's DuraFlash, high-capacity, RD230 SD Cards are fully SD UHS-I compliant. The RD230 SD Cards are offered in industrial temperature with capacities from 32GB to 256GB. They are specifically designed to meet strict environmental requirements as in networking, industrial, gaming and automotive applications.

Incorporating onboard error detection and correction algorithms and static and dynamic wear-leveling techniques, SMART's RD230 SD Cards ensure years of reliable operation over a product's life.



Features & Benefits

- Capacities: 64GB to 256GB (SDXC), 32GB (SDHC)
- SD UHS-I Compliant
- Support I-Temp (-40°C to +85°C)
- Low Power Dissipation
- Onboard Wear-Leveling

Applications

- Automotive
- Gaming
- Industrial
- Networking

Product Family Overview

Capacity	Sequential Performance
RD230 SD 6.1 SD Card	
32GB to 256GB	Up to 95MB/s Read; Up to 55MB/s Write

Specifications

RD230 SD 6.1 SD Card	
NAND Type	TLC
Performance	
Host Interface Rate (maximum)	SD 6.1 (SDR 104)
Capacities	32GB to 256GB
Sequential Read (maximum)	Up to 95MB/s
Sequential Write (maximum)	Up to 55MB/s
Reliability	
MTBF	> 3,000,000 hours
Data Reliability	< 1 Non-Recoverable Error in 10 ¹⁷ bits read
Data Retention	10 years >90% life remaining 1 year at the end of life
Endurance (Sequential Workload) ¹	256GB: 700 TBW 128GB: 350 TBW 64GB: 175 TBW 32GB: 87 TBW
Environmental	
Shock	1500 g half-sine, 0.5 msec, 1 shock along each axis, X, Y, Z in each direction
Vibration	20G 80-2000Hz, 1.52mm 20-80Hz, 3 axis
Operating Temperature	Industrial: -40°C to +85°C
Storage Temperature	-40°C to +85°C
Humidity	40°C, Operation: 90% RH, Storage: 93% RH
Physical	
Length	32.0mm
Width	24.0mm
Thickness	2.1mm

¹Endurance is directly related to 128k sequential write workload.

DuraFlash Product Grading System

SE Standard Endurance | TLC

HE High Endurance | eTLC

PE Premium Endurance | eTLC (OP 28%)

UE Ultra Endurance | pSLC



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