256GB PCIe Gen.3 NVMe SSD

ZSNM2G30256

Product Overview

The 256GB PCIe Gen3 NVMe SSD delivers fast, efficient storage for desktops, laptops, and embedded systems using the PCIe 3.0x4 interface and NVMe protocol. It significantly out-paces SATA SSDs in both sequential and random performance, enabling quicker OS boot times, rapid application loading, and smoother handling of everyday tasks.

Key Features

- PCIe Gen3x4 interface with NVMe protocol supporting up to 8 Gbps per lane
- Faster boot times and quicker application loading compared to SATA SSDs
- Supports NVMe 1.3 or later for improved command efficiency
- Advanced wear-levelling technology to extend drive lifespan
- LDPC error correction for improved data integrity and reliability
- Dynamic SLC caching to enhance write performance
- Thermal throttling protection to prevent overheating under heavy workloads
- Low power consumption with advanced power management states
- Shock- and vibration-resistant design with no moving parts
- Compact M.2 2280 form factor for wide system compatibility

Product Specifications

Parameter	Specification
Capacity	256GB
Interface	PCIe Gen3.0×4, NVMe 1.3
Form Factor	M.2 2280
NAND Flash Type	3D NAND
Sequential Read Speed	Up to 3000 MB/s
Sequential Write Speed	Up to 2000 MB/s
Operating Voltage	3.3 V DC
MTBF	≥ 1.5 million Hours
Endurance (TBW)	75 TB
Operating Temperature	0°C to 70°C
Storage Temperature	-40°C to 85°C

Physical Dimensions

• Form Factor: M.2 SSD

• Interface Connector: M key edge connector

• Dimensions: 22 (W) × 80 (L) × 2.3 (H) mm

• Weight: About 8 gm.

Advanced Storage Management

• NVMe protocol for low latency and high throughput

• S.M.A.R.T monitoring support

• TRIM & garbage collection support for sustained performance

• Advanced caching and error-correction features (LDPC / SLC cache)

Warranty

• 5-Year Warranty