dahua TECHNOLOGY

DHI-SSD-E900
NVMe M.2 Solid State Drive

- Adopts high-quality 3D NAND wafer level chip
- Supports PCIe3.0 x4, and NVMe 1.3 protocol
- All-metal cooling plate is included; equipped with intelligent temperature control technology
- Supports TRIM to improve read/write performance and speed
- Supports Max. Write technology for full-disk SLC cache
- Supports LDPC ECC
- Low power consumption management

System Overview

Equipped with high-quality 3D NAND wafer chip, high-performance controller and mature firmware solution, and worked with professional all-metal cooling plate, Dahua E900 series NVMe SSD provides efficient, stable and durable NVMe SSD.

*System configuration for performance test: Chip-Intel Z390 Chipset, Intel Core i9-9900KF@3.6GHz, 16GB DDR4; operating system-Windows 10 x64; testing tool-CrystalDiskMark 6.0.0

Scene

Dahua E900 series NVMe M.2 business-grade SSD can be used for enterprise and personal notebooks*, desktops, and other devices. Suitable for high workload environments such as making or editing videos or image rendering, it is designed for tech-savvy high-end user, gamers and professionals.

*All-metal cooling plate is included with E900 series. Please make sure that your device has enough space before installing.
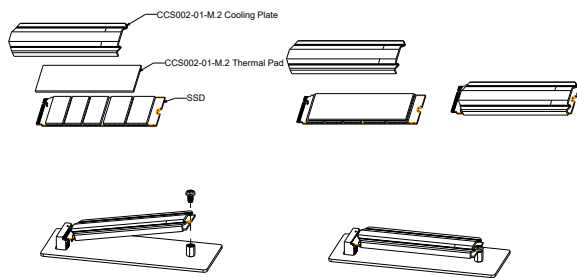
Technical Specification

Product Model	DHI-SSD-E900N128G	DHI-SSD-E900N256G	DHI-SSD-E900N512G	DHI-SSD-E900N1TB
Capacity[1]	128 GB	256 GB	512 GB	1 TB
Form Factor	M.2 2280			
Port	PCIe Gen 3.0 x 4			
Net Weight	Max 8 g (0.02 lb)			
Product Dimensions[2]	80.0 mm × 23.0 mm × 4.8 mm (3.15" × 0.91" × 0.19")			
Packaging Dimensions	140.5 mm × 105.5 mm × 15.5 mm (5.53" × 4.15" × 0.61")			
Memory Component	3D NAND			
Power Consumption[2]	3066 mW (max) 566mW (idle)	2597 mW (max) 528 mW (idle)	3521 mW (max) 1188 mW (idle)	3696 mW (max) 1188 mW (idle)
S.M.A.R.T	Support			

TRIM	Support			
Garbage Collection	Support			
Sequential Read[3]	Up to 1250 MB/s	Up to 2000 MB/s	Up to 2000 MB/s	Up to 2000 MB/s
Sequential Write[3]	Up to 650 MB/s	Up to 1050 MB/s	Up to 1450 MB/s	Up to 1600 MB/s
4K Random Read[3]	Up to 70000	Up to 90000	Up to 160000	Up to 230000
4K Random Write[3]	Up to 160000	Up to 190000	Up to 200000	Up to 230000
MTBF	1,500,000 hours			
Operating Temperature	0°C to +70°C (+32°F to +158°F)			
Storage Temperature	−40°C to +85°C (−40°F to +185°F)			
Operating Humidity	5%–95% (non-condensing)			
Vibration Resistance	10–200 Hz, 0.5 G			
Shock Resistance	1500 G/0.5 ms (half sine wave)			
TBW	80TB	128 TB	256 TB	512 TB
Warranty[4]	3-year limited warranty			
Reference Information	1. Capacity calculation: 1 GB = 1 billion bytes (IDEMA). Actual available capacity might be reduced (due to formatting, partition, operating system applications, or other necessary usage). 2. The dimensions are after installing cooling plate. 3. System configuration of performance test: Intel Z390 Chipset, Intel Core i9-9900KF@3.6GHz, 16GB DDR4,; operating system-Windows 10 x64; testing tool-CrystalDiskMark 6.0.0. 4. Warranty period or maximum write amount (TBW), whichever comes first. 5. High performance SLC cache has been enabled. *Above data based on internal testing of Dahua Memory Laboratory			

Ordering Information

Type	Model	Description
E900 Series	DHI-SSD-E900N128G	M.2 2280 PCIe G3x4 (Dramless) SSD DHI-SSD-E900N128G
	DHI-SSD-E900N256G	M.2 2280 PCIe G3x4 (Dramless) SSD DHI-SSD-E900N256G
	DHI-SSD-E900N512G	M.2 2280 PCIe G3x4 (Dramless) SSD DHI-SSD-E900N512G
	DHI-SSD-E900N1TB	M.2 2280 PCIe G3x4 (Dramless) SSD DHI-SSD-E900N1TB

Installation

Dimensions (mm[inch])