dahua
TECHNOLOGY

DHI-SSD-S820N
M.2 SATA SSD

· Adopts high-quality wafer level chip

· Supports SATA III protocol with transmission speed up to 550 MB/s

· View information through S.M.A.R.T

· Provides better read and write performance with TRIM and NCQ

· Low power consumption management

· Stable read and write performance of the SSD card allows the car DVR
  to make and save video recordings without losing frames

System Overview

As a new generation of M.2 2280 SATA SSD product launched by Dahua, S820 series adopts high-quality 3D NAND wafer level chip and high-performance controller. It is specially designed for vehicle monitoring system and improve response speed of car DVR. The S820 improves performance in processing data, and effectively deals with various special conditions in vehicle monitoring such as data flow and full coverage.

Scene

Supports mobile data terminal for vehicles with M.2 SATA ports.
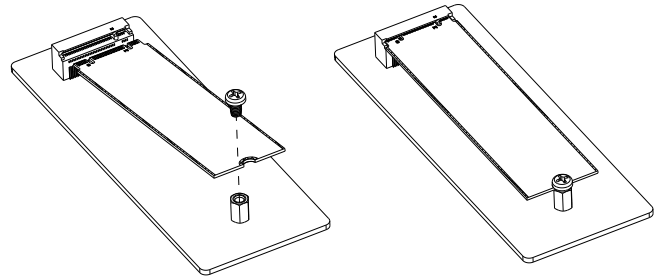
Technical Specification

Product Model	DHI-SSD-S820N512G	DHI-SSD-S820N1TB
Capacity[1]	512 GB	1 TB
Form Factor	SATA M.2 2280	
Port	SATAIII 6Gb/s	
Net Weight	Max. 8 g (0.02 lb)	
Product Dimensions[2]	80.00 mm × 22.00 mm × 2.20 mm (3.15" × 0.87" × 0.09")	
Packaging Dimensions	614 mm × 454 mm × 300 mm (24.2" × 17.9" × 11.8")	
Memory Component	3D NAND	
Power Consumption[3]	2000 mW (max) 500 mW (idle)	2100 mW (max) 500 mW (idle)
S.M.A.R.T	Yes	
TRIM	Yes	

Garbage Collection	Yes	
Sequential Read[3]	Up to 550 MB/s	Up to 490 MB/s
Sequential Write[3]	Up to 460 MB/s	Up to 460 MB/s
4K Random Read[3]	Up to 45,000	Up to 41,000
4K Random Write[3]	Up to 82,000	Up to 82,000
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	10-1000Hz,2.78G	
TBW	1000 TB	2000 TB
Warranty[4]	3-year limited warranty	
Reference Information	1. Capacity calcultion: 1 GB = 1 billiboynt es (IDEMA). Actual available capacity might be reduced (due to formatting, partition, operating system applications, or other necessary usage). 2. 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. 3. Warranty period or maximum write amount (TBW), whichever comes first. (* Speed data is from THE Dahua Storage lab and actual performance may vary from device to device.)	

Ordering Information

Type	Model	Description
S820 Series	DHI-SSD-S820N512G-G1YTTANN8	Dahua M.2 2280 SATA Solid State Drive 512GB Dramless 0~70℃
	DHI-SSD-S820N1TB-G1YTTANN8	Dahua M.2 2280 SATA Solid State Drive 1TB Dramless 0~70℃

Installation

Dimensions (mm[inch])