

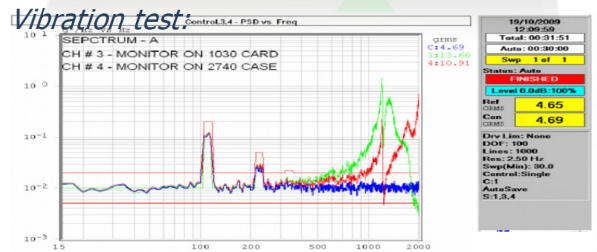
2.5" SATA3 High Capacity  
Up to 16000GB  
pSLC MLC & TLC Flash Disk

7/9.5  
mm

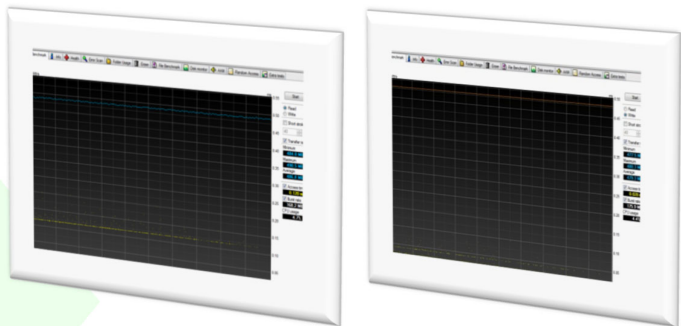
Photon series  
AS25-SATA3\_HCF

### Product Overview

The *Photon series* presents SATA3 interfaces in a standard 2.5" Form Factor pSLC and MLC Flash Drive. Asine AS25\_HCF flash drive delivers performance and proven reliability for data and mission critical systems. Added benefits of flexibility are built into Asine's AS25\_HCF storage systems, including easy field firmware upgrades and expandable storage capacity as flash disk capacities increase. The AS25\_HCF drives support OEM application specific features such as **AES-256 bit hardware encryption, fast sanitize erase**, high grade industrial certified metal & workmanship, and more. Product is compliant to JGPSI-JIG, REACH, and RoHS.



### Sustained performance test:



### Applications

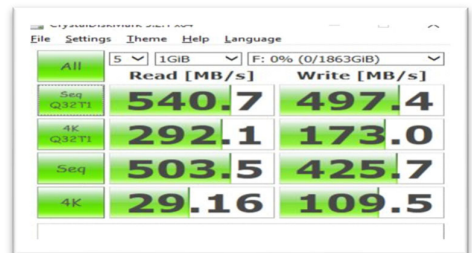
- Industrial & Commercial PC / Tablet Systems
- JBOD, NAS, SAN, RAID
- Data warehouse
- Security, HLS-Home Land Security
- ATM, Gaming, Lottery
- Automotive, Navigation, Infotainment, ECU
- Point Of Sale- POS / Kiosk, Smart Terminals
- Medical
- Industrial & Airborne Systems
- Rugged Computer
- High-Speed Data Recording
- Video Surveillance, JPEG2000 Capture
- Factory Automation



## Features

- Highest quality MLC & pSLC Flash technology
- 1000GB to 16,000GB MLC; for pSLC & TLC up to 8,000GB of non-volatile (per model) Flash memory in a 2.5" form factor
- SATA1, SATA2 & SATA3 interfaces. Protocol SATA 3.1 AHCI
- Security - Optional: AES256; Secure Erase support, OPAL
- All modes to PIO3,4 & to UDMA5 of SATA interface, ATA8 standard compliance
- **Fast sanitize erase** for entire media (few seconds typical) capacity dependent
- Operating temperature – Commercial 0°C to +70°C and Industrial -40°C to +85°C
- Storage temperature -50°C to +95°C
- Humidity 5% to 95% relative, non-condensing
- Altitude – operating -1000 ft. to 70,000 ft.
- High data transfer rate: ≥ 500 MB/Sec Sustained Read or Write (capacity, technology & file system dependent)
- IOPS 4KB up to 80K random Read & 70K Write (overall capacity dependent)
- Reliability – MTBF 2,000,000 hours based on Telcordia
  - Embedded EDC/ECC. Bad Block Mapping and Management
  - Built-in power-up self test and automatic self-diagnostics
  - Wear-Leveling Algorithm: Dynamic & Static wear leveling
  - PLP – Power lost Protection - SPOR
- Power: 2.7 W @ 1000GB. 0.8 W on Idle; TLC max 3.9 W.1.6 W on Idle
- TBW up to 640 overall with 8TB of TLC SSD
- TBW up to 1000 overall with 4TB of MLC SSD, up to 2000 for 8TB SSD
- TBW up to 17,000 overall with 1TB of pSLC SSD 128K sequential workload
- No special drivers - uses existing Windows, Linux, VxWorks®, and SATA drivers
- Standard, Industrial, and pSLC models
- SSD unit sustain environmental
  - Shock (operating and non-operating) 1,000 G/0.5ms
  - Vibration - Operating: 2.17 GRMS (5-700 Hz)
  - Non-Operating: 3.13 GRMS (5-800 Hz)

The AS25-SATA3\_HCF is a top reliable high performance mass storage Solid-State Disk with no moving parts, ideal to meet the reliability requirements for high quality storage, data store, video and audio servers, as well as broadcasting systems and general computing. The AS25\_HCF drives are designed to withstand long life true full capacity, while operating without compromising data integrity.



### Dimensions:

100.2 L X 70 W X H

H= 7 mm. 9.5 mm at 8TB MLC/4TB pSLC

**Weight:** 80 gr. typ.

Ordering Information: P/N Structure: AS25-[SATA3]-[cap][t][c][f][h][m]

**Remark:** Consult factory for allowable P/N's combinations

P/N Prefix	Capacity	t	c	f	h	m
AS25-SATA3	C/E/Z,H @M option	C 0°C to +70°C	D Conduction	F Conformal	H H/W Sanitize	SP pSLC
I/F	1000 1000 GB	E -25°C to +75°C	Cool	Coating	Erase and WP	M MLC
	2000 2000 GB	Z -40°C to +85°C				T TLC
	4000 4000 GB					
	8000 8000 GB					
	016T 16 TB					
	C/Z,H @SP option					
	1000 1000 GB					
	2000 2000 GB					
	4000 4000 GB					
	8000 8000 GB					
<b>Note:</b>	C @T option					
Net capacity depends on	2000 2000 GB					
Operating System	4000 4000 GB					
	8000 8000 GB					

### Ordering Example:

AS25-SATA3-4000-ZM is a 2.5" SSD with 4000GB MLC Flash, SATA3, operating at -40°C to +85°C