

2.5" NVMe PCIexpress *UHC* Ultra
High Capacity Up to 30TB
3D QLC/TLC Flash Disk

UHC
Up to
30TB

Photon series
AS25-NVMe_UHC

Product Overview

The *Photon series* presents NVMe - PCIexpress interfaces in a standard 2.5" U.2 Form Factor QLC / TLC Flash Drive. Asine AS25-NVMe flash drive delivers performance and proven reliability for data and mission critical systems. Added benefits of flexibility are built into Asine's AS25-NVMe storage systems, including expandable storage capacity as flash disk capacities increase. The AS25-NVMe drives support OEM application specific features such as **fast sanitize erase**, high grade industrial certified metal & workmanship, and more. Product is compliant to RoHS.

Sustained performance test:



Images for reference only

Applications

- Servers
- JBOD, NAS, SAN, RAID
- Data warehouse
- AI
- Industrial & Commercial PC
- Security, HLS-Home Land Security
- Navigation, Infotainment
- Medical
- Rugged Computer
- High-Speed Data Recording
- Video Surveillance, JPEG2000 Capture
- Factory Automation
- Virtual Reality



Features

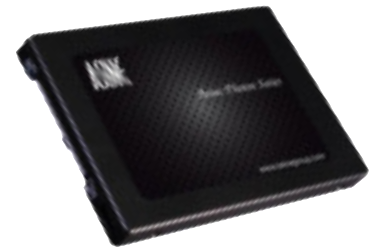
- Highest quality Asine ~~Photon series~~ 3D QLC/TLC Flash technology
- From 8TB to 30TB of non-volatile Flash memory in a U.2 2.5" (SFF-8639)
- Interface NVMe PCIe Gen3 X4 lanes
- NVMe specifications revision 1.3 compliant
- Fast sanitize erase for entire media (few seconds typical) capacity dependent
- Operating temperature – Commercial 0°C to +60°C
- Storage temperature -55°C to +95°C
- Humidity 5% to 95% relative, non-condensing
- Altitude – operating 0 ft. to 70,000 ft.

High data transfer rate: Read up to 3100MB/Sec, Write up to 2500MB/Sec

IOPS 4KB; up to 400K random R/W

- Reliability – MTBF 1,500,000 hours by JEDEC-218/219
 - 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
 - Power: 3W on Idle. Operation Avg. 27W @ 30TB
- TBW – TLC 28,800 TBW (*avg.) @ 30TB unit / 0.8 DDPD, QLC 12,000 (*avg.) DDPD 0.6 for 30TB unit (*avg. of 100% 4K Random to 100% 128K sustain). Data calculated according to intermediate workload. WAF present application workload profile.
- No special drivers - uses compliant NVMe Windows and Linux drivers
- SSD unit sustain environmental – Shock (operating and non-operating) 1,000 G/0.5ms. Vibration - Operating: 16.3G GRMS (10-2000 Hz)

The AS25-NVMe_UHC 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 NVMe UHC drives are designed to withstand long life true full capacity, while operating without compromising data integrity.



Dimensions:

100.2 L X 70 W X 15 H mm max

Weight: 160 gr. typ.

Ordering Information: P/N Structure: ASCN8025-030TNAEQ2[nnn] **Remark:** Consult factory for allowable P/N's combinations

Ordering Information:

P/N	Description	nnn
ASCN8025-008TNAEQ2	U.2-NVMe Gen3 QLC 7.6TB AES256 Commercial temperature	nnn Factory code
ASCN8025-015TNAEQ2	U.2-NVMe Gen3 QLC 15TB AES256 Commercial temperature	
ASCN8025-030TNAEQ2	U.2-NVMe Gen3 QLC 30TB AES256 Commercial temperature	

Options for U.2

Conformal coated (-00F)

Ordering Example:

ASCN8025-030TNAEQ2 is a U.2 2.5" SSD with 30TB QLC Flash, NVMe / PCIexpress Gen3 I/F, operating at 0°C to +60°C