Data Sheet

QSAN Unified Storage

XN5 Series

Performance-Oriented All NVMe Unified Storage for Demanding Workload

Key Benefits

Unparalleled Performance

- 100% NVMe 2U26 high density architecture
- Onboard 25 GbE LAN port and flexible high-speed I/O expansion

Enterprise Reliability

- 99.9999% high availability with mirrored firmware architecture and overall modular design performs no single point of failure
- Never lose any data at cache-to-flash memory protection solution
- Non-disruptive firmware upgrade and backup appliance reach zero downtime

Effortless Management

- Simplify the steps of upgrading and replacing system components with modular hardware design
- QSM - the operation system for flash storage reduces learning and maintenance efforts through our innovative interface design
- Support RESTful API, SNMP, and emailing for external management or use QSAN XInsight, smarter data management with simplified platform and intelligent engine

Presenting Lightning-Fast Performance for Enterprises

QSAN XN5 series is the premier enterprise-level all-NVMe flash unified storage solution with unparalleled speed. With µs-level latency, it meets the responsiveness needs of the most challenging enterprise applications. The XN5 is ideal for modern applications, including AI model training, real-time databases, HPC (High-Performance Computing), and media production.

Accelerate Your Business with 100 µs Latency

The XN5 series features an NVMe SSD architecture designed to ensure consistent response times, prioritizing steady performance instead of occasional peak throughput. Tailored for enterprise high-performance computing infrastructures, it delivers high IOPS with latency at the microsecond level. With minimal latency concerns, applications are shielded from slowdowns or halts caused by high response times. Matching with the RDMA technology, XN5 can mostly eliminate the latency when accessing data from the host to the drive.

Always-on for Business

XN5 is equipped with mirrored firmware architecture, built-in hot-swappable, and fully redundant hardware design, streamlining maintenance and upgrades. Its dual active controllers operate, and online firmware upgrades deliver seamless storage services in real-time, guaranteeing uninterrupted service delivery with zero downtime.

Sweatless Management Experience

QSM continuously evolves security levels to protect data across storage and adhere to industry best practices. Supporting SED (Self-Encrypting Drives) coupled with WORM (Write Once Read Many) will keep your sensitive data safe even if the drives are lost, stolen, or misplaced. Additionally, Windows ACL (Access Control List) and RBAC (Role-Based Access Control) help to prevent unauthorized access to your data.

Reduce Business Overhead through Data Reduction

Equipped with advanced data reduction capabilities, including deduplication and compression, the XN5 offers unparalleled efficiency, allowing businesses to significantly reduce overhead costs.

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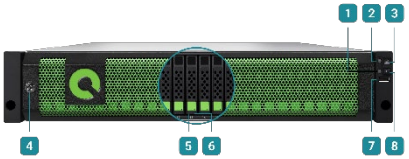
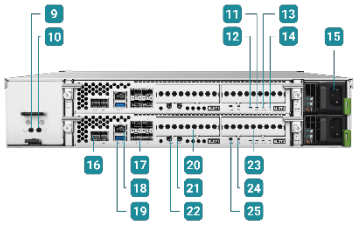
Appearance





1. Enclosure Status LED
2. Enclosure Access LED
3. Enclosure Power Button / LED
4. Bezel Lock
5. Disk Drive Status LED
6. Disk Drive Power LED
7. USB Port
8. UID (Unique Identifier) Button / LED
9. Cache-to-Flash Module Power LED
10. Cache-to-Flash Module Status LED
11. Master / Slave LED (only for dual controllers)
12. Controller Status LED
13. Dirty Cache LED
14. UID (Unique Identifier) LED
15. Power Supply Unit
16. 12 Gb/s SAS Wide Port
17. 25 GbE LAN Port
18. 2.5 GbE LAN Port
19. USB Port
20. Host Card Slot 1 (host card is an optional part)
21. Service Port
22. Console Port
23. Host Card Slot 2 (host card is an optional part)
24. Reset to Factory Default Button
25. Buzzer Mute Button

System Specification

Model Name	XN5226D-12C	XN5226S-12C
Architecture	Dual-active controller	Single-upgradable controller
CPU		
Processor	Intel® Xeon® 12-core x 2	Intel® Xeon® 12-core
Memory		
Memory Module Pre-installed	32 GB DDR4 RDIMM	16 GB DDR4 RDIMM
Total Memory Slots	16	8
Memory Expandable up to	2,048 GB	1,024 GB
Storage		
Drive Bays	2.5" Slot x 26	
Maximum Drive Bays with Expansion Unit	546	
Compatible Drive Type	2.5" dual-port U.2 NVMe SSD 2.5" SAS SSD (for expansion units) 3.5" SAS HDD (for expansion units)	2.5" single-port U.2 NVMe SSD 2.5" SAS SSD (for expansion units) 3.5" SAS HDD (for expansion units)
Drive Interface	U.2 NVMe (PCIe Gen 4) SAS 12 Gb/s (for expansion units)	
Maximum Internal Raw Capacity	798 TB	
Maximum Raw Capacity with Expansion	16,773 TB	
Hot Swappable Drive	Yes	
Connectivity Port		
PCIe Expansion	(Gen 4x8 Slot) x 4	(Gen 4x8 Slot) x 2
2.5 GbE RJ45 LAN Port	2 (onboard)	1 (onboard)
10 GbE SFP+ LAN Port	2 (option) / 4 (option)	
10 GbE RJ45 LAN Port	2 (option) / 4 (option)	
25 GbE SFP28 LAN Port	8 (onboard) / 2 (option) / 4 (option)	4 (onboard) / 2 (option) / 4 (option)
100 GbE QSFP LAN Port	2 (option)	
16 Gb SFP+ Fibre Channel	2 (option) / 4 (option)	
32 Gb SFP28 Fibre Channel	2 (option) / 4 (option)	
Expansion and External Port		
12 Gb/s SAS Wide Port	4 (onboard)	2 (onboard)
USB Port	1 (front) / 2 (rear)	1 (front) / 1 (rear)
Others	Console Port x 2, Service Port x 2	Console Port x 1, Service Port x 1
Software Specification		
Storage OS	QSM 4	
RAID Type	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50EE / 60EE	
Storage Efficiency	Thin provisioning / Compression and Deduplication (option)	
Software Acceleration	SSD cache / Auto tiering / RDMA	
Data Protection	Snapshot / Asynchronous / Synchronous (option)	
Backup Service	Rsync / S3 backup / Cloud backup / XMirror* / Microsoft 365 email backup	
Security	SSL / SSH / iSCSI CHAP / ISE & SED / WORM / RBAC / Windows ACL / Antivirus	
Support Protocols	CIFS / NFS / FTP / WebDAV / iSCSI / FCP / NVMe-oF	
Management	Web UI / Window AD / LDAP / RESTful API / S.E.S. / LCM	
Appearance		
Dimension (H x W x D) (mm)	88 x 438 x 573	
Net Weight (kg)	19.6	16.5
Gross Weight (kg)	28.6	25.5
Others		
Memory Protection	Cache-to-Flash Module (built-in)	
System Fan	8 pcs	4 pcs
Power Supply Unit	850 W x 2 (80 Plus Platinum)	
Power Input	100 - 240 VAC, 50/60 Hz	
Power Consumption	812 W / 2,770 BTU	
Certification	CE / FCC / BSMI	
Standard Warranty	System: 5 years Cache-to-Flash Module: 1 year	

* The feature is still under developing, please contact QSAN for accurate release date.