

Data Sheet



QSAN Unified Storage

XCubeNXT 8012D

Simple Dual Controller Unified Storage for SMB

Key Benefits

Simple

- Set up your system in 5 minutes, and instant usage by ZFS.
- Non-disruptive architecture enables maintenance and upgrades without performance impact.
- Support multiple protocols are suitable for all kinds of applications.
- Get the latest feature without charge. Continuously updated firmware even over the warranty.
- Active-Active architecture with a fully modular design. No service down when there is a single point of failure.

Enterprise-Grade

- Ransomware/cyber-attack protection by WORM, SED, and Pool encryption.
- Sync data among branch offices and build up an enterprise private cloud with XMirror.
- Store data more efficiently with built-in enterprise feature.
- Avoid data lost in a power failure by memory cache protection.

Scalable

- Support 432 bays, no need to re-buy storage for expansion.
- Scale-out everything instantly, includes generational upgrades.

Enterprise-Level Unified Storage For Business Environments

QSAN XN8012D is a simple, secure, scalable, and affordable dual controller unified storage systems for SMB and enterprise. Enterprise can initially manage data efficiently and scale-out its architecture with expansion units as their business grows. It is an ideal solution for businesses to plan their budget smartly and grow with it.

Faster Storage Easier Configuration

XN8012D provides many tools to accelerate application execution efficiency which are very simple to use.

- **Intuitive load balancing**- Automatically select the right path that fits your current workload.
- **Application efficiency**- Support 16GbE/32GbE Fibre channel and 25GbE/32GbE provide different application scenarios.
- **Smart SSD cache**- One SSD to provide both read and write cache to achieve cost-efficiency without compromising performance.
- **Intuitive load balancing**- Automatically select the right path that fits your current workload.

Business Easy Expansion

Enterprises can make cost-effective planning in the initial stage of expansion. When the demand is getting larger, they can expand the hardware and capacity. And all this does not need to stop any services.

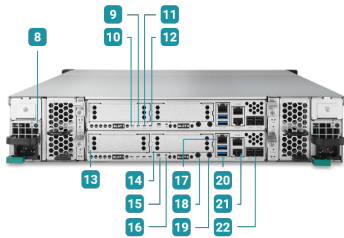
- **Non-disruptive upgrade**- Data service keeps running during software and hardware upgrade.
- **High scalability**- Support up to 420 bays and 7.5 PB.
- **Beyond warranty**- Get the latest feature without charge.

Efficiently Data Store, Saving Your Wallet

Your backup and archive size will become huge, so data efficiency is very important too. Every bit counts!

- **Deduplication**- With deduplication, QSM will auto remove the redundant data object to reduce the usage of storage capacity.
- **Compression**- Helping ITs to reduce the amount of storage you need to purchase and maintain.

Appearance



1. Enclosure Power Button / LED
2. UID (Unique Identifier) Button / LED
3. Enclosure Access LED
4. Enclosure Status LED
5. USB Port
6. Disk Drive Power LED
7. Disk Drive Status LED
8. PSU Indicator and Beep Off Button
9. Controller Status LED
10. Master / Slave LED (only for dual controllers)
11. Dirty Cache LED
12. UID (Unique Identifier) LED
13. Host Card Slot 1 (host card is an optional part)
14. Host Card Slot 2 (host card is an optional part)
15. Buzzer Mute Button
16. Reset to Factory Default Button
17. Management Port
18. Console Port
19. Service Port
20. USB Port
21. 10GbE iSCSI Port
22. 12Gb/s SAS Wide Port

System Spec

Architecture	Active-Active dual-controller
CPU	
CPU	Intel® Xeon® 64-bit Quad-Core (Also support 8 core model)
Memory	
System Flash	16GB USB DOM
Memory Module Pre-installed	16GB DDR4 ECC DIMM (per controller)
Memory Expandable up to	4 x 32 = 128GB (per controller)
Storage	
Drive Bays	3.5" Slot x 12
Maximum Drive Bays with Expansion Unit	420
Compatible Drive Type	3.5" SAS HDD / SAS SED HDD, 3.5" NL-SAS HDD / NL-SAS SED HDD, 2.5" SAS SSD / SAS SED SSD 2.5" SATA SSD / SATA SED SSD (*), 2.5" SAS HDD / SAS SED HDD, 2.5" NL-SAS HDD / NL-SAS SED HDD (* In dual-controller system, 2.5"SATA HDD need 6G MUX board)
Drive Interface	SAS 12Gb/s
Maximum Internal Raw Capacity	216TB
Maximum Raw Capacity with Expansion Units	7,560TB
Hot Swappable Drive	Yes
Connective port	
USB 2.0 Port	1 (Front)
USB 3.0 Port	2 (Rear)
Others	UPS Port x 1, Controller port x 1
1GbE RJ45 LAN Port	1 (Onboard)
10GbE RJ45 LAN Port	2 (Onboard) / 2 iSCSI (Option: HQ-10G2T)
10GbE SFP+ LAN Port	4 iSCSI (Option: HQ-10G4S2)
25GbE SFP28 LAN Port	2 iSCSI (Option: RHCE25P2) (Available soon)
16Gb SFP+ Fibre Channel	4 FCP (Option: HQ-16F4S2) / 2 FCP (Option: HQ-16F2S2)
32Gb SFP28 Fibre Channel	2 FCP (Option: RHCF32P2) (Available soon)
Expansion Port	
12Gb/s SAS Wide Port	2 (onboard)
PCIe Expansion	1 x Gen3x8, 1 x Gen2x4
Function	
Max Pools	4 (Recommendation)
Max LUN	4096
Max LUN Size	Unlimited (Depends on pool size)
Max Snapshot	4096
Security	SED, WORM, Pool Encryption
Support Protocols	FC, iSCSI, NFS, CIFS, FTP
Deduplication	Yes
Compression	Yes
SSD Cache	Yes (Read/Write in 1 SSD)
Virtualization	Hyper-V, VMware ready, VAAI, SRM, Citrix
Cache-to-Flash Module	Yes (Does not need Battery Backup Module)
Others	
System Fan	4 pcs(hot-swappable)
Power Recovery	Yes
Wake on LAN/WAN	Yes
Certification	CE, FCC, CCC, BSMI, VCCI, KCC
Standard warranty	3 years