

QSAN Unified Storage

XCubeNXT 8100

Enterprise Unified Storage in Simplicity

Key Benefits

Modern Simplicity

- QSM storage management system minimizes the learning curve and eases maintenance through an intuitive GUI
- Fast setup and data can be accessed in 5 minutes after installation
- Multiple protocol support and cross QSAN platform replication

Dependable Data Experience

- 99.9999% high availability design with no single point of failure
- Cache-to-flash to protect cache data in power outage
- Non-disruptive firmware upgrade ensures continuous data service with zero downtime

Flexible Expansion

- Dual controller with built-in 4-port 10 GbE and maximum 26 host ports allows direct connection to multiple hosts without switches
- Outstanding scale-up capability up to 16.7 PB
- Wake-on-SAS allows you to remotely power on / off all cascaded XCubeDAS expansion units for power saving

High-Performance Unified Storage for Enterprise Workloads

The XCubeNXT 8100 series is the newest generation for diverse workloads which demand more performance. Highly available and secure with multiple protocol and cross QSAN platform support, it is designed to be ideal for applications in mission-critical data centers, containerization, virtualization, or media environments. Plus, backed by a 5-year limited warranty for proven enterprise-grade reliability.

Proven Simplicity - "Set and Forget" Data Services

QSM, a storage management system with intuitive GUI designs, helps to save time in storage deployment considerably. It also delivers unified storage features including support for a range of multi protocols (CIFS, NFS, FTP, iSCSi, FCP, etc.), complete RAID level protection, RAID EE, thin provisioning, SSD cache, auto-tiering, compression, inline deduplication, and more. With the help of an intuitive dashboard, managers can monitor storage status in real time.

Secure Data and Secure Management

QSM continuously evolves security level 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) helps to prevent unauthorized access to your data

High Availability and Enterprise Reliability

The XCubeNXT series is a proven high availability unified storage system with full redundancy. Its dual-active architecture and cache-to-flash technology ensure optimal performance and resilience in critical situations.

Flexible I/O Modules and Scale-up Capacity as Needed

Each controller has two host card slots that can be configured as iSCSI, Fibre Channel, or a mix of both besides built-in 4-port 10 GbE. As a result, the series offers great flexibility with built-in 8-port 10 GbE and up to 26 host ports in a dual-controller system. In addition, the XN8126 provides massive scale-up capabilities by connecting XCubeDAS or 3rd-party expansion units with up to 546 disk drives or 16.7 PB raw capacity for future data growth.



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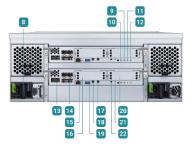


- 1. Enclosure Status LED
- 2. Enclosure Access LED
- 3. Enclosure Power Button / LED
- 4. Disk Drive Status LED
- 5. Disk Drive Power LED
- 6. USB Port
- 7. UID (Unique Identifier) Button / LED
- 8. Power Supply Unit
- 9. Master / Slave LED (only for dual controllers)
- 10. Controller Status LED
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-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

Architecture CPU		XN8126S
CPU	XN8126D Dual-active controller	Single-upgradable controller
	Dual-active controller	Single-upgradable controller
	Intol® Voon® 4 core v 2	Intol® Voon® 4 ooro
Processor	Intel® Xeon® 4-core x 2 (8-core model is also available)	Intel® Xeon® 4-core (8-core model is also available)
Memory	,	
	32 GB DDR4 RDIMM	16 GB DDR4 RDIMM
<u> </u>	8	4
Memory Expandable up to	512 GB	256 GB
Storage		
	2.5" Slot x 26	
Maximum Drive Bays with Expansion	546	
Unit	540	
Compatible Drive Type	2.5" SAS, NL-SAS, SED HDD 2.5" SAS, SED SSD	2.5" SAS, NL-SAS, SED HDD 2.5" SATA HDD 2.5" SAS, SATA, SED SSD
Drive Interface	SAS 12 Gb/s	SAS 12 Gb/s, SATA 6 Gb/s
Maximum Internal Raw Capacity	798 TB	
Maximum Raw Capacity with Expansion	16,773 TB	
Hot Swappable Drive	Yes	
Connectivity Port		
PCle Expansion	(Gen 3x8 Slot) x 4	(Gen 3x8 Slot) x 2
1 GbE RJ45 LAN Port	2 (onboard)	1 (onboard)
10 GbE SFP+ LAN Port	8 (onboard) / 4 (option)	4 (onboard) / 4 (option)
10 GbE RJ45 LAN Port	2 (option) / 4 (option)	
	2 (option) / 4 (option)	
	2 (option) / 4 (option)	
32 Gb SFP28 Fibre Channel	2 (option) / 4 (option)	
Expansion and External 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	
Storage OS RAID Type	0/1/5/6/10/50/60/5EE/6EE/50E	
Storage OS RAID Type Storage Efficiency	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 508 Thin provisioning / Compression and Ded	
Storage OS RAID Type Storage Efficiency Software Acceleration	0/1/5/6/10/50/60/5E/6EE/508 Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA	uplication (option)
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection	0/1/5/6/10/50/60/5EE/6EE/50R Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous	uplication (option) (option)
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service	0/1/5/6/10/50/60/5EE/6EE/50I Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr	uplication (option) (option) or* / Microsoft 365 email backup
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security	0/1/5/6/10/50/60/5EE/6EE/50I Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / ISCSI CHAP / ISE & SED / WO	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols	0/1/5/6/10/50/60/5E/6EE/50I Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / ISCSI CHAP / ISE & SED / WO CIFS / NFS / FTP / WebDAV / ISCSI / FCP	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols Management	0/1/5/6/10/50/60/5EE/6EE/50I Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / ISCSI CHAP / ISE & SED / WO	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols Management Appearance	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50I Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / ISCSI CHAP / ISE & SED / WO CIFS / NFS / FTP / WebDAV / ISCSI / FCP Web UI / Window AD / LDAP / RESTful AP	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm)	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50f Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / iSCSI CHAP / ISE & SED / WO CIFS / NFS / FTP / WebDAV / iSCSI / FCP Web UI / Window AD / LDAP / RESTful AP	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg)	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50f Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / iSCSI CHAP / ISE & SED / WO CIFS / NFS / FTP / WebDAV / iSCSI / FCP Web UI / Window AD / LDAP / RESTful AP 88 x 438 x 491 16.3	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg)	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50f Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / iSCSI CHAP / ISE & SED / WO CIFS / NFS / FTP / WebDAV / iSCSI / FCP Web UI / Window AD / LDAP / RESTful AP	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50f Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / iSCSI CHAP / ISE & SED / WO CIFS / NFS / FTP / WebDAV / iSCSI / FCP Web UI / Window AD / LDAP / RESTful AP 88 x 438 x 491 16.3 18.6	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus I / S.E.S. / LCM
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others Memory Protection	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50f Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / iSCSI CHAP / ISE & SED / WO CIFS / NFS / FTP / WebDAV / iSCSI / FCP Web UI / Window AD / LDAP / RESTful AP 88 x 438 x 491 16.3 18.6 Cache-to-Flash Module (Supercapacitor M	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus I / S.E.S. / LCM
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others Memory Protection System Fan	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50t Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / iSCSI CHAP / ISE & SED / WO CIFS / NFS / FTP / WebDAV / iSCSI / FCP Web UI / Window AD / LDAP / RESTful AP 88 x 438 x 491 16.3 18.6 Cache-to-Flash Module (Supercapacitor M 4 pcs	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus I / S.E.S. / LCM
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others Memory Protection System Fan Power Supply Unit	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50f Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / iSCSI CHAP / ISE & SED / WO CIFS / NFS / FTP / WebDAV / iSCSI / FCP Web UI / Window AD / LDAP / RESTful AP 88 x 438 x 491 16.3 18.6 Cache-to-Flash Module (Supercapacitor M 4 pcs 850 W x 2 (80 Plus Platinum)	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus I / S.E.S. / LCM
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others Memory Protection System Fan Power Supply Unit Power Input	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50t Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / iSCSI CHAP / ISE & SED / WO CIFS / NFS / FTP / WebDAV / iSCSI / FCP Web UI / Window AD / LDAP / RESTful AP 88 x 438 x 491 16.3 18.6 Cache-to-Flash Module (Supercapacitor M 4 pcs 850 W x 2 (80 Plus Platinum) 100 - 240 VAC, 50/60 Hz	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus I / S.E.S. / LCM
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others Memory Protection System Fan Power Supply Unit Power Input Power Consumption	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50t Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / iSCSI CHAP / ISE & SED / WO CIFS / NFS / FTP / WebDAV / iSCSI / FCP Web UI / Window AD / LDAP / RESTful AP 88 x 438 x 491 16.3 18.6 Cache-to-Flash Module (Supercapacitor M 4 pcs 850 W x 2 (80 Plus Platinum) 100 - 240 VAC, 50/60 Hz 429 W / 1,464 BTU	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus I / S.E.S. / LCM
Storage OS RAID Type Storage Efficiency Software Acceleration Data Protection Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others Memory Protection System Fan Power Supply Unit Power Input Power Consumption Certification	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50t Thin provisioning / Compression and Dedi SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchronous Rsync / S3 backup / Cloud backup / XMirr SSL / SSH / iSCSI CHAP / ISE & SED / WO CIFS / NFS / FTP / WebDAV / iSCSI / FCP Web UI / Window AD / LDAP / RESTful AP 88 x 438 x 491 16.3 18.6 Cache-to-Flash Module (Supercapacitor M 4 pcs 850 W x 2 (80 Plus Platinum) 100 - 240 VAC, 50/60 Hz	uplication (option) (option) or* / Microsoft 365 email backup RM / RBAC / Windows ACL / Antivirus I / S.E.S. / LCM

 $^{^{\}star}$ The feature is still under developing, please contact QSAN for accurate release date.

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- 13. 12 Gb/s SAS Wide Port
- 14. 10 GbE LAN Port
- 15. 1 GbE LAN Port
- 16. Host Card Slot 1 (host card is an optional part)
- 17. Service Port
- 18. Console Port
- 19. USB Port
- 20. Host Card Slot 2 (host card is an optional part)
- 21. Reset to Factory Default Button
- 22. Buzzer Mute Button

Model Name	XN8124D	XN8124S
Architecture	Dual-active controller	Single-upgradable controller
CPU		
	Intel® Xeon® 4-core x 2	Intel® Xeon® 4-core
Processor	(8-core model is also available)	(8-core model is also available)
Memory		
Memory Module Pre-installed	32 GB DDR4 RDIMM	16 GB DDR4 RDIMM
Total Memory Slots	8	4
Memory Expandable up to	512 GB	256 GB
Storage		
Drive Bays	3.5" Slot x 24	
Maximum Drive Bays with Expansion	504	
Unit		
Compatible Drive Type	3.5" & 2.5" SAS, NL-SAS, SED HDD 2.5" SAS, SED SSD	3.5" & 2.5" SAS, NL-SAS, SED HDD 3.5" & 2.5" SATA HDD 2.5" SAS, SATA, SED SSD
Drive Interface	SAS 12 Gb/s	SAS 12 Gb/s, SATA 6 Gb/s
Maximum Internal Raw Capacity	624 TB	
Maximum Raw Capacity with Expansion	13,104 TB	
Hot Swappable Drive	Yes	
Connectivity Port		
PCle Expansion	(Gen 3x8 Slot) x 4	(Gen 3x8 Slot) x 2
1 GbE RJ45 LAN Port	2 (onboard)	1 (onboard)
10 GbE SFP+ LAN Port	8 (onboard) / 4 (option)	4 (onboard) / 4 (option)
10 GbE RJ45 LAN Port	2 (option) / 4 (option)	
25 GbE SFP28 LAN Port	2 (option) / 4 (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 Dasta ettas	Snapshot / Asynchronous / Synchronous (option)	
Data Protection	Shapshot / Asynchronous / Synchrono	us (option)
Backup Service	Rsync / S3 backup / Cloud backup / XN	
	Rsync / S3 backup / Cloud backup / XN	
Backup Service	Rsync / S3 backup / Cloud backup / XN	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus
Backup Service Security	Rsync / S3 backup / Cloud backup / XN SSL / SSH / ISCSI CHAP / ISE & SED / N	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP
Backup Service Security Support Protocols	Rsync / S3 backup / Cloud backup / X1 SSL / SSH / iSCSI CHAP / ISE & SED / V CIFS / NFS / FTP / WebDAV / iSCSI / F	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP
Backup Service Security Support Protocols Management	Rsync / S3 backup / Cloud backup / X1 SSL / SSH / iSCSI CHAP / ISE & SED / V CIFS / NFS / FTP / WebDAV / iSCSI / F	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP
Backup Service Security Support Protocols Management Appearance	Rsync / S3 backup / Cloud backup / Xh SSL / SSH / iSCSI CHAP / ISE & SED / \ CIFS / NFS / FTP / WebDAV / iSCSI / F Web UI / Window AD / LDAP / RESTful	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP
Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm)	Rsync / S3 backup / Cloud backup / Xh SSL / SSH / iSCSI CHAP / ISE & SED / Y CIFS / NFS / FTP / WebDAV / iSCSI / F Web UI / Window AD / LDAP / RESTful 170.3 x 438 x 515	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP
Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg)	Rsync / S3 backup / Cloud backup / Xh SSL / SSH / iSCSI CHAP / ISE & SED / Y CIFS / NFS / FTP / WebDAV / iSCSI / F Web UI / Window AD / LDAP / RESTful 170.3 x 438 x 515 25.9	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP
Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg)	Rsync / S3 backup / Cloud backup / Xh SSL / SSH / iSCSI CHAP / ISE & SED / Y CIFS / NFS / FTP / WebDAV / iSCSI / F Web UI / Window AD / LDAP / RESTful 170.3 x 438 x 515 25.9	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP API / S.E.S. / LCM
Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others	Rsync / S3 backup / Cloud backup / Xh SSL / SSH / iSCSI CHAP / ISE & SED / N CIFS / NFS / FTP / WebDAV / iSCSI / F Web UI / Window AD / LDAP / RESTful 170.3 x 438 x 515 25.9 28.3	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP API / S.E.S. / LCM
Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others Memory Protection	Rsync / S3 backup / Cloud backup / Xh SSL / SSH / iSCSI CHAP / ISE & SED / V CIFS / NFS / FTP / WebDAV / iSCSI / F Web UI / Window AD / LDAP / RESTful 170.3 x 438 x 515 25.9 28.3 Cache-to-Flash Module (Supercapacito	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP API / S.E.S. / LCM
Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others Memory Protection System Fan	Rsync / S3 backup / Cloud backup / Xh SSL / SSH / iSCSI CHAP / ISE & SED / Y CIFS / NFS / FTP / WebDAV / iSCSI / F Web UI / Window AD / LDAP / RESTful 170.3 x 438 x 515 25.9 28.3 Cache-to-Flash Module (Supercapacito	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP API / S.E.S. / LCM
Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others Memory Protection System Fan Power Supply Unit	Rsync / S3 backup / Cloud backup / Xh SSL / SSH / iSCSI CHAP / ISE & SED / Y CIFS / NFS / FTP / WebDAV / iSCSI / F Web UI / Window AD / LDAP / RESTful 170.3 x 438 x 515 25.9 28.3 Cache-to-Flash Module (Supercapacite 4 pcs 850 W x 2 (80 Plus Platinum)	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP API / S.E.S. / LCM
Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others Memory Protection System Fan Power Supply Unit Power Input	Rsync / S3 backup / Cloud backup / Xh SSL / SSH / iSCSI CHAP / ISE & SED / Y CIFS / NFS / FTP / WebDAV / iSCSI / F Web UI / Window AD / LDAP / RESTful 170.3 x 438 x 515 25.9 28.3 Cache-to-Flash Module (Supercapacito 4 pcs 850 W x 2 (80 Plus Platinum) 100 - 240 VAC, 50/60 Hz 648 W / 2,211 BTU CE / FCC / BSMI	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP API / S.E.S. / LCM
Backup Service Security Support Protocols Management Appearance Dimension (H x W x D) (mm) Net Weight (kg) Gross Weight (kg) Others Memory Protection System Fan Power Supply Unit Power Input Power Consumption	Rsync / S3 backup / Cloud backup / Xh SSL / SSH / iSCSI CHAP / ISE & SED / V CIFS / NFS / FTP / WebDAV / iSCSI / F Web UI / Window AD / LDAP / RESTful 170.3 x 438 x 515 25.9 28.3 Cache-to-Flash Module (Supercapacito 4 pcs 850 W x 2 (80 Plus Platinum) 100 - 240 VAC, 50/60 Hz 648 W / 2,211 BTU	Mirror* / Microsoft 365 email backup WORM / RBAC / Windows ACL / Antivirus CP API / S.E.S. / LCM

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- 21. Reset to Factory Default Button
- 22. Buzzer Mute Button

Model Name	XN8116D	XN8116S	
Architecture	Dual-active controller	Single-upgradable controller	
CPU			
Processor	Intel® Xeon® 4-core x 2 (8-core model is also available)	Intel® Xeon® 4-core (8-core model is also available)	
Memory			
Memory Module Pre-installed	32 GB DDR4 RDIMM	16 GB DDR4 RDIMM	
Total Memory Slots	8	4	
Memory Expandable up to	512 GB	256 GB	
Storage			
Drive Bays	3.5" Slot x 16		
Maximum Drive Bays with Expansion Unit	496		
Compatible Drive Type	3.5" & 2.5" SAS, NL-SAS, SED HDD 2.5" SAS, SED SSD	3.5" & 2.5" SAS, NL-SAS, SED HDD 3.5" & 2.5" SATA HDD 2.5" SAS, SATA, SED SSD	
Drive Interface	SAS 12 Gb/s	SAS 12 Gb/s, SATA 6 Gb/s	
Maximum Internal Raw Capacity	416 TB		
Maximum Raw Capacity with Expansion	12,896 TB		
Hot Swappable Drive	Yes		
Connectivity Port			
PCle Expansion	(Gen 3x8 Slot) x 4	(Gen 3x8 Slot) x 2	
1 GbE RJ45 LAN Port	2 (onboard)	1 (onboard)	
10 GbE SFP+ LAN Port	8 (onboard) / 4 (option)	4 (onboard) / 4 (option)	
10 GbE RJ45 LAN Port	2 (option) / 4 (option)		
25 GbE SFP28 LAN Port	2 (option) / 4 (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		
Management	Web UI / Window AD / LDAP / RESTful API / S.E.S. / LCM		
Appearance			
Dimension (H x W x D) (mm)	130.4 x 438 x 515		
Net Weight (kg)	21.7		
Gross Weight (kg)	24		
Others			
Memory Protection	Cache-to-Flash Module (Supercapacito	or Module + Flash Module) (option)	
System Fan	4 pcs		
Power Supply Unit	850 W x 2 (80 Plus Platinum)	•	
Power Input	100 - 240 VAC, 50/60 Hz		
Power Consumption	534 W / 1,822 BTU		
Certification	CE / FCC / BSMI		
Standard Warranty	System: 5 years Supercapacitor Module: 1 year		

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





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

Model Name	XN8112D	XN8112S	
Architecture	Dual-active controller	Single-upgradable controller	
CPU	Saul douve controller	Single appradable controller	
	Intel® Xeon® 4-core x 2	Intel® Xeon® 4-core	
Processor	(8-core model is also available)	(8-core model is also available)	
Memory			
Memory Module Pre-installed	32 GB DDR4 RDIMM	16 GB DDR4 RDIMM	
Total Memory Slots	8	4	
Memory Expandable up to	512 GB	256 GB	
Storage			
Drive Bays	3.5" Slot x 12		
Maximum Drive Bays with Expansion Unit	492		
Compatible Drive Type	3.5" & 2.5" SAS, NL-SAS, SED HDD 2.5" SAS, SED SSD	3.5" & 2.5" SAS, NL-SAS, SED HDD 3.5" & 2.5" SATA HDD 2.5" SAS, SATA, SED SSD	
Drive Interface	SAS 12 Gb/s	SAS 12 Gb/s, SATA 6 Gb/s	
Maximum Internal Raw Capacity	312 TB		
Maximum Raw Capacity with Expansion	12,792 TB		
Hot Swappable Drive	Yes		
Connectivity Port			
PCle Expansion	(Gen 3x8 Slot) x 4	(Gen 3x8 Slot) x 2	
1 GbE RJ45 LAN Port	2 (onboard)	1 (onboard)	
10 GbE SFP+ LAN Port	8 (onboard) / 4 (option)	4 (onboard) / 4 (option)	
10 GbE RJ45 LAN Port	2 (option) / 4 (option)		
25 GbE SFP28 LAN Port	2 (option) / 4 (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		
Management	Web UI / Window AD / LDAP / RESTful API / S.E.S. / LCM		
Appearance			
Dimension (H x W x D) (mm)	88 x 438 x 515		
Net Weight (kg)	16.4		
Gross Weight (kg)	18.8		
Others			
Memory Protection	Cache-to-Flash Module (Supercapacito	or Module + Flash Module) (option)	
System Fan	4 pcs		
Power Supply Unit	850 W x 2 (80 Plus Platinum)	•	
Power Input	100 - 240 VAC, 50/60 Hz	100 - 240 VAC, 50/60 Hz	
Power Consumption	407 W / 1,389 BTU		
Certification	CE / FCC / BSMI		
Standard Warranty	System: 5 years Supercapacitor Module: 1 year		

 $^{^{\}star}$ The feature is still under developing, please contact QSAN for accurate release date.