Data Sheet



QSAN Unified Storage

XCubeNXT 5100

Value-Optimized Unified Storage for SMB

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

Leading Density with Uncompromised Performance

The XCubeNXT 5100 series is the newest generation that harnesses industry-leading versatility for mixed workloads. Highly available and secure with multiple protocol and cross QSAN platform support, it is designed to be ideal for modern enterprise applications such as virtualization, containerization, surveillance, and backup. 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 XN5126 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.







- 1. Enclosure Status LED
- 2. Enclosure Access LED
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- 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

System Specification

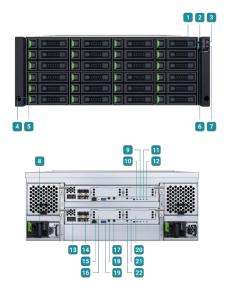
Model Name	XN5126D	XN5126S	
Architecture	Dual-active controller	Single-upgradable controller	
СРИ			
Processor	Intel® Xeon® 4-core x 2	Intel® Xeon® 4-core	
Memory			
Memory Module Pre-installed	16 GB DDR4 RDIMM	8 GB DDR4 RDIMM	
Total Memory Slots	8	4	
Memory Expandable up to	512 GB	256 GB	
Storage			
Drive Bays	2.5" Slot x 26		
Maximum Drive Bays with Expansion	546		
Unit	546		
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			
PCIe 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		50FF / 60FF	
Storage Efficiency		0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50EE / 60EE	
Software Acceleration	Thin provisioning / Compression and Deduplication (option)		
Data Protection	SSD cache / Auto tiering / RDMA Snapshot / Asynchronous / Synchrono	ous (ontion)	
Backup Service	Rsync / S3 backup / Cloud backup / X		
Security			
Support Protocols	SSL / SSH / ISCSI CHAP / ISE & SED / WORM / RBAC / Windows ACL / Antivirus		
Management	CIFS / NFS / FTP / WebDAV / ISCSI / FCP Web UI / Window AD / LDAP / RESTful API / S.E.S. / LCM		
-			
Appearance Dimension (H x W x D) (mm)	88 x 438 x 401		
Net Weight (kg)	88 x 438 x 491		
Gross Weight (kg)	16.3 18.6		
Others			
Memory Protection	Cache-to-Flash Module (Supercapacitor Module + Flash Module) (option)		
System Fan			
Power Supply Unit	850 W x 2 (80 Plus Platinum)		
Power Input	100 - 240 VAC, 50/60 Hz		
Power Consumption	429 W / 1,464 BTU		
Certification	CE / FCC / BSMI		
	System: 5 years		

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

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

System Specification

Model Neme	VNE124D	VNE1249
Model Name	XN5124D	XN5124S
Architecture	Dual-active controller	Single-upgradable controller
CPU		
Processor	Intel® Xeon® 4-core x 2	Intel® Xeon® 4-core
Memory		
Memory Module Pre-installed	16 GB DDR4 RDIMM	8 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 Unit	504	
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		
PCIe 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/50	DEE / 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)	170.3 x 438 x 515	
Net Weight (kg)	25.9	
Gross Weight (kg)	28.3	
Others		
Memory Protection	Cache-to-Flash Module (Supercapacitor I	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	648 W / 2,211 BTU	
O sutificanting	CE / FCC / BSMI	
Certification		
Standard Warranty	System: 5 years Supercapacitor Module: 1 year	

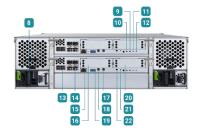
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- 15. 1 GbE LAN Port
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- 18. Console Port
- 19. USB Port
- 20. Host Card Slot 2 (host card is an optional part)
- **21.** Reset to Factory Default Button
- 22. Buzzer Mute Button

System Specification

Model Name	XN5116D	XN5116S	
Architecture	Dual-active controller	Single-upgradable controller	
CPU			
Processor	Intel® Xeon® 4-core x 2	Intel® Xeon® 4-core	
Memory			
Memory Module Pre-installed	16 GB DDR4 RDIMM	8 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			
PCIe 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 / 50	EE / 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 / XMir		
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 (Supercapacitor N	Nodule + 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		

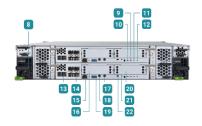
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- 13. 12 Gb/s SAS Wide Port
- 14. 10 GbE LAN Port
- 15. 1 GbE LAN Port
- 16. Host Card Slot 1 (host card is an optional part)
- 17. Service Port
- 18. Console Port
- 19. USB Port
- 20. Host Card Slot 2 (host card is an optional part)
- **21.** Reset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

System Specification

Model Name	XN5112D	XN5112S
Architecture	Dual-active controller	Single-upgradable controller
CPU		
Processor	Intel® Xeon® 4-core x 2	Intel® Xeon® 4-core
Memory		
Memory Module Pre-installed	16 GB DDR4 RDIMM	8 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		
PCIe 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 / 50	EE / 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 (Supercapacitor N	Aodule + 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	407 W / 1,389 BTU	
Certification	CE / FCC / BSMI	
	System: 5 years	
Standard Warranty	Supercapacitor Module: 1 year	

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