QSAN Network Attached Storage

XCubeNAS 5112R

Capacity-Optimized and Cost-Effective Rackmount NAS

Key Benefits

Performance Ready for Intensive Workloads

• Flash ready with optional 10 GbE to accelerate I/O-intensive workloads with nimble data transmission speeds, ensuring smooth user experience.

I/O Scale-Up for Large Bandwidth

• Scalability up to the multi-petabyte level, with no practical limitations to volume or pool size. Maximize availability according to your needs to conveniently store mission-critical data in a single pool.

Multi-Layer Security

• WORM (Write Once Read Many), pool encryption, and SED (Self-Encrypting Drive) allow powerful folder, pool, and drive levels of security that shield users from cyberattacks and physical theft.

Scale-Up Capacity as Needed to PBs

The XCubeNAS 5112R (2U 18-bay) and 50112RE (2U 14-bay) are high-density network attached storage system that delivers the best value for its capacity and cost. Harboring powerful capabilities for I/O expansion, it provides a cost effective, comprehensive solution for file storage and backup, enabling flexible scaling to the multi-petabyte level to save additional investment by consolidating various application usages into one XCubeNAS.

One Storage for All Platforms

XCubeNAS can replace the file server, integrate applications, and virtual servers. It can also simplify the process of integrating storage through the existing network.
• Multi protocols support of AFP / CIFS / FTP / iSCSI / NFS / WebDAV for all applications.
• Support Windows AD and LDAP Directory Services and Windows ACLs and advanced ACL for stable file service.

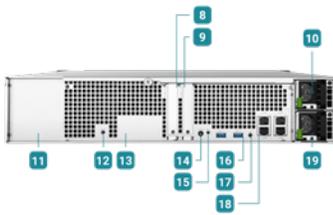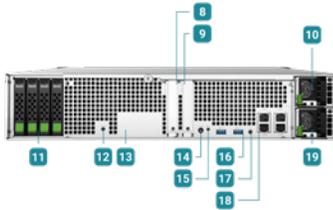## Complete Backup Solution from Local, Edge to Cloud

As data grows exponentially and is treated as the foundation for every business to drive innovation, a smart backup archiving strategy provided by XCubeNAS, based on comprehensive backup application and PB-level scalability, is the perfect solution for modern IT.
• **XMirror** - Regularly synchronizes a volume or the contents of a folder between multiple XCubeNAS devices. Any modification to documents will be replicated to other XCubeNAS.
• **Real-time Remote Replication** - By periodically copying data to different branches, your data can be recovered when a disaster happens.
• **Snapshot and Replica** - Administrators can better control data versions and execute point-in-time recovery on folders and LUNs by snapshot.
• **Cloud Backup and Sync** - Support public cloud backup: Alibaba Cloud OSS, hicloud S3, Amazon S3 and S3 compatible storage. Support cloud synchronization: Google Drive, Microsoft OneDrive, Dropbox.

Protect Your Business from Any Threat

QSM continuously evolves our security level to protect data across storage and adhere to industry best practices from software to physical. Moreover, with a variety of built-in backup applications that help you complete data backup and data integrity. QSM can assure your assets are well-handled in our unified storage.

Appearance

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. Host Card Slot 1 (host card is an optional part)

9. Host Card Slot 2 (host card is an optional part)

10. Power Supply Unit 1

11. 2.5" NVMe U.2 SSD (not supported in RE model)

12. Reset to Factory Default Button

13. Empty

14. Console Port

15. Buzzer Mute Button

16. USB Port

17. UID (Unique Identifier) LED

18. 2.5 GbE (RJ45) LAN Port

19. Power Supply Unit 2

System Specification

Model Name	XN5112R	XN5112RE
Architecture	Single Controller	
CPU		
Processor	Intel® Xeon® 64-bit 2-core	
Memory		
Memory Module Pre-installed	8 GB DDR4 ECC DIMM	
Total Memory Slots	4	
Memory Expandable up to	256 GB	
Storage		
Drive Bays	3.5" Slot x 12 2.5" Slot x 4 M.2 Slot x 2	3.5" Slot x 12 M.2 Slot x 2
Maximum Drive Bays with Expansion Unit	426	422
Compatible Drive Type	3.5" SATA HDD & 2.5" SATA SSD 2.5" U.2 NVMe SSD M.2 NVMe SSD	3.5" SATA HDD & 2.5" SATA SSD M.2 NVMe SSD
Drive Interface	SATA (6 Gb/s) U.2 NVMe (PCIe Gen 3x2) M.2 NVMe (PCIe Gen 3x2)	SATA (6 Gb/s) M.2 NVMe (PCIe Gen 3x2)
Maximum Internal Raw Capacity	333 TB	272 TB
Maximum Raw Capacity with Expansion Units	9,309 TB	9,248 TB
Hot Swappable Drive	Yes (M.2 slot does not support hot plugging)	
Connectivity Port		
PCIe Expansion	(Gen 4x8 Slot) x 1, (Gen 4x4 Slot) x 1	
2.5 GbE RJ45 LAN Port	4 (onboard)	
10 GbE SFP+ LAN Port	2 (option)	
10 GbE RJ45 LAN Port	2 (option)	
25 GbE SFP28 LAN Port	2 (option)	
Expansion and External Port		
12 Gb/s SAS Wide Port	2 (option)	
USB Port	1 (front) / 2 (rear)	
Others	Console port x 1	
Software Specification		
Storage OS	QSM	
RAID Type	0 / 1 / 5 / 6 / Z3 / 10 / 50 / 60	
Storage Efficiency	Thin provisioning / Deduplication / Compression	
Software Acceleration	Hybrid SSD cache / Auto tiering	
Data Protection	Snapshot / Local volume clone	
Remote Replication	Rsync / XMirror / Asynchronous	
Security	SED / WORM / Pool encryption	
Support Protocols	AFP / CIFS / FTP / iSCSI / NFS / WebDAV	
Management	Web UI / Serial console / RESTful API / S.E.S. / LCM	
Appearance		
Dimension (H x W x D) (mm)	88.5 x 438 x 510	
Net Weight (kg)	11.6	11.1
Gross Weight (kg)	16.2	15.7
Others		
System Fan	2 pcs	
Power Supply Unit	450 W x 2 (80 PLUS Platinum)	
Power Input	100 - 240 VAC, 50/60 Hz	
Power Consumption	299 W	255 W
British Thermal Unit	1,020 BTU	869 BTU
Certification	CE / FCC / BSMI	
Standard Warranty	System: 3 years	