XCubeNAS
XN8012R

QSAN

Ultra-high Performance and Virtualization Ready

The Industry's first 2U hybrid NAS (12+4+2) with Intel® Xeon ® E3 Quad-core processor provides native auto-tiering storage capability to fulfill the maximum performance and high-capacity demand for enterprises. With U.2 NVMe SSDs and up to 64GB memory capacity, the XN8012R's maximum sequential write performance is up to 4,716MB/s and 4K sequential IOPS is up to 359,790. This is the best choice for enterprise data storage applications, virtualization ready storage and data backup systems.
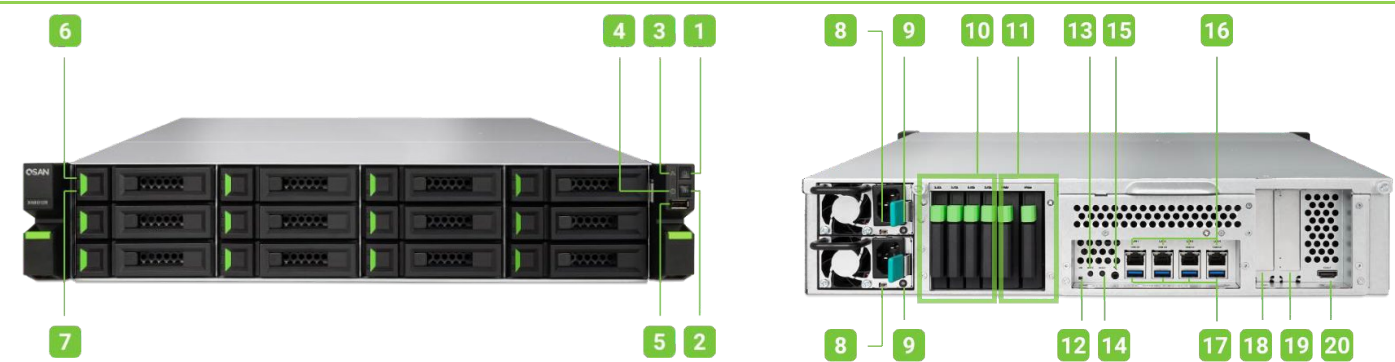
Product Features

- With High performance and expansion by using 12Gb/s technology, maximum space up to 3.3PB.
- Unified Storage - Integrated storage system supports block and file storage simultaneously and following protocols, iSCSI, CIFS, NFS, FTP, and AFP.
- Universal and Efficient Data Backup - XMirror supports permission backup , disaster recovery and flexible protection between multiple NAS devices.
- KVM Built-in Hypervisor Manager : enabling user to create and manage virtual machines that run directly on the XCubeNAS and host multiple virtualized environments without the additional hardware investment.
- Comprehensive Data Security - Pool Military level encryption with AES-256, Write Once Read Many (WORM) , Self-Encrypting Drive (SED).
- Thin Provision - Precision Restore and dynamically Space.
- Advanced Enterprise Storage Technology - Auto-Tiering, Inline Compression, Deduplication and Thin Provision.

Application areas

- IT Industry : File storage services, cloud storage services, near-line backup systems, secondary backup storage devices, disaster recovery solutions, virtualize host and storage devices.
- Government : Diskless workstation system, urban security monitoring system, agenda recording and playback system, digital file storage (digital collection), remote data backup center, cloud storage service, virtualized storage device.
- Education : Administrative system storage device, host and storage device virtualization, network storage service, security monitoring system, digital teaching system, library management system, computer classroom diskless workstation.
- Media Industry : Non-linear editing system, audio-visual editing system, online editing storage system, media database storage management, video on-demand system, content on-demand delivery system, wedding studio photo/video storage system.
- Finance & Insurance : Telemarketing recording system, policy image storage device, data storage system , Near-Line backup system, host virtualization application, development system storage device.
- Telecommunications industry : Online music play system, security monitoring system, customer service recording system, network storage service, Near-Line backup system, virtualization of host and storage devices.

Product Spec of XN8012R

Apperance

1. Power Button/LED Indicator for Power Status

2. Unique Identifier (UID) Button/LED Indicator

3. System Access LED Indicator

4. System Status LED Indicato

5. USB 2.0 Port

6. Disk Drive Power LED Indicator

7. Disk Drive Power LED Indicator

8. Power Supply Unit Power Port

9. Power Supply Unit PSU Indicator and Beep Off Button

10. SATA SSD Slot

11. NVMe SSD Slot

12. Unique Identifier (UID) LED Indicator

13. Mute Button

14. Reset Button

15. Console Port

16. Gigabit LAN Port

17. USB 3.0 Port

18. Additional PCIe Slot for Expansion (Gen3 x 8)

19. Additional PCIe Slot for Expansion (Gen3 x 4)

20. HDMI Port

Hardware Spec

Architecture	All-in-one
CPU	
Processor	Intel® Xeon®64-bit Quad-Core 3.3GHz
Memory	
System Flash	8GB SATA DOM
Memory Module Pre-installed	8GB DDR4 U-DIMM
Total Memory Slots	4
Memory Expandable up to	64 GB
Storage	
Drive Bays	3.5" Slot x 12, 2.5" Slot x 6
Maximum Drive Bays with Expansion Unit	426
Compatible Drive Type	3.5 " SATA HDD, 2.5" SATA HDD, 2.5" SATA SSD, 2.5" NVMe SSD
Drive Interface	SATA 6Gb/s (backward compatible with SATA 3Gb/s)
Maximum Internal Raw Capacity	393TB
Maximum Raw Capacity with Expansion Units	8,553TB
Hot Swappable Drive	yes
External Port	
USB 2.0 Port	1 (Front)
USB 3.0 Port	4 (Rear)
HDMI Port	1
Others	Console Port x1
LAN Port	
1GbE RJ45 LAN Port	4 (Onboard)
10GbE RJ45 LAN Port	2 (Option: THBE10R2)
10GbE SFP+ LAN Port	2 (Option: XN-E1002)
Thunderbolt 3	2 (Option: XN-TB302)
Expansion Port	
12Gb/s SAS Wide Port	2 (Option: XN-S1202)
PCIe Expansion	
Gen3x8 Slot	1
Gen2x4 Slot	1

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Appearance	
Dimension (H x W x D) (mm)	88.5 x 438 x 510
Chassis Form Factor	19" Rackmount 2U 12+6 Bay
Net Weight (kg)	13.5
Gross Weight (kg)	14.9

Others	
System Fan	60mm x 60mm x 3 pcs, 40mm x 40mm x 1 pcs
Replaceable System Fan	yes
Power Recovery	yes
Scheduled Power On/Off	yes
Wake on LAN/WAN	yes
Power Supply Unit / Adapter	250W x2
Redundant Power Supply	Yes
AC Input Power Voltage	100V-240V
Power Frequency	50-60 Hz, Single Phase
Power Consumption	332 W (Access), 179 W (HDD Hibernation)
British Thermal Unit	1132 BTU/hr (Access), 611 BTU/hr (HDD Hibernation)
LCM Support	yes

Environment Temperature	
Operating Temperature	0 to 40°C
Storage Temperature	-10°C to 50°C
Operating Relative Humidity	20% to 80% non-condensing
Non-operating Relative Humidity	10% to 90%

Certification	
	CE / EAC / SASO / RCM / VCCI / BSMI / FCC

Warranty	
Standard Warranty	3 years