





The Industry's first 2U hybrid NAS (8+6) 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 XN8008R's maximum sequential write performance is up to 4,690MB/s and 4K sequential IOPS is up to 346,000. 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.

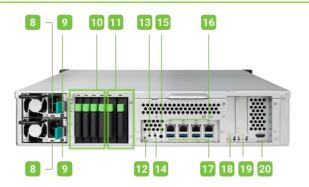
Application areas

- 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 XN8008R

Appearance





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
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

Processor Intel® Xeon®64-bit Quad-Core 3.3GHz Memory Memory System Flash 8GB SATA DOM Memony Module Pre-installed 8GB DDR4U-DIMM Total Memory Slots 4 Memory Expandable up to 64 GB Storage Tribus Mariamum Drive Bays with Expansion Unit 42 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 344B Maximum Raw Capacity with Expansion Units 8,504TB Mc Swappable Drive yes Steenal Port 1(Front) USB 3.0 Port 4 (Rear) USB 3.0 Port 4 (Rear) HDMI Port 1 (Front) USB 3.0 Port 4 (Rear) LOBER 154 LAN Port 4 (Onboard) 105e Expansion 4 (Onboard) 105e Expansion Port 2 (Option) Expansion Port 2 (Option) Expension Port 2 (Option) Expension Port 2 (Option) Company Substituting	Hardware Spec	
Processor Intel® Xeon®64-bit Quad-Core 3.3GHz Memory System Flash 8GB SATA DOM Memory Module Pre-installed 8GB SDR4 U-DIMM Total Memory Slots 4 Memory Expandable up to 64 GB Storage Total Storage Drive Bays 35" Slot x 8, 2.5" Slot x 6 Maximum Drive Bays with Expansion Unit 42 Compatible Drive Type 35." SATA HDD, 2.5" SATA HDD, 2.5" SATA SDD, 2.5" NVMe SSD Drive Interface 5ATA 6Gb/s (backward compatible with SATA 3Gb/s) Maximum Internal Raw Capacity 4,504 BB Maximum Raw Capacity with Expansion Units 4,504 BB Mc Swappable Drive 5,504 BB Uses 3.0 Port 1 (Front) USB 3.0 Port 4 (Rear) HDM Port 1 USB 3.0 Port 4 (Rear) HDM Port 1 LEN Port 4 (Onboard) 10Gbe R145 LAN Port 4 (Onboard) 10Gb Explain 4 (Onboard) 10Gb Explain Fort 4 (Onboard) 10Gb Explain Fort 4 (Onboard) 10Gb Explain Fort<	Architecture	All-in-one
Memory System Flash 8GB SATA DOM Memory Module Pre-installed 6GB DDR4 U-DIMM Total Memory Slots 4 Memory Expandable up to 64 GB Storage Unive Bays 3.5° SIOt x 8, 2.5° SIOt x 6 Maximum Drive Bays with Expansion Unit 422 Compatible Drive Type 35° 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 444TB Maximum Raw Capacity with Expansion Units 8,504TB Met Suppable Drive yes Letternal Port USB 2.0 Port 1 (Front) USB 2.0 Port 4 (Rear) UDMI Port 4 (Rear) LAN Port 5 (Option) LOS LAN Port 4 (Onboard) LOS Exp 1, LAN Port 4 (Onboard) LOS Exp 1, LAN Port 2 (Option) LOS Exp 1, LAN Port 2 (Option) LOS Exp 2, LAN Port 2 (Option) LOS Exp 2, LAN Port 2 (Option) LOS Exp 2, LA	CPU	
System Flash 868 SATA DOM Memory Module Pre-installed 868 DDR4 U-DIMM Total Memory Slots 4 Memory Expandable up to 6 4 6 8 Stroage Drive Bays 3.5" Slot x 8, 2.5" Slot x 6 Maximum Drive Bays with Expansion Unit 42 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 4504 TB Maximum Internal Raw Capacity with Expansion Unit 5,504 TB Maximum Row Capacity with Expansion Unit 40 USB 2.0 Port 1 (Front) USB 3.0 Port 4 (Rear) HDMI Port 1 (Front) USB 3.0 Port 4 (Rear) HDMI Port 2 (Onsole Port x1 LAN Port 4 (Onboard) LOR FLAS LAN Port 4 (Onboard) 10GbE RIAS LAN Port 2 (Option) 10GbE SPP - LAN Port 2 (Option) 10muderbolt 3 2 (Option) 10gbe SPR JAS Wide Port 2 (Option) 10gbe SP	Processor	Intel® Xeon®64-bit Quad-Core 3.3GHz
Memory Module Pre-installed 8GB DRA U-DIMM Total Memory Slots 4 Memory Expandable up to 64 GB Storage ************************************	Memory	
Total Memory Slots 4 Memory Expandable up to 64 GB Storage Drive Bays 3.5° Slot x 8, 25° Slot x 6 Maximum Drive Bays with Expansion Unit 422 Compatible Drive Type 3.5° SATA HDD, 2.5° SATA HDD, 2.5° SATA SDD, 2.5° NVMe SDD Drive Interface SATA 6Gb/s (backward compatible with SATA 3Gb/s) Maximum Internal Raw Capacity 344TB Maximum Raw Capacity with Expansion Units 4,804TB Most Suppable Drive 9 External Port 1 USB 3.0 Port 1 (Front) USB 3.0 Port 4 (Rear) HDMI Port 1 10Gbe RJAS LAN Port 4 (Onboard) 10Gbe RJAS LAN Port 2 (Option) 10Gbe RJAS LAN Port 2 (Option) <td>System Flash</td> <td>8GB SATA DOM</td>	System Flash	8GB SATA DOM
Kemory Expandable up to 64 GB Storage Drive Bays 3.5" Slot x 8.2.5" Slot x 6 Maximum Drive Bays with Expansion Unit 422 Compatible Drive Type 3.5 " SATA HDD, 2.5" SATA SDD, 2.5" NVMe SSD Drive Interface 344 G6b/s (backward compatible with SATA 3Gb/s) Maximum Internal Raw Capacity 345 GB Maximum Raw Capacity with Expansion Unit 8,504TB Hot Swappable Drive yes External Port 1 (Front) USB 2.0 Port 1 (Front) USB 3.0 Port 4 (Rear) HDMI Port 2 (Onsole Port xl LAN Port 4 (Onboard) G165E R145 LAN Port 4 (Onboard) 106bE R145 LAN Port 2 (Option) 106bE R745 LAN Port 2 (Option) 1076bE SFP LAN Port 2 (Option) <	Memory Module Pre-installed	8GB DDR4 U-DIMM
Storage Drive Bays 3.5" Slot x 8, 2.5" Slot x 6 Maximum Drive Bays with Expansion Unit 422 Compatible Drive Type 3.5 "SATA HDD, 2.5" SATA SDD, 2.5" NVMe SSD Drive Interface 3.4 A 66b/s (backward compatible with SATA 36b/s) Maximum Internal Raw Capacity 344TB Maximum Raw Capacity with Expansion Unit 8, 8504TB Mot Swappable Drive 9 External Port 1 (Front) USB 2.0 Port 1 (Front) USB 3.0 Port 4 (Rear) HDMI Port 2 (Onsole Portx) LAN Port 5 (Onsole Portx) LAN Port 1 (Onboard) 1 (Gober RJS LAN Port 2 (Option) 1 (Gober SP+ LAN Port 2 (Option) Thurder bolt 3 (Option) Thurder bolt 3 (Option) Expansion Port 5 (Option) Expansion Port 5 (Option) Expansion Port 5 (Option) Pole Expansion Pole First Pole Pole Pole Pole Pole Pole Pole Pole	Total Memory Slots	4
Drive Bays 3.5° Slot x 8, 2.5° Slot x 6 Maximum Drive Bays with Expansion Unit 42 Compatible Drive Type 3.5 ° SATA HDD, 2.5° SATA SDD, 2.5° NVMe SDD Drive Interface SATA 6Gb/s (backward compatible with SATA 3Gb/s) Maximum Internal Raw Capacity 344TB Maximum Raw Capacity with Expansion Units 8,504TB Bot Sapable Drive yes External Port USB 2.0 Port 1 (Front) USB 3.0 Port 4 (Rear) HDMI Port 2 (Dasse Port x1 UFB 2.0 NP Ox 4 (Probard) 105E RJAS LAN Port 4 (Onboard) 105E RJAS LAN Port 4 (Onboard) 105E SPF+ LAN Port 2 (Option) 106E SPF+ LAN Port 2 (Option) 107E Sps SS Wide Port 2 (Option) Expansion Port 2 (Option) Expansion Port 2 (Option) Expansion Port 2 (Option)	Memory Expandable up to	64 GB
Maximum Drive Bays with Expansion Unit 422 Compatible Drive Type 3.5. "SATA HDD, 2.5" SATA HDD, 2.5" SATA SDD, 2.5" NVMe SSD Drive Interface SATA 6Gb/s (backward compatible with SATA 3Gb/s) Maximum Internal Raw Capacity 344TB Maximum Raw Capacity with Expansion Units 8,504TB Mostimum Raw Capacity with Expansion Units 8,504TB Hot Swappable Drive yes External Port USB 2.0 Port 1 (Front) USB 3.0 Port 4 (Rear) HDMI Port 1 (Sonsel Port x1 LORS 9.0 Port x1 LORS 9.0 Port x1 LORS 9.0 Fort x1 LOR	Storage	
Compatible Drive Type 3.5 " SATA HDD, 2.5" SATA SDD, 2.5" NVMe SSD Drive Interface SATA 6Gb/s (backward compatible with SATA 3Gb/s) Maximum Internal Raw Capacity 344TB Maximum Raw Capacity with Expansion Units 8,504TB 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 4 (Onboard) 10GbE RJ45 LAN Port 4 (Onboard) 10GbE RJ45 LAN Port 2 (Option) Thunderbolt 3 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 2 (Option) Expansion Port 2 (Option) PCIE Expansion 2 (Option)	Drive Bays	3.5" Slot x 8, 2.5" Slot x 6
Drive Interface SATA 66b/s (backward compatible with SATA 36b/s) Maximum Internal Raw Capacity 344TB Maximum Raw Capacity with Expansion Units 8,504TB 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 4 (Onboard) 10GbE RJ45 LAN Port 4 (Onboard) 10GbE RJ45 LAN Port 2 (Option) 10GbE SFP+ LAN Port 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 2 (Option) Expansion Port 2 (Option) PCIE Expansion 2 (Option)	Maximum Drive Bays with Expansion Unit	422
Maximum Internal Raw Capacity 344TB Maximum Raw Capacity with Expansion Units 8,504TB Hot Swappable Drive yes External Port USB 2.0 Port USB 3.0 Port 1 (Front) USB 3.0 Port 4 (Rear) HDMI Port 1 Chers Console Port x1 LAN Port 4 (Onboard) 10GbE RJ45 LAN Port 4 (Onboard) 10GbE RJ45 LAN Port 2 (Option) 10GbE SFP+ LAN Port 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 2 (Option) 12Gb/s SAS Wide Port 2 (Option) PCIE Expansion 4 (Onboard)	Compatible Drive Type	3.5 " SATA HDD, 2.5" SATA HDD, 2.5" SATA SSD, 2.5" NVMe SSD
Maximum Raw Capacity with Expansion Units 8,504TB 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 4 (Onboard) 10GbE RJ45 LAN Port 4 (Onboard) 10GbE RJ45 LAN Port 2 (Option) 10GbE SFP+ LAN Port 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 2 (Option) Expansion Port 2 (Option) PCIE Expansion 2 (Option)	Drive Interface	SATA 6Gb/s (backward compatible with SATA 3Gb/s)
External Port USB 2.0 Port 1 (Front) USB 3.0 Port 4 (Rear) HDMI Port 1 Others Console Port x1 LAN Port 4 (Onboard) 105bE RJ45 LAN Port 4 (Onboard) 106bE RJ45 LAN Port 2 (Option) 106bE SFP+ LAN Port 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 2 (Option) PCIe Expansion 2 (Option)	Maximum Internal Raw Capacity	344TB
External Port USB 2.0 Port 1 (Front) USB 3.0 Port 4 (Rear) HDMI Port 1 Others Console Port x1 LAN Port 4 (Onboard) 105bE RJ45 LAN Port 4 (Onboard) 105bE RJ45 LAN Port 2 (Option) 106bE SFP+ LAN Port 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 2 (Option) 12Gb/s SAS Wide Port 2 (Option) PCIE Expansion 5 (Option) 6en3x8 Slot 1	Maximum Raw Capacity with Expansion Units	8,504TB
USB 2.0 Port 1 (Front) USB 3.0 Port 4 (Rear) HDMI Port 1 Others Console Port x1 LAN Port LAN Port 10GbE RJ45 LAN Port 4 (Onboard) 10GbE RJ45 LAN Port 2 (Option) 10GbE SFP+ LAN Port 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 12Gb/s SAS Wide Port 2 (Option) PCIe Expansion 2 (Option)	Hot Swappable Drive	yes
USB 3.0 Port 4 (Rear) HDMI Port 1 Others Console Port x1 LAN Port 4 (Onboard) 10GbE RJ45 LAN Port 4 (Onboard) 10GbE RJ45 LAN Port 2 (Option) 10GbE SFP+ LAN Port 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 12Gb/s SAS Wide Port 2 (Option) PCIe Expansion Gen3x8 Slot 1	External Port	
HDMI Port 1 Others Console Port x1 LAN Port 1 16bE RJ45 LAN Port 4 (Onboard) 10GbE RJ45 LAN Port 2 (Option) 10GbE SFP+ LAN Port 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 2 (Option) 2Gb/s SAS Wide Port 2 (Option) PCIe Expansion 1	USB 2.0 Port	1 (Front)
Others Console Port x1 LAN Port 1GbE RJ45 LAN Port 4 (Onboard) 10GbE RJ45 LAN Port 2 (Option) 10GbE SFP+ LAN Port 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 12Gb/s SAS Wide Port 2 (Option) PCIE Expansion FOLE Expansion 1 1	USB 3.0 Port	4 (Rear)
LAN Port 1GbE RJ45 LAN Port 4 (Onboard) 10GbE RJ45 LAN Port 2 (Option) 10GbE SFP+ LAN Port 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 12Gb/s SAS Wide Port 2 (Option) PCle Expansion Gen3x8 Slot 1	HDMI Port	1
1GbE RJ45 LAN Port 4 (Onboard) 10GbE RJ45 LAN Port 2 (Option) 10GbE SFP+ LAN Port 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 12Gb/s SAS Wide Port 2 (Option) PCle Expansion Gen3x8 Slot 1	Others	Console Port x1
10GbE RJ45 LAN Port2 (Option)10GbE SFP+ LAN Port2 (Option)Thunderbolt 32 (Option)Expansion Port12Gb/s SAS Wide Port2 (Option)PCIe ExpansionGen3x8 Slot1	LAN Port	
10GbE SFP+ LAN Port 2 (Option) Thunderbolt 3 2 (Option) Expansion Port 12Gb/s SAS Wide Port 2 (Option) PCle Expansion Gen3x8 Slot 1	1GbE RJ45 LAN Port	4 (Onboard)
Thunderbolt 3 2 (Option) Expansion Port 12Gb/s SAS Wide Port 2 (Option) PCle Expansion Gen3x8 Slot 1	10GbE RJ45 LAN Port	2 (Option)
Expansion Port 12Gb/s SAS Wide Port 2 (Option) PCIe Expansion Gen3x8 Slot 1	10GbE SFP+ LAN Port	2 (Option)
12Gb/s SAS Wide Port 2 (Option) PCle Expansion Gen3x8 Slot 1	Thunderbolt 3	2 (Option)
PCIe Expansion Gen3x8 Slot 1	Expansion Port	
Gen3x8 Slot 1	12Gb/s SAS Wide Port	2 (Option)
	PCIe Expansion	
Gen2x4 Slot 1	Gen3x8 Slot	1
	Gen2x4 Slot	1



Appearance	
Dimension (H x W x D) (mm)	88.5 x 438 x 510
Chassis Form Factor	19" Rackmount 2U 8+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	263 W (Access), 122 W (HDD Hibernation)
British Thermal Unit	895 BTU/hr (Access), 417 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

