# XN8012D



## Simple Unified Storage for SMB



### Enterprise-level Unified Storage for Business Environments

QSAN XN8012D is a simple, secure, scalable and affordable unified storage systems for SMB and enterprise. Enterprise can initially manage data efficiently, and scale out their architecture with expansion units as their business grows. It is an ideal solution for business to plans their budget smartly and grow with it.

#### **Benefit**

#### Simple Deployment Quick Installation

When your XN8012D arrives, the entire installation process can complete within five minutes, allows the IT to complete storage infrastructure deployment effortlessly.

Just a few clicks With the Instant RAID and Quick install, you can be instantly deployed with no initialization or synchronization phase and deliver storage service within 5 minutes.

- Setup Storage Once in Place Built-in 4 x 10GbE lan port and support multi protocol suitable for all kind of application. You don't need to spend any extra money after you bought XN8012D.
- Easy to master XN8012D is designed to release IT maintenance effort, SW/HW upgrade and maintenance can never be this easy.

#### **Business Easy Expansion**

Enterprises can make cost-effective planning in the initial stage of expansion. When the demand is getting larger, they can expand the hardware and capacity. And all this does not need to stop any services.

- Non-disruptive upgrade
   Data service keeps running during software and hardware upgrade
   Go with the simplest architecture in the beginning, expand later when necessary.
- High scalability Support up to 420 bays and 6 PB, Easy to expand the capacity without stopping service.
- **Beyond warranty** Get the latest feature without charge. Continuously updated firmware even over the warranty.

#### Efficiently data store, saving your wallet

Your backup and archive size is becoming huge. Data efficiency is very import, and every bit counts!

**Compression** Helping ITs to reduce the amount of storage you need to purchase and maintain.

#### Simple

- Set up your system in 5 minutes, and instant usage by ZFS.
- Non-disruptive architecture enables
   maintenance and upgrades without
   performance impact.
- Support multiple protocols, is suitable for all kind of application.
- Get the latest feature without charge. Continuously updated firmware even over the warranty.

#### Enterprise-grade

- Protect against ransomware and cyber attack by WORM, SED and Pool encryption.
- XMirror can sync your data among branch office, build up enterprise private cloud.
- Built-in various enterprise feature help your to store your data more efficiency and save capacity.
- Built-in enterprise data services for all workloads

#### Scalable

- Support up to 420bays, you don't have to re-buy storage just for expansion.
- Scale-out everything instantly, includes generational upgrades.

# Hardware Spec

# Appearance



1.	Enclosure	Power	Button	/ LED
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- 2. UID (Unique Identifier) Button / LED
- 3. Enclosure Access LED
- 4. Enclosure Status LED
- 5. USB Port

6. Disk Drive Power LED

7. Disk Drive Status LED



8. Power Supply Unit – PSU Indicator and Beep Off Button
9. Controller Status LED
10. Master / Slave LED (only for dual controllers)
11. Dirty Cache LED
12. UID (Unique Identifier) LED
13. Host Card Slot 1 (host card is an optional part)
14. Host Card Slot 2 (host card is an optional part)
15. Buzzer Mute Button
16. Reset to Factory Default Button
17. Management Port
18. Console Port
19. Service Port
20. USB Port
21. 10GbE iSCSI Port
22. 12Gb/s SAS Wide Port

Tialuwale Spec	
Architecture	Active-Active dual-controller
CPU	
CPU	Intel® Xeon® 64-bit Quad-Core (Also support 8 core model)
Memory	
System Flash	16GB USB DOM
Memory Module Pre-installed	16GB DDR4 ECC DIMM (per controller)
Memory Expandable up to	$4 \times 32 = 128$ GB (per controller)
Storage	
Drive Bays	3.5" Slot x 12
Maximum Drive Bays with	
Expansion Unit	420 3.5" SAS HDD / SAS SED HDD, 3.5" NL-SAS HDD / NL-SAS SED HDD, 2.5" SAS SSD /
Compatible Drive Type	SAS SED FDD / SAS SED FDD , 3.3 'NE-SAS FDD / NE-SAS SED FDD , 2.3 'SAS SSD / SAS SED SSD 2.5" SATA SSD / SATA SED SSD (*), 2.5" SAS HDD / SAS SED HDD, 2.5" NL-SAS HDD / NL-SAS SED HDD (*) In dual-controller system, 2.5" SATA HHD need 6G MUX board
Drive Interface	SAS 12Gb/s
Maximum Internal Raw Capacity	192TB
Maximum Raw Capacity with Expansion Units	6,720TB
Hot Swappable Drive	Yes
Connective port	
USB 2.0 Port	1 (Front)
USB 3.0 Port	2 (Rear)
Others	UPS Port x $1 \cdot$ Controller port x $1$
1GbE RJ45 LAN Port	1 (Onboard)
10GbE RJ45 LAN Port	2 (Onboard) / 2 iSCSI (Option : HQ-10G2T)
10GbE SFP+ LAN Port	4 iSCSI (Option : HQ-10G4S2)
25GbE SFP28 LAN Port	2 iSCSI (Option : RHCE25P2) (Will be launch in the 4th guarter of 2020)
16Gb SFP+ Fibre Channel	4 FCP (Option : HQ-16F4S2) / 2 FCP (Option : HQ-16F2S2) (Will be launch in the 4th quarter of
	2020)
32Gb SFP28 Fibre Channel	2 FCP (Option : RHCF32P2) (Will be launch in the 4th quarter of 2020)
Expansion Port	
	2 (ask as a)
12Gb/s SAS Wide Port	2 (onboard)
12Gb/s SAS Wide Port PCle Expansion	2 (onboard) 1 x Gen3x8, 1 x Gen2x4
12Gb/s SAS Wide Port PCle Expansion Appearance	1 x Gen3x8, 1 x Gen2x4
12Gb/s SAS Wide Port PCle Expansion	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515
12Gb/s SAS Wide Port PCle Expansion Appearance	1 x Gen3x8, 1 x Gen2x4
12Gb/s SAS Wide Port PCle Expansion Appearance Dimension (H x W x D) (mm)	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515
12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay
12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg)	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay 16.4
12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg) Gross Weight (kg)	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay 16.4
12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg) Gross Weight (kg) Memory Protection	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay 16.4 18.8
12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg) Gross Weight (kg) Memory Protection Cache-to-Flash Module	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay 16.4 18.8
12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg) Gross Weight (kg) Memory Protection Cache-to-Flash Module Others	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay 16.4 18.8 Yes (Does not need Battery Backup Module )
12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg) Gross Weight (kg) Memory Protection Cache-to-Flash Module Others System Fan	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay 16.4 18.8 Yes (Does not need Battery Backup Module ) 4 pcs(hot-swappable)
12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg) Gross Weight (kg) Memory Protection Cache-to-Flash Module Others System Fan Power Recovery	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay 16.4 18.8 Yes (Does not need Battery Backup Module ) 4 pcs(hot-swappable) Yes
12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg) Gross Weight (kg) Memory Protection Cache-to-Flash Module Others System Fan Power Recovery Wake on LAN/WAN	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay 16.4 18.8 Yes (Does not need Battery Backup Module ) 4 pcs(hot-swappable) Yes Yes
12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg) Gross Weight (kg) Memory Protection Cache-to-Flash Module Others System Fan Power Recovery Wake on LAN/WAN Power Supply Unit / Adapter	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay 16.4 18.8 Yes (Does not need Battery Backup Module ) Yes (Does not need Battery Backup Module ) Yes Yes Yes Yes Yes
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12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg) Gross Weight (kg) Memory Protection Cache-to-Flash Module Others System Fan Power Recovery Wake on LAN/WAN Power Supply Unit / Adapter Redundant Power Supply AC Input Power Voltage Power Frequency	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay 16.4 18.8 Yes (Does not need Battery Backup Module ) Yes (Does not need Battery Backup Module ) Yes Yes 7 yes Yes Yes Yes (hot-swappable) Yes (hot-swappable) Yes (hot-swappable) 100V-240V 50-60 Hz - Single Phase
12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg) Gross Weight (kg) Memory Protection Cache-to-Flash Module Others System Fan Power Recovery Wake on LAN/WAN Power Supply Unit / Adapter Redundant Power Supply AC Input Power Voltage Power Frequency Power Consumption	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay 16.4 18.8 Yes (Does not need Battery Backup Module ) 4 pcs(hot-swappable) Yes Yes 770W/850W x 2 (80 PLUS Platinum) Yes (hot-swappable) 100V-240V 50-60 Hz - Single Phase 407W
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12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg) Gross Weight (kg) Memory Protection Cache-to-Flash Module Others System Fan Power Recovery Wake on LAN/WAN Power Supply Unit / Adapter Redundant Power Supply AC Input Power Voltage Power Frequency Power Consumption British Thermal Unit LCM Support Operating Temperature	1 x Gen3x8, 1 x Gen2x4 8 x 438 x 515 19" Rackmount 3U12 bay 16.4 18.8 Yes (Does not need Battery Backup Module ) 4 pcs(hot-swappable) Yes Yes 770W/850W x 2 (80 PLUS Platinum) Yes (hot-swappable) 100V-240V 50-60 Hz · Single Phase 407W 1,388BTU 1,388BTU Yes
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12Gb/s SAS Wide Port PCIe Expansion Appearance Dimension (H x W x D) (mm) Chassis Form Factor Net Weight (kg) Gross Weight (kg) Memory Protection Cache-to-Flash Module Others System Fan Power Recovery Wake on LAN/WAN Power Supply Unit / Adapter Redundant Power Supply AC Input Power Voltage Power Frequency Power Consumption British Thermal Unit LCM Support Operating Temperature Storage Temperature Operating Relative Humidity Non-operating Relative	1 x Gen3x8, 1 x Gen2x4 88 x 438 x 515 19" Rackmount 3U12 bay 16.4 18.8 Yes (Does not need Battery Backup Module ) 4 pcs(hot-swappable) Yes Yes 770W/850W x 2 (80 PLUS Platinum) Yes (hot-swappable) 100V-240V 50-60 Hz - Single Phase 407W 1,388BTU Yes 0 to 40°C -10°C to 50°C

