

Data Sheet

QSAN Flash Storage

XF3 Series

Professional NVMe Storage for General Block Environment

Key Benefits

Unparalleled Performance

- Onboard 10 GbE iSCSI and flexible high-speed I/O expansion

Enterprise Reliability

- 99.9999% high availability with overall modular design performs no single point of failure
- Never lose any data at cache-to-flash memory protection solution
- Non-disruptive firmware upgrade and backup appliance reach zero downtime

Effortless Management

- Simplify the steps of upgrading and replacing system components with modular hardware design
- XEVO - the operating system for flash storage reduces learning and maintenance efforts through our innovative interface design
- Support RESTful API, SNMP, and emailing for external management or use QSAN XInsight, smarter data management with simplified platform and intelligent engine

Powerful Performance with Optimized Cost

QSAN XF3 series is a cost-effective NVMe flash storage solution with the best balance of performance and cost. With µs-level latency, the XF3 assists enterprises in meeting the responsiveness needs of most enterprise applications. The XF3 is ideal for modern applications including cloud collaboration, large scale surveillance, and high-speed business backup alike.

Accelerate Your Business with µs-Level Latency

The XF3 series features an NVMe SSD architecture to ensure consistent response times, prioritizing steady performance instead of occasional peak throughput. Tailored for enterprise high-performance computing infrastructures, it delivers high IOPS with latency at the microsecond level. With minimal latency concerns, applications are shielded from slowdowns or halts caused by high response times. Matching with the RDMA technology, XF3 can mostly eliminate the latency when accessing data from the host to the drive.

Always-on for Business

XF3 is equipped with hot-swappable, and fully redundant hardware design, streamlining maintenance and upgrades. Its dual active controllers operate, and online firmware upgrades deliver seamless storage services in real-time, guaranteeing uninterrupted service delivery with zero downtime.

Sweatless Management Experience

XEVO, the flash-based storage management system, excels in efficiency, ensuring data access within just 5 minutes of initial storage deployment. Its intuitive dashboard and robust reporting system enable managers to analyze business usage and monitor storage status in real-time. Furthermore, external management functionalities like RESTful API, SNMP, and email notifications provide managers with holistic system oversight, empowering them to make informed decisions.

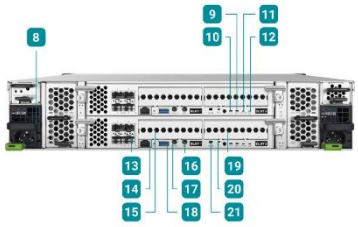
Reduce Business Overhead through Data Reduction

Equipped with advanced data reduction capabilities, including deduplication and compression, the XF3 offers unparalleled efficiency, allowing businesses to significantly reduce overhead costs.

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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. 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. 10 GbE LAN Port
14. 2.5 GbE LAN Port
15. Host Card Slot 1 (host card is an optional part)
16. Service Port
17. Console Port
18. USB Port
19. Host Card Slot 2 (host card is an optional part)
20. Reset to Factory Default Button
21. Buzzer Mute Button

System Specification

Model Name	XF3212D-4C	XF3212S-4C
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	116	
Compatible Drive Type	2.5" dual-port U.2 NVMe SSD (for internal & JBOF)	2.5" single-port U.2 NVMe SSD (for internal & JBOF)
Drive Interface	U.2 NVMe (PCIe Gen 4)	
Maximum Internal Raw Capacity	737 TB	
Maximum Raw Capacity with Expansion	7,127 TB	
Hot Swappable Drive	Yes	
Connectivity Port		
PCIe Expansion	(Gen 3x8 Slot) x 4	(Gen 3x8 Slot) x 2
Max. 2.5 GbE LAN Port	2 (onboard)	1 (onboard)
Max. 10 GbE LAN Port	24 (8 onboard)	12 (4 onboard)
Max. 25 GbE LAN Port	16	8
Max. 100 GbE LAN Port	8	4
Max. 16 Gb Fibre Channel	16	8
Max. 32 Gb Fibre Channel	16	8
Max. 64 Gb Fibre Channel	16	8
Expansion and External Port		
10 / 25 / 100 GbE LAN Port to JBOF	Up to 4 JBOF	
USB Port	3	2
Console Port	2	1
Software Specification		
Storage OS	XEVO 3	
RAID Type	0 / 1 / 5 / 6 / 10 / 50 / 60 / 5EE / 6EE / 50EE / 60EE / QDP (Dynamic Pool)	
Storage Efficiency	Thin provisioning / QCompact (Compression and Deduplication) (option)	
Software Acceleration	SSD Cache / Auto tiering / RDMA	
Data Protection	Snapshot / Asynchronous / Synchronous (option) / QMetro (option)	
Security	SSL / SSH / iSCSI CHAP / ISE & SED	
Support Protocol	iSCSI / FCP / NVMe-oF	
Management	Web UI / RESTful API / S.E.S. / LCM	
Appearance		
Dimension (H x W x D) (mm)	88 x 438 x 515	
Net Weight (kg)	16.3	
Gross Weight (kg)	18.6	
Others		
Memory Protection	Cache-to-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	
Standard Warranty	System: 3 years Cache-to-Flash Module: 1 year	

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