QSAN Flash Storage

# XCubeFAS 5200

Performace-Oriented All NVMe Flash Storage Made for Demanding Workload

## Key Benefits

### Unparalleled Performance
- 100% NVMe 2U26 high density architecture
- Onboard 25 GbE iSCSI and flexible 32 Gb Fibre Channel high-speed I/O expansion

### Enterprise Reliability
- 99.9999% high availability with mirrored firmware architecture and 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 operation 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

## Presenting Lightning-Fast Performance for Enterprises

QSAN XF5200, the premier enterprise-level all-NVMe flash storage solution with unparalleled speed. With µs-level latency, It excels in meeting the responsiveness needs of the most challenging enterprise applications. The XF5200 is ideal for modern applications including AI model training, real-time database, HPC (High-Performance Computing), and high-speed backup alike.

## Accelerate Your Business with Sub-100 µs Latency

The QSAN XF5200 features a all NVMe SSD architecture designed 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 RDMA mechanism, XF5200 can mostly eliminate the latency when accessing data from host to the drive.

## Always-on for Business

XF5200 is equipped with mirrored firmware architecture, built-in hot-swappable, and fully redundant hardware design, streamlining maintenance and upgrades. Its dual active controllers operate and online firmware upgrade deliver seamless storage services in real-time, guaranteeing uninterrupted service delivery while zero downtime.
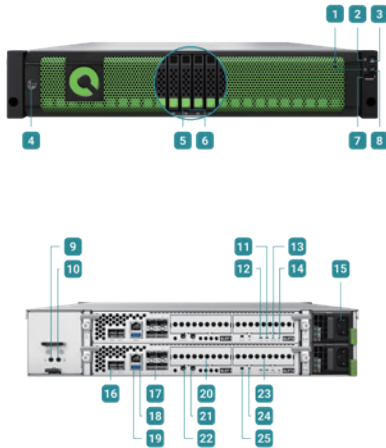
## Sweatless Management Experience

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 XF5200 offers unparalleled efficiency, allowing businesses to significantly reduce overhead costs.

## Appearance





1. Enclosure Status LED
2. Enclosure Access LED
3. Enclosure Power Button / LED
4. Bezel Lock
5. Disk Drive Status LED
6. Disk Drive Power LED
7. USB Port
8. UID (Unique Identifier) Button / LED
9. Cache-to-Flash Module Power LED
10. Cache-to-Flash Module Status LED
11. Master / Slave LED (only for dual controllers)
12. Controller Status LED
13. Dirty Cache LED
14. UID (Unique Identifier) LED
15. Power Supply Unit
16. 12 Gb/s SAS Wide Port
17. 25 GbE iSCSI (SFP28) Port
18. Management Port
19. USB Port
20. Host Card Slot 1 (host card is an optional part)
21. Service Port
22. Console Port
23. Host Card Slot 2 (host card is an optional part)
24. Reset to Factory Default Button
25. Buzzer Mute Button

## System Specification

| Model Name | XF5226D | XF5226S |
|---|---|---|
| Architecture | Dual-active controller | Single-upgradeable controller |
| **CPU** | | |
| Processor | Intel® Xeon® 12-core | |
| **Memory** | | |
| Memory Module Pre-installed | 16 GB DDR4 RDIMM (per controller) | |
| Total Memory Slots | 8 (per controller) | |
| Memory Expandable up to | 1,024 GB (per controller) | |
| **Storage** | | |
| Drive Bays | 2.5" Slot x 26 | |
| Maximum Drive Bays with Expansion Unit | 546 | |
| Compatible Drive Type | 2.5" dual-port U.2 NVMe SSD<br>2.5" SAS SSD (for expansion units) | 2.5" single-port U.2 NVMe SSD<br>2.5" SAS SSD (for expansion units) |
| Drive Interface | U.2 NVMe (PCIe Gen 4x4)<br>SAS 12 Gb/s (for expansion units) | |
| Maximum Internal Raw Capacity | 798 TB (calculate 30.72 TB SSD) | |
| Maximum Raw Capacity with Expansion Units | 16,773 TB (calculate 30.72 TB SSD) | |
| Hot Swappable Drive | Yes | |
| **Connectivity Port** | | |
| PCIe Expansion | (Gen 4 x 8 Slot) x 2 | |
| 2.5 GbE RJ45 LAN Port | 1 (onboard management port per controller) | |
| 10 GbE SFP+ LAN Port | 2 (option) / 4 (option) | |
| 10 GbE RJ45 LAN Port | 2 (option) / 4 (option) | |
| 25 GbE SFP28 LAN Port | 4 (onboard per controller) / 2 (option) / 4 (option) | |
| 16 Gb SFP+ Fibre Channel | 2 (option) / 4 (option) | |
| 32 Gb SFP28 Fibre Channel | 2 (option) / 4 (option) | |
| **Expansion and External Port** | | |
| 12 Gb/s SAS Wide Port | 2 (onboard per controller) | |
| USB Port | 1 (front) / 2 (rear) | |
| Others | Console Port x 1, Service Port (UPS) x 1 | |
| **Software Specification** | | |
| Storage OS | XEVO 3 | |
| RAID Type | 0 / 1 / 3 / 5 / 6 / 10 / 30 / 50 / 60 / 5EE / 6EE / 50EE / 60EE | |
| Storage Efficiency | Thin provisioning / Deduplication* (option) / Compression* (option) | |
| Software Acceleration | RDMA / Auto tiering | |
| Data Protection | Snapshot / Asynchronous / Synchronous (option) | |
| Security | HTTPS / SSH / iSCSI CHAP / ISE & SED | |
| Support Protocols | 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 573 | |
| Net Weight (kg) | 19.6 | |
| Gross Weight (kg) | 28.6 | |
| **Others** | | |
| Memory Protection | Cache-to-Flash Module (built-in) | |
| System Fan | 4 pcs (per controller) | |
| Power Supply Unit | 850 W x 2 (80 Plus Platinum) | |
| Power Consumption | 812 W | |
| Certification | CE / FCC / BSMI | |
| Standard Warranty | System: 5 years<br>Cache-to-Flash Module: 1 year | |

\* The feature is still under developing, please contact QSAN for accurate release date.

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