

Solution Brief

Revolutionizing Surveillance with QSAN and Altos SmartCCTV Integration

Challenges

- Large-scale surveillance systems need substantial storage and scalable solutions for high-resolution video data
- Achieving high-speed connectivity required for video streaming
- Ensuring redundancy, high availability, and robust security measures
- Effective management tools are necessary for handling system complexity

Essential Components and Challenges of Modern Surveillance Systems

Surveillance cameras are indispensable in today's society, generating vast amounts of data. High-definition cameras, essential for richer data collection, require higher bandwidth, increased writing speeds, and greater storage capacity.

The main challenges that come with large scale surveillance (from 200 to 2,000 cameras) include but are not limited to recording, but also retaining data from deep learning in order to develop an inference model. Challenges include large throughput (retaining data for compliance purposes, video analysis, playback, storage requirements), high availability (99.9999%), and high read requirements stemming from high versatility in AI and smart cities. Storage needs caching and tiering to support AI continuous learning in the training phase.

An effective VMS (Video Management System) is also needed to handle the complexities of large systems, including efficient data indexing, retrieval and compliance with data retention policies. Leveraging reliable CMS, it will ensure security, protect assets and increase business efficiency.

QSAN ALTOS an Acer Group Company

Highlights

- Expands data storage capacity while minimizing rack space consumption
- Provides a leading cost-effective solution for capacity-intensive applications
- Integrates best-in-class server and storage to significantly reduce costs
- Provides rich CMS software compatibility for customers to choose from
- Provides rich VMS software compatibility for deployment flexibility

Enhancing Surveillance Efficiency and Security with QSAN and Altos Technologies

QSAN and Altos jointly deliver a solution of large-scale surveillance with outstanding performance and availability.

Altos BrainSphere™ Servers are highly efficient computing system featuring the most optimized computing capability and demanding workloads support. This collaboration ensures robust surveillance performance and reliability, enhancing system efficiency and resource utilization.

Using QSAN storage as the system's data center, the innovative management interface simplifies terminal device deployment and aggregates connections, enhancing network camera accessibility. The Altos BrainSphere™ Server, compatible with various VMS, creates a secure zone to ensure solution flexibility in most surveillance deployment.

Meeting the Demands of Large-Scale Surveillance with High Availability and Efficiency

The QSAN XCubeSAN and XCubeNXT series are proven high availability SAN and unified storage systems with full redundancy in modular design. Their dual-active architecture and automatic failover / failback mechanism, coupled with cache-to-flash technology, enables the system to withstand critical situations. To achieve better efficiency on the data center, QSAN storage fulfills the requirements for large-scale surveillance. A approach resolves the challenging workload of large-scale surveillance system while supporting further on-demand expansion. QSAN's innovative technologies reduce the complexity caused by enlarged storage capacity. Online RAID migration simplifies disk addition, while RAID EE shortens rebuild time of RAID configuration. In combination with high-density JBOD units, the system may achieve petabyte-level capacity on a single storage platform without requiring additional efforts on management.

Solutions

- QSAN storage and Altos SmartCCTV combine for a high-performance, scalable surveillance solution, ensuring efficient data management and continuous video streaming
- QSAN's dual-active architecture and automatic failover mechanisms ensure system resilience and continuous operation, crucial for large-scale surveillance
- The solution supports flexible expansion with minimal rack space consumption and provides a leading price-capacity ratio, making it affordable for various applications
- Leveraging AI for real-time video analysis, the integrated solution enhances security and environmental monitoring while supporting ESG principles

Altos SmartCCTV Solution Enables AI-Powered Surveillance for Environmental Integrity and Safety

Altos SmartCCTV Solution leverages an AI recognition engine as its cornerstone technology, employing real-time video analysis from surveillance cameras to safeguard environmental integrity and security. It is designed as a premium solution for medium to large-scale IP video surveillance applications targeting at commercial establishments, residences, public sectors, and private enterprises, to provide enhanced flexibility and comprehensive deployment in diverse surveillance environments.

The Altos BrainSphere™ S330 F6 series, S340 F6 series, and also specified tower servers are equipped with the Altos Video Surveillance Transmission Acceleration System delivering outstanding high-speed video recording performance, real-time storage acceleration, and highly accurate image recognition. They stand out with greater number of IP surveillance cameras support, and are capable for continuous recording and play-back functionality, also ensuring a seamless experience without losing the layout of the footage.

Altos and QSAN Deliver High-performance, Scalable Surveillance Solutions

The combined solution of Altos and QSAN storage platforms provides large-scale surveillance systems with exceptional performance and stable service. Rich VMS software support, efficient management, and flexible expansion contribute to the availability of the system and, thus, make surveillance simple and affordable.

Recommended ALTOS Models



Altos BrainSphere™
S340 F6



Altos BrainSphere™
S330 F6



Altos BrainSphere™
T350 F5



Altos BrainSphere™
T110 F6

Recommended QSAN Models





QSAN XS5300 Series
QSAN XS3300 Series





QSAN XN8100 Series
QSAN XN5100 Series

VMS Support List

	VMS (Video Management System)
Verified	• Hankest • Milestones • Nx
Support	• Digifort • Avigilon • Qognify Ocularis • Cognyte • Pelco • Luxriot • Bosch (BVMS) • Exacq • Genetec

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