

# Megapixel Hardware RAID Solutions Secure 180-Day Non-stop Recording for Commercial Banks

The 180-day megapixel recording, large data storage, and open platform management are essential factors for selecting a network surveillance system for banks. Surveon's reliable end to end RAID solutions can meet the stringent requirements and ease the overall security management, helping bank security managers fight against internal as well as external fraud and protect clients' properties and the lives of staff and customers.

## Customer

The Yuanta Commercial Bank operates 78 domestic branches, with 5,000 professional financial personnel in 220 divisions, providing commercial banking services in Taiwan. In order to broaden the bank's operation and strengthen its competency, the bank is planning to expand service territory to 120 branches. Its surveillance system thus is in need of a major upgrade to meet the business growth. "Security is our top concern. For a financial institution, the loss of any important video footage could impact more than the costs of the investment," said J. Hong, security project manager of the Yuanta Bank.

## Challenges

"We were looking for the high quality surveillance solutions with crystal-clear images and scalability," said Hong. "At the bank counter, we need cameras with a wider coverage and higher resolution since it is where money goes in and out between customers and clerks. In addition, the HDR function is important for locations with lighting changes such as entrances and hallways."

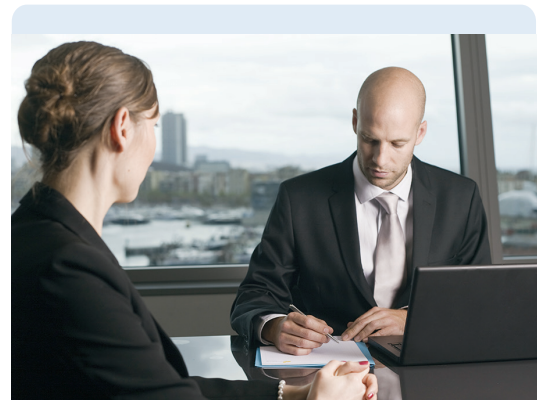
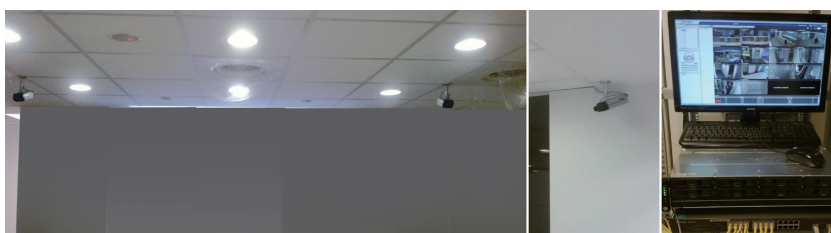
Moreover, 24/7 recording of high resolution images requires large data storage. "We were concerned that this might burden the overall system performance and put us under high risks of data loss," Hong pointed out.

As the bank plans to expand in the near future, a scalable solution with unlimited expansion of cameras, NVR, storage, and clients is a must. And an open platform that can be integrated with the existing IT infrastructure and new devices is also crucial. "We are glad we've selected Surveon; their complete megapixel solutions have met our high demands for quality, integration, and stability," said Hong.

## Solutions

### High Quality Megapixel Cameras

The Surveon CAM4211, CAM4221, CAM3351 compact IP cameras were installed in the vaults, hallways and stairs, offering stylish designs that well fit in the bank interior while maintaining high image quality under complicated lighting conditions. The small camera size also lowers visibility and minimizes the discomfort of customers under surveillance.



## Summary

### Customer:

Yuanta Commercial Bank, Taiwan

### Bank Needs:

- High level surveillance
- Superior image quality under complex lighting
- Continuous megapixel recording for 180 days
- System stability and reliability
- Centralized management
- Scalable solutions

### Surveon Solutions:

Highly integrated solutions with the following:

- CAM3351, Full HD D/N compact outdoor bullet
- CAM4211, megapixel D/N 3-axis IR compact dome
- CAM4221, megapixel D/N 3-axis compact dome
- CAM2301A, Full HD H.264 D/N box camera
- CAM2321, 3 megapixel D/N WDR box camera
- SMR8016U, hardware RAID rackmount NVR
- Surveon VMS Enterprise with real-time video analytics

### Surveon Solution Benefits:

- Certified end to end solutions, from cameras, NVR, VMS, to storage
- 24/7 non-stop megapixel recording
- Hardware RAID ensures reliability and zero frame loss
- Live view and real-time VI detection
- Open platform with easy integration
- Centralized management
- 100% in-house design and production
- 3-year warranty

Counters, hallways, stairs, and ATMs are the other key monitored sections in the bank and each area has different surveillance requirements. In the counter and front desk areas where lots of people movement of and money exchange take place, the Surveon CAM2321 cameras were deployed owing to its 3 megapixel SONY sensor and the WDR functionality which provide clearer images and wider coverage. The Surveon CAM2301A series was installed in the ATMs, providing 1080P resolution for facial recognition and tampering detections of any illegal activities.

### Enterprise Hardware RAID Megapixel NVR

“Nowadays many mission-critical projects require continuous megapixel recording, and hardware RAID can provide high I/O performance and reliability in these cases,” said Casper Wu, product manager of Surveon. The Surveon SMR8000U rackmount NVR series was chosen for its hardware RAID (RAID5), low power consumption, and eight hot-swappable hard disks for easy management. The Surveon SMR8000U also supports megapixel recording of up to 40 channels for video retention periods up to 180 days.

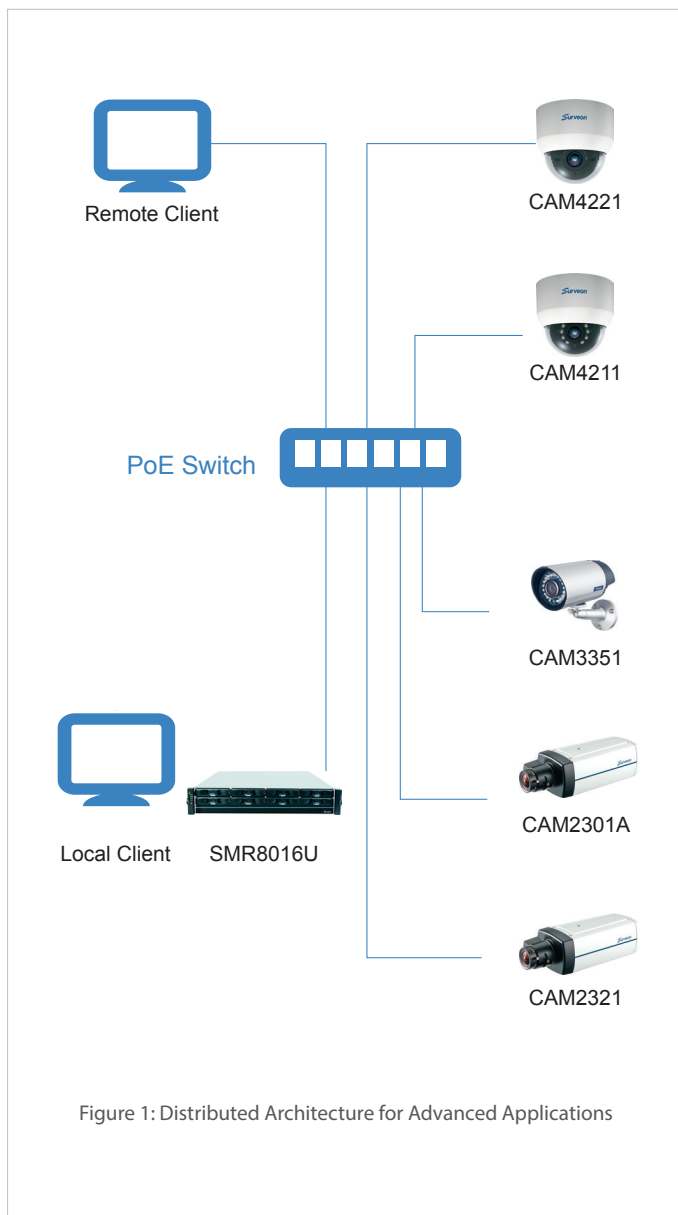


Figure 1: Distributed Architecture for Advanced Applications

### Professional Video Management Solutions

The Surveon VMS Enterprise incorporates plenty of advanced functionalities applicable for professional security projects. The Smart Search offers a total awareness controlling framework, turning massive data to actionable information. With the real-time video analytics, security personnel can quickly react from the live view, snapshots, pop-ups, e-Maps and instant playback to lower the damage and increase the operation efficiency.

Built on the open platform, the Surveon VMS Enterprise optimizes the network security infrastructure by supporting integration with various IT systems such as alarms, intercoms, access control systems, and so on. In addition, the client-server architecture allows full scalability in each part of the system including cameras, NVR, storage, and display monitors, making it possible to scale the surveillance network to any sizes for future expansions.

### Benefits

#### Excellent Image Quality

Any bank applications can find a fitting selection within Surveon’s full line of megapixel cameras with more than 30 models. The advanced features, including 3 megapixel real-time (30 FPS) performance, HDR, ROI video cropping, HLC, and 2D/3D noise reduction, can ensure good image quality even under difficult lighting conditions, such as strong backlighting.

#### Reliable Data Storage

The Surveon SMR8000U system supports eight hot-swappable disk drives and RAID 5 protection, minimizing installation efforts and making maintenance extremely easy. The embedded hardware RAID 5 accelerator ensures that the multi-channel megapixel cameras have access to the required bandwidth when recording images, reducing instability often seen when systems are conducting high I/O operations for an extended period of time.

#### End to End Solutions

Surveon provides various product packages, ranging from different camera segments and resolutions to all kinds of NVR and storage systems. All of them are based on the same VMS framework, allowing partners to keep the investment on existing projects for expansions.

#### About Shu Hwa Electronic Co., Ltd.

Shu Hwa Electronic Co., Ltd. is a professional security system integrator for the financial sector, with 21 branches, sales offices and service centers in Taiwan. As a major contributor to public security, Shu Hwa offers services in consulting, design, installation, deployment, integration with access control systems, and maintenance of security systems.

#### About Surveon

Surveon Technology offers end-to-end network video surveillance solutions that showcase our expertise in professional camera design, hardware RAID NVR, high availability video storage, embedded firmware and video management software. All Surveon products are designed in-house and manufactured on our ISO 9001 and ISO 14001 certified production site to ensure the highest quality for our partners.