



END-TO-END SECURITY SOLUTIONS
FOR BANKING INSTITUTIONS
SMART BANKING SOLUTION

BANKING



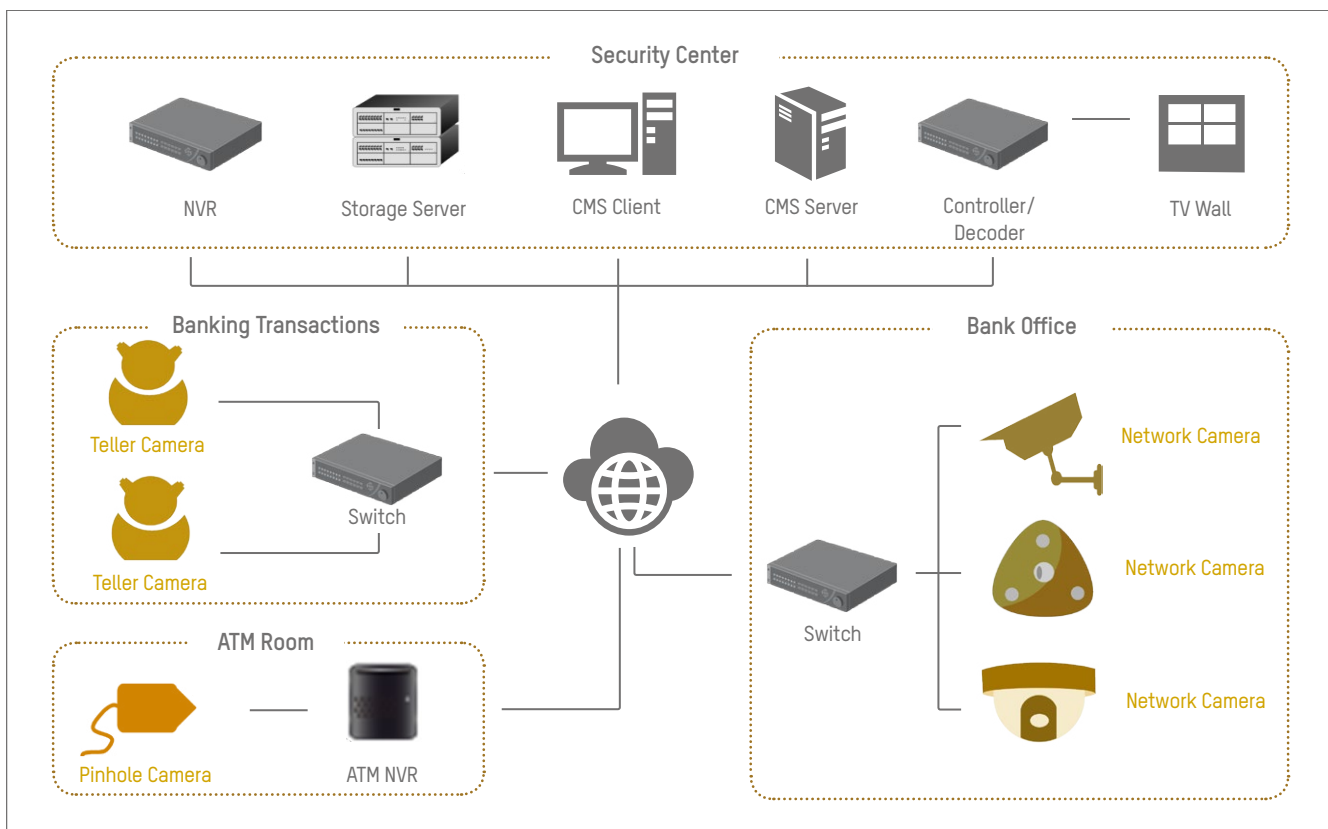
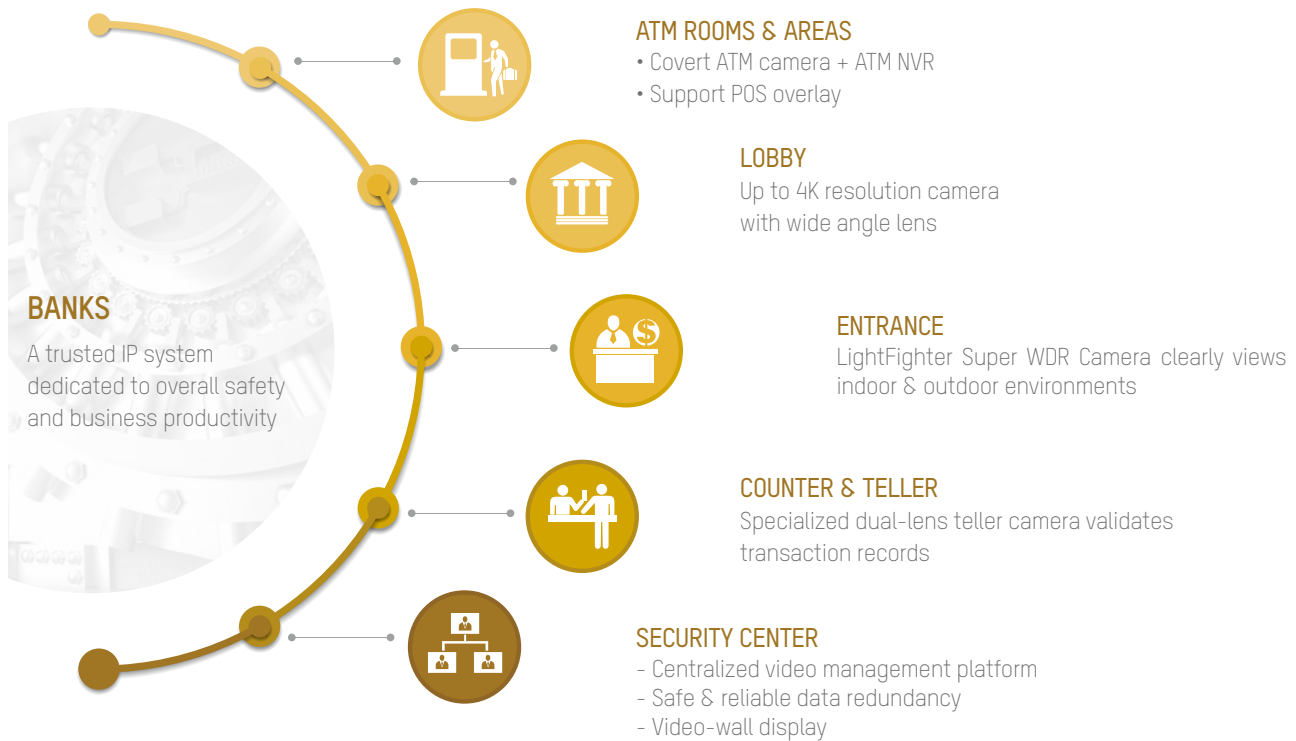


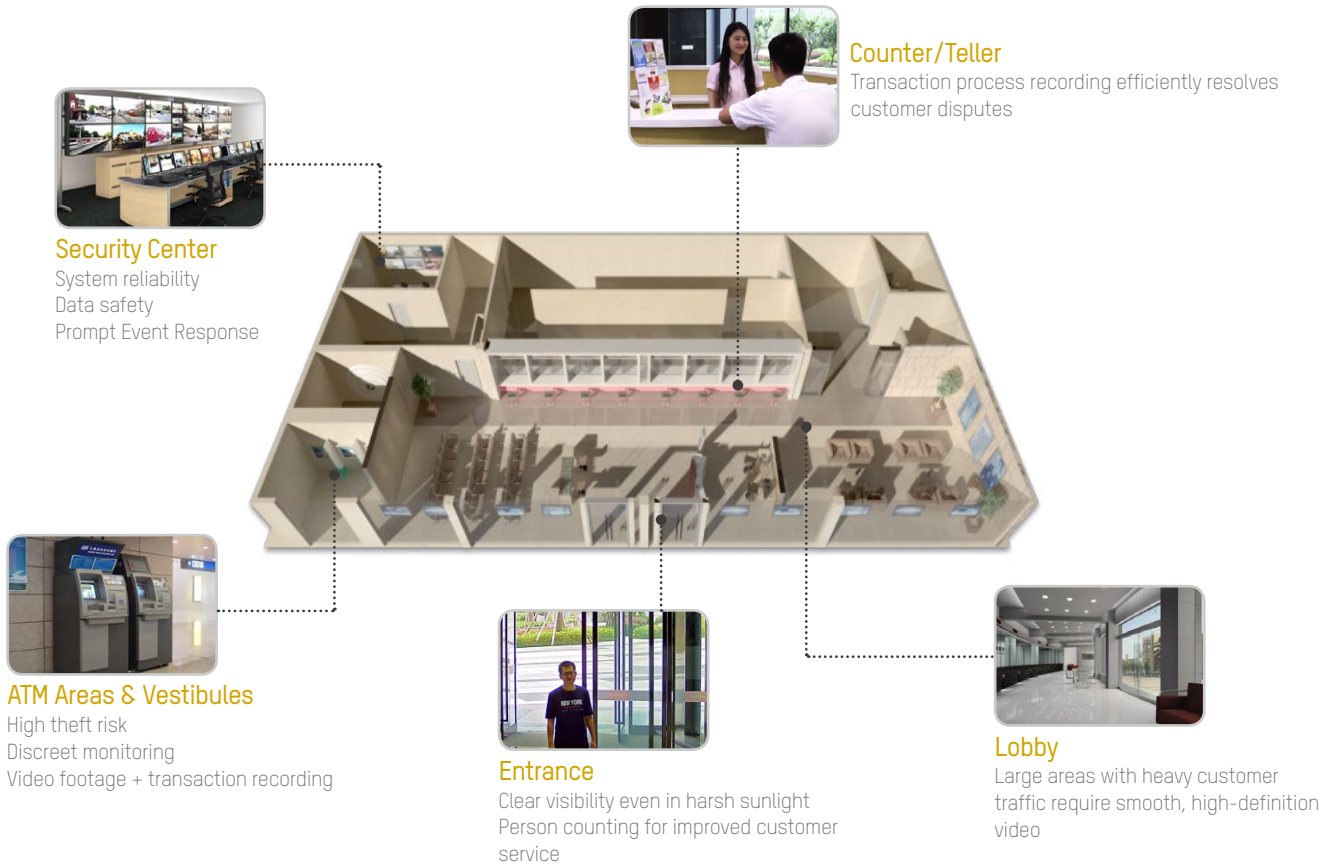
Money, finance and security businesses are vulnerable to constant threats. We understand the unique needs of these industries and offer reliable solutions that you can bank on! Smart Banking Surveillance Solution boasts powerful, intelligent functionalities. These functionalities are embedded with advanced technology to help you integrate your financial facilities – from branch offices to service centers to treasuries – into a centralized monitoring solution that is easy to implement, manage and integrate. We help you conduct effective surveillance of bank assets, manage the security of your clients and personnel, protect restricted areas, and secure ATM areas with unwavering reliability. And there's more – our surveillance solutions also improve accountability, efficiency and customer satisfaction for better business.

A SMART SOLUTION FOR BANK SECURITY

- Ensure around-the-clock safety for customers and employees
- Increase transaction safety and customer satisfaction
- Collect reliable footage for post-investigation
- Manage all the branches effectively and easily

BENEFITS & SOLUTIONS





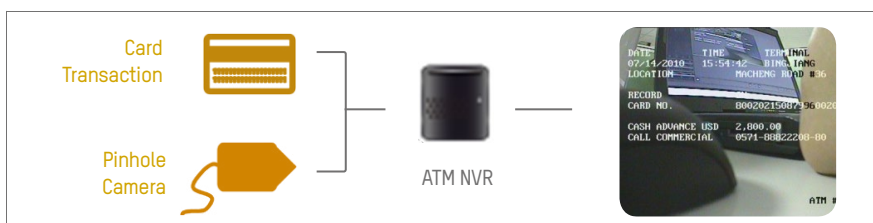
ATM Area Monitoring



Provides a complete solution for ATM machine and its cabin area's safety.

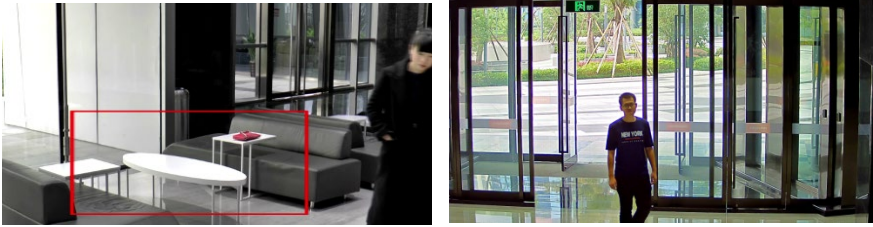
- **ATM Cameras:**
HD video, discreet pinhole design, dual lens for different direction viewings.
- **ATM NVR:**
Dedicated form factor, support transaction information overlay.
- **Cabin Camera:**
Only one wide angle camera to cover all the in-cabin area.

Note: Transaction Data Overlay With video for better customer dispute solving and enhance transaction safety.



* The integration protocols may vary based on exact ATM machine manufacturers and ATM models, CUSTOMIZATION PROCESS may be required. Please go to technical support team for more information.

Entrance & Lobby



In a bank agency, the entrance and lobby areas are the most frequented locations that require high detailed facial images even in high lighting contrast environment.

- **Super WDR camera:**

Lightfighter series cameras can reach up to 140dB Wide Dynamic Range for obtaining a crystal clear image quality even in high contrast sunshine environment

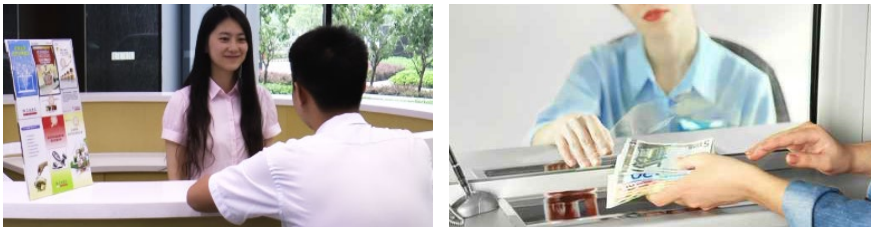
- **4K Ultra HD camera:**

From fixed box camera with dedicated wide angle lens to panoramic fisheye camera, has a full range of 4K products to meet highest definition requirement.

- **Smart Detection:**

Smart IP cameras have full smart feature-set such as intrusion detection, object left/removal detection etc. to better assist in-office security management

Counter & Teller



High volumes of financial transactions each day – from signing documents to approving loans – may leave institutions vulnerable to customer misunderstandings or disputes.

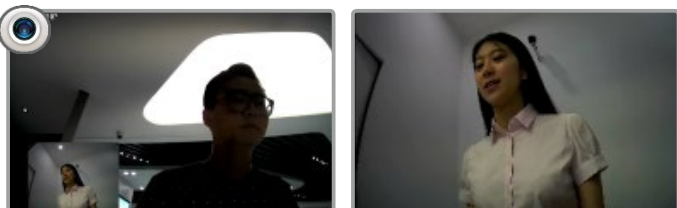
- **Dual-lens Teller Camera:**

Monovu teller camera is specifically designed for applications where high definition and bilateral close-up imaging are required of individuals during financial transactions.

MODE 1



MODE 2 (PiP)



Modern-classic Design



Easy Double Views



On-board Storage

Security Center



Storing critical video footage of daily operations in a bank's security center is a core component of a total CCTV system. It requires the utmost reliability and manageability for data protection and security operations.

- **Embedded NVR:**

We have the richest embedded network recorder product line – from 4 channels to 256 channels – for every level of need

- **Video Management Platform:**

CMS Video Platform is the CCTV system core that manages, views, plays back, and controls all the daily operations among all devices

- **Network Storage Server:**

A must-have product line for total secure data storage

- **Monitor Display System:**

From standalone monitors to large TV walls, we have it all



Storage Server



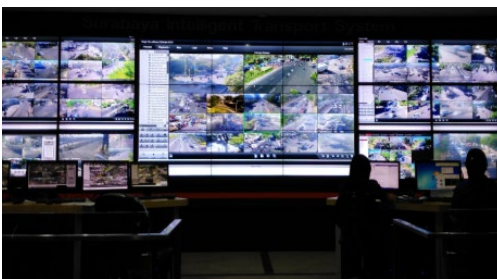
Modularized design and hot plugging for easy maintenance



Double controller & power module for data safety



Supports CVR mode for better return on investment



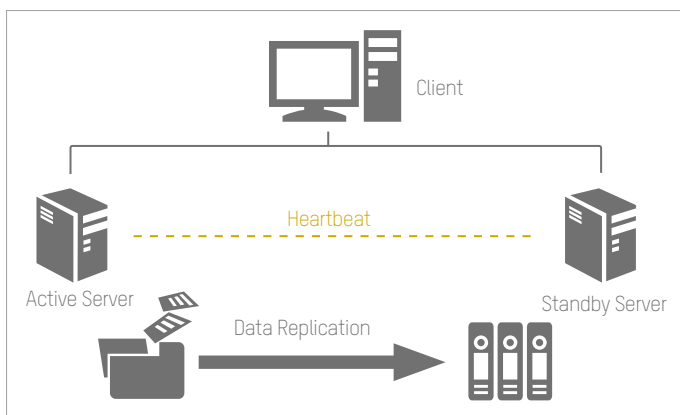
Decoder



Video Wall Controller



TV Wall

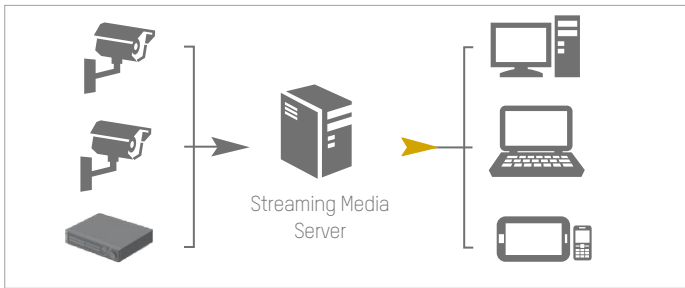


Data Safety

Server Redundancy Design



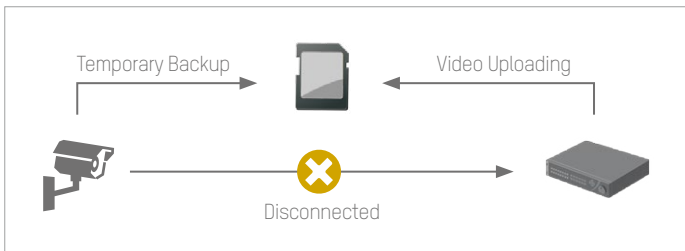
- Active & standby servers
- "Heartbeat" function automatically backs up users' information if one server is interrupted
- Ensures users' live view and playback in case of failover



Transmission Optimization

Streaming Media Server

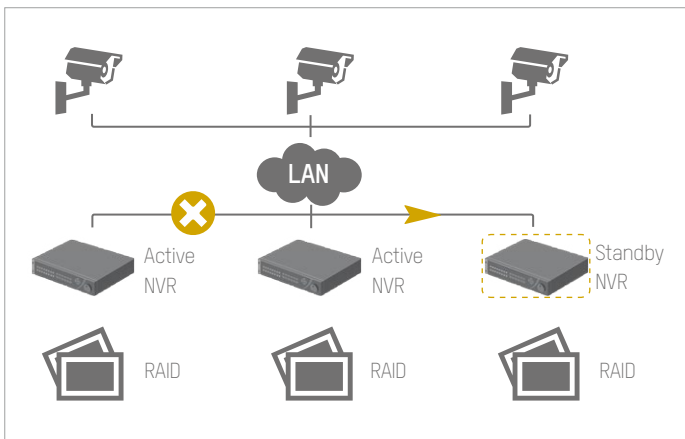
- Streaming Media Server enable multiple users to live view or playback the same camera with only one channel bandwidth transmission;
- 1 Streaming Media Server supports up to 200 x 2Mbps video data streaming and up to 200 channels.



Data Safety

Auto Network Recovery (ANR)

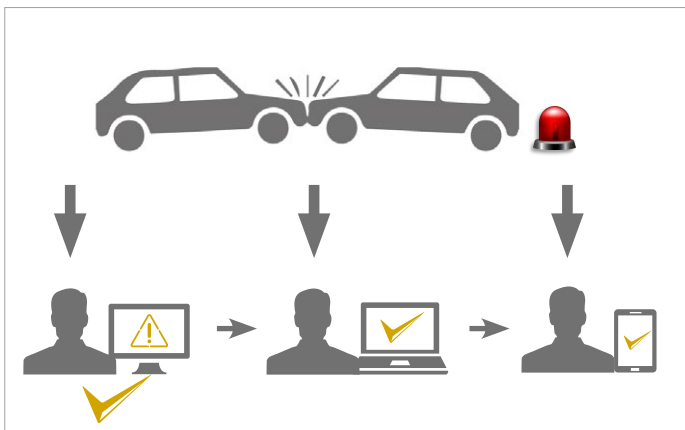
- Auto backup if network connection is interrupted
- Data moves from SD card to back-end device while network connection is restored
- We recommended using brand Micro SD card for ANR storage



Data Safety

RAID & N+1 Failover

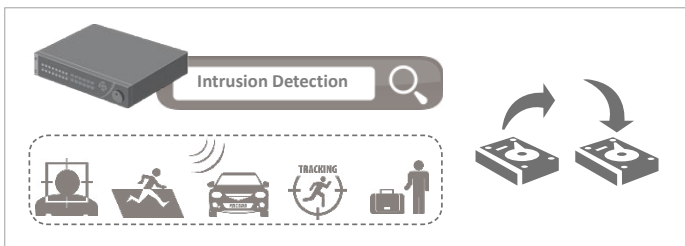
- **Single-spot storage backup:** Multi-RAID supported by embedded NVR and Storage Server
- **Multi-spot storage backup:** When any active NVR is out of service, the standby NVR can take over recording automatically



Alarm Management

Multi-users Notification

- Real-time alarm notifications sent to CMS's control clients
- Even mobile clients can receive notifications
- One-Check-All mechanism allows one user to handle the event and others to simply receive notification

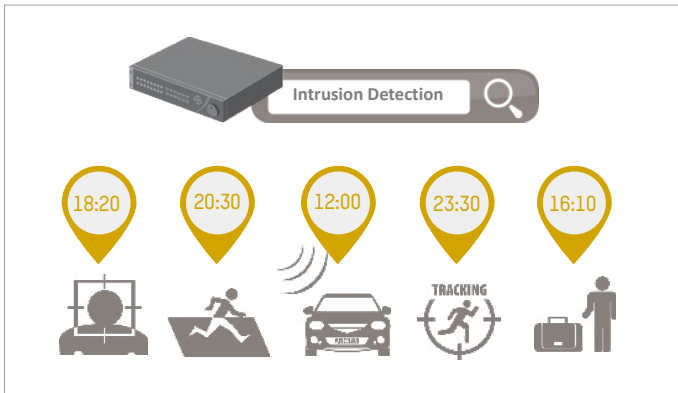


Large Data Management

Smart Backup

- Supports event footage backup
- Saves maximum storage space





Large Data Management

Smart Search

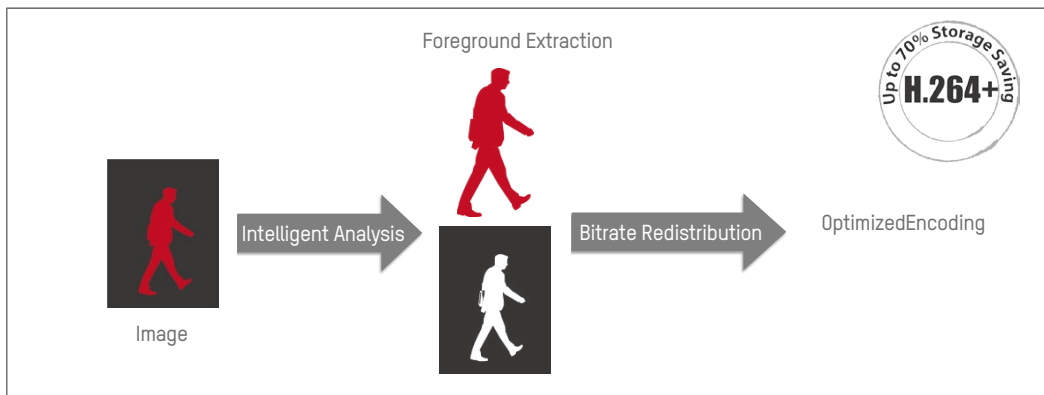


- Fully compatible with Smart IP Cameras
- Easy and quick event search for snapshots and video recording
- Plays back the target event footage at standard speed and can fast-forward (up to 16x)
- Unrelated video can be skipped during playback

HIGHLIGHTED TECHNOLOGY

Smart Codec – H.264+ Optimized Compression

An efficient way to manage super high resolution video footage.



Analytic + Compression

The moving target is extracted from the static background, using a different codec for each element.

- Background-based predictive smart encoding
- Enhanced noise suppression
- Optimized, long-term bitrate control



H.264 (25fps)

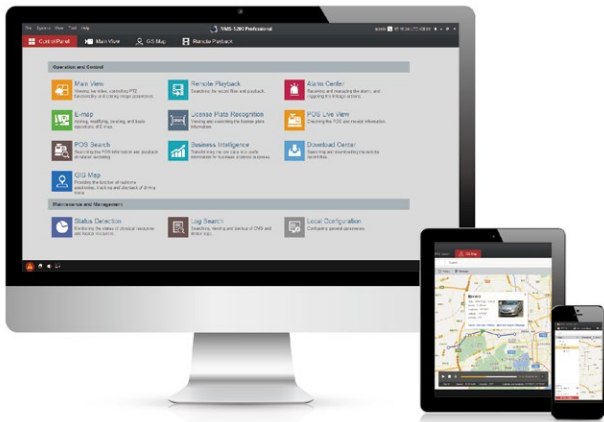


H.264+ (25fps)

In a static nighttime environment, the H.264+ bitrate can achieve 50–60 Kbps – 10–20 times better than the standard H.264 codec. This not only saves bandwidth, but effectively reduces storage requirements.

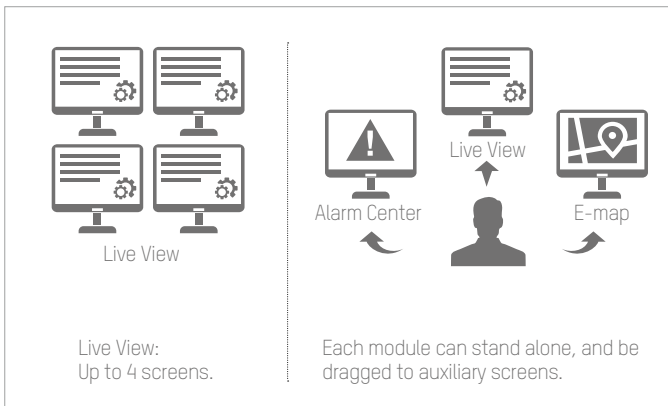
- Improved encoding
- Improved transmission efficiency
- Improved data storage

CMS PROFESSIONAL



Control client	Mobile Client	Web client
<ul style="list-style-type: none"> - Live View & Playback - E-map - Alarm Center - LPR/Mobile video - System Health Check - Log Search - Local Configuration 	<ul style="list-style-type: none"> - Live View - Playback - PTZ-Control - Local Configuration 	<ul style="list-style-type: none"> - Live View - Playback - PTZ-Control - Local Configuration

Multi-Screen Operation

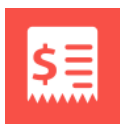


System Status Detection



- CMS Status
- Storage Server Status
- Stream Media Server Status
- Device Online Status
- Camera Online Status
- Signal Status
- Recording Schedule
- Recording Status

Add-on modules



POS Module

- POS live view (Video and transaction receipts)
- Transaction information search
- Transaction video playback
- Event backup



Business Intelligence Module

- Transaction Data Analysis
- People Counting Analysis
- Retail & Traffic Analysis



Parking Lot & ANPR Module

- Automatic Number Plate Recognition
- No credential required for access & exit
- Black list & white list automatic filtering
- Entrance barrier linkage
- Vehicle information and entrance statistic report



GIS Map Module

- Vehicle real-time tracking
- Vehicle exception alarming
- Instant communication with vehicle
- Vehicle routine report

APPLICATION REFERENCE



■ Ziraat Bank, Turkey

A total of two thousand Network DVRs were installed across every branch and ATM kiosk of Ziraat Bank throughout Turkey.

"The sophisticated products, professional technical support, and speedy customization provided perfectly match what we expected, and we will continue to use their reliable products in the second phase of the installation." Necmi Cevirme, security department manager of Ziraat Bank.



■ Bank of India

Network DVRs are used in more than 20 Janakalyan Sahakari Bank branch offices to acquire transaction details including ATM IDs, card numbers, and transaction times and dates, as well as to overlay the information onto video footage with user-defined fonts, color, and positioning.

"After adopting their Network DVR to get high-quality surveillance 24/7, Janakalyan Sahakari Bank has now enhanced its security to provide a secured environment for customers, employees, and assets," said Vijay Kale, manager of Janakalyan Sahakari Bank Head office.



■ Janakalyan Sahakari Bank, Mumbai, India

Provides a hybrid security solution for over 4,000 Bank of India branches throughout the country. The high-quality, advanced technology Smart IP Cameras and 700TVL analog cameras secure the facilities.



■ VakifBank, Turkey

VakifBank's complete system fully utilizes DVR technology to maximize local-storage in branch offices, while CMS Professional Video Management Platform was applied to remotely manage all video information from each one.



■ BMCE Bank, Morocco

Morocco's BMCE Bank applied hybrid DVR to allow the use of both analog and IP cameras in the bank's surveillance system, providing excellent performance today with existing analog cameras, and promises excellent performance tomorrow with future IP technology.