MAXIMIZE BUSINESS
EFFICIENCY AND INTELLIGENCE
SMART RETAIL SOLUTION

RETAIL

In the retail business, customers need to feel safe to have a good shopping experience and merchandise needs to be protected from both internal and external threats. Security can be a big headache for store managers and security integrators.
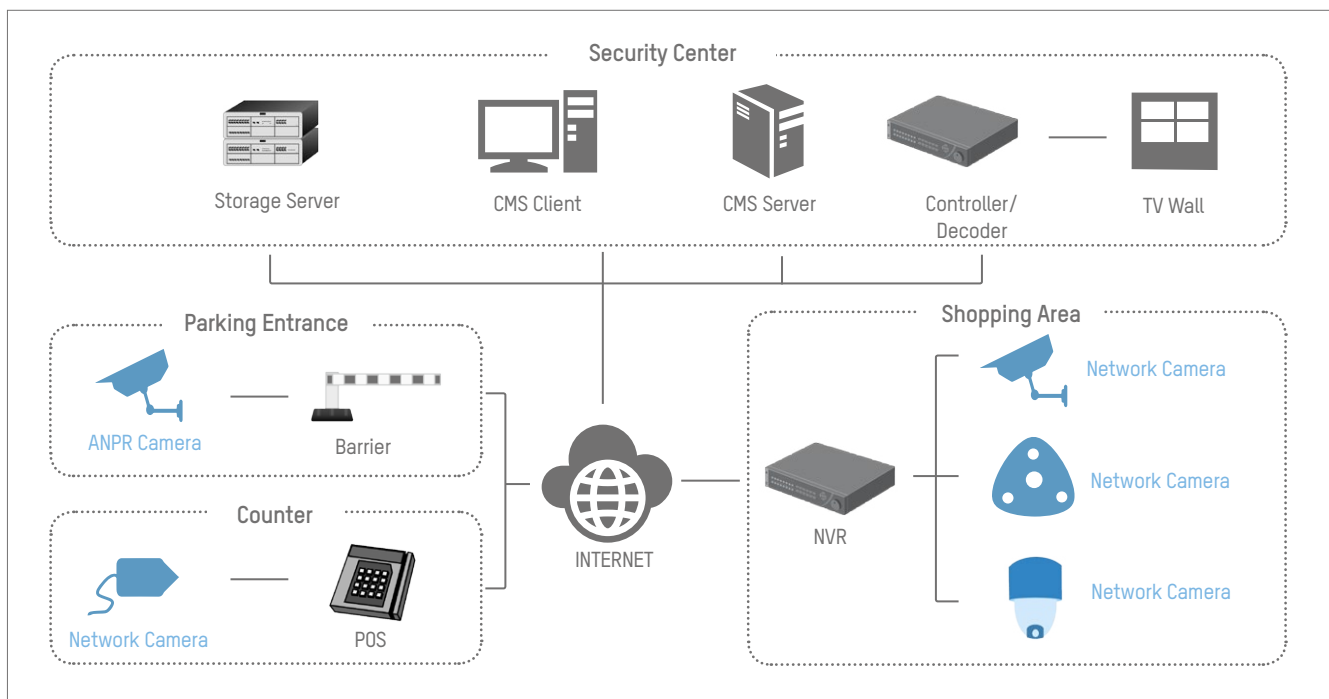
Fortunately, there's a solution. Smart Retail Solution for shopping centers, malls, and retail businesses. Developed this critical solution specifically for retail centers with multiple points of sale, large entries and exits, and vast parking areas. The Smart Retail Solution provides access control, security for staff, and loss prevention support. And that's just the beginning. This Smart system also features analytics for enhancing business value, too. Intelligent functions include people-counting to track customer traffic and volume, and automatic vehicle number plate recognition for superior access control in parking areas. Also customers and staff can feel secure day and night.

The Smart Retail Solution from us is a surveillance package that does more than just record video. It's a business solution. In this brochure you will find all the essential elements for a complete Smart Retail Solution. Ask your distributor about Solutions today, and keep your customers' shopping areas safe and secure, day and night.

SMART SOLUTION FOR RETAIL MALLS AND SUPERMARKETS

• Ensures around-the-clock safety for customers/staffs and asset
• Resolves transaction disputes and aids loss prevention
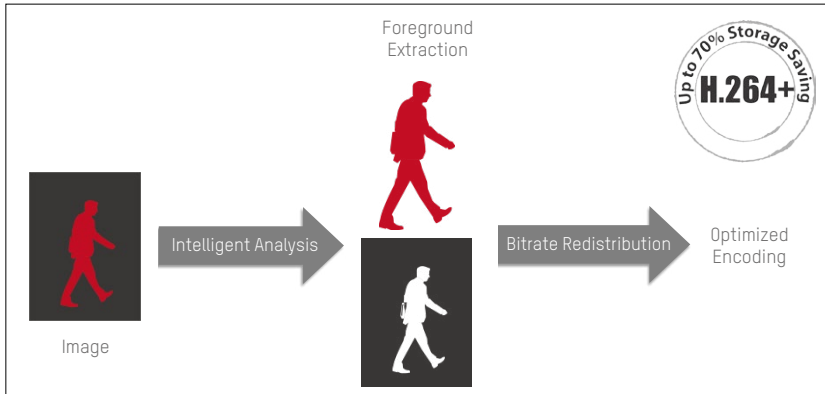• Reports customer analytics for smart business decisions

TOTAL IP SYSTEM

COUNTERS
• Specialized dual-lens teller cameras for transaction validity
• POS integration for effective dispute resolution and to prevent sweetheart behavior

SHOPPING AREAS
• Fish eye cameras for large shelf-area monitoring

Security Centers
• Centralized video management and user management f
• Video wall display for centralized monitoring

Smart Solution For Retail
A trusted IP system dedicated to overall safety and improved business productivity!

STORE WINDOWS
• Covert, pinhole cameras for discreet monitoring
• Recessed-mount camera for subtle installation and operation

ENTRANCES
People-counting camera generates customer flow reports for business statistics and improvements

PARKING LOTS
ANPR cameras automate VIP customer vehicles entrance process and store footage for retrieval

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Security Center

Storage Server   CMS Client   CMS Server   Controller/Decoder   TV Wall

Parking Entrance
ANPR Camera — Barrier

Counter
Network Camera — POS

INTERNET

NVR

Shopping Area
Network Camera
Network Camera
Network Camera

HIGHLIGHTED TECHNOLOGY

■ Smart Codec – H.264+ Optimized Compression

An efficient way to manage super high resolution video footage.

Foreground
Extraction

Up to 70% Storage Saving

H.264+

Intelligent Analysis

Bitrate Redistribution

Optimized
Encoding

Image

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

4.2 Mbps	73.4 kbps

H.264 (25fps)

1.4 Mbps	31.1 kbps

H.264+ (25fps)

In a static nighttime environment, the bitrate of H.264+ can reach up to 50~60Kbps, 10~20x over standard H.264 codec, that not only saves bandwidth rresources, but efficiently decreases storage requirements.

- more encoding improvement
- more transmission efficiency
- more storage saving

■ ANPR Module

A critical element in access control

Smart IPC

NVR

Vehicle
Detection

License Plate
Recognition

Vehicle
Management

CMS
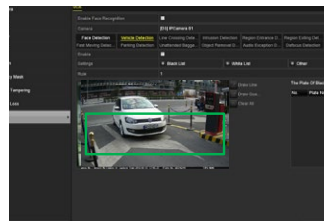Professional
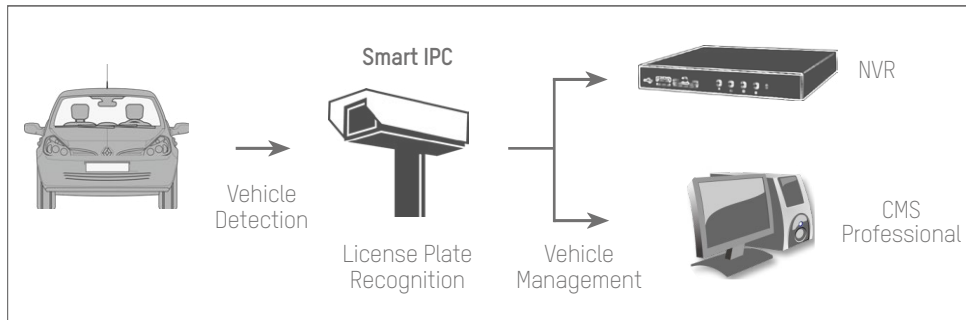
ANPR System
- License Plate Comparison
- B/W List Filtering
- Alarm Triggering
- Result Query
- Result Export
- Auto Network Recovery (ANR)
- ANPR Remote Configuration

* The exact functionalities may vary based on local strategy and product development.
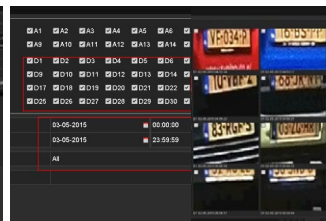
License Plate Recognition
- Entrance Time Recording
- Plate Number Recording

Vehicle Management
- Auto Comparison
- Blacklist Filtering
- Alarm Triggering

Smart Search /Smart Backup
- LPR Searching
- Post-event Investigation

Vehicle Detection
- GEO Tracking
- Increases security

PERFECT VIEW

Security Centers
Security desks require real-time monitoring in critical shopping areas for quick emergency response

Parking Lots
Frequent, high volume vehicle entry and exit require strong security detail and management

Entrances
Clear visibility in high contrast and harsh lighting conditions along with customer-counting for business development

Shopping Area
Large, open areas and areas prone to shoplifting require hi-tech surveillance for both loss prevention and analytics

Points of Sale
Transaction records as well as internal theft require effective record-keeping and data retrieval

Store Windows
Shopping areas with high-value goods require critical protection and subtle esthetics

Parking Lot Monitoring

Customer traffic flow and retail shopping trends are very helpful analytics for businesses when advertising promotional campaigns and evaluating marketing strategy. Along with providing security, products increase your business productivity.

People Counting Cameras: With built-in customer-counting algorithms, the IDS Intelligence Camera automatically records foot traffic and charts walking directions. When used in tandem with CMS Professional Software, the IDS Intelligence Camera is an easy-to-use and cost-efficient data-analysis solution

LED Display

ANPR Camera

Barrier

INTERNET

CMS Pro Client

CMS Pro Server

White/ Black list
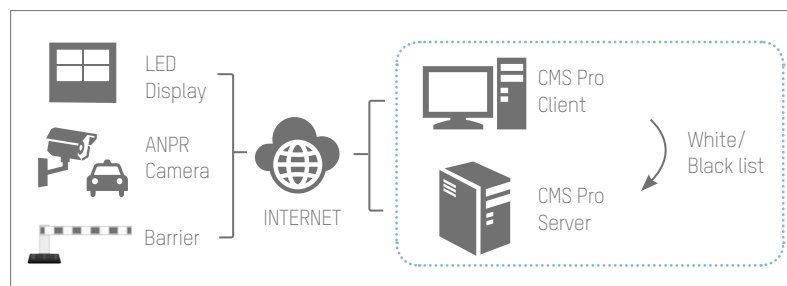
• ANRP camera automatically recognize Vehicle's plate No, display platen No in security personal's screen;
• Black/White List function enable automate the VIP customer's vehicle entrance with Barrier integration,
• Black/White List can be modified easily according to VIP customer's list changes.

RETAIL

Store Window Monitoring

For retail areas where aesthetics is important, such as store windows and guest areas, surveillance equipment blends in discreetly to efficiently protect customers and assets.

• Pinhole Cameras: HD video with a discreet pinhole design and dual lens for multi-directional viewing.
• Recessed-Mount IP Cameras: Easy installation and high-definition video while maintaining a pleasant business environment.

Entrance Monitoring

Customer traffic flow and retail shopping trends are very helpful analytics for businesses when advertising promotional campaigns and evaluating marketing strategy. Along with providing security, our products increase your business productivity.

People Counting Cameras: With built-in customer-counting algorithms, the IDS Intelligence Camera automatically records foot traffic and charts walking directions. When used in tandem with CMS Professional Software, the IDS Intelligence Camera is an easy-to-use and cost-efficient data-analysis solution

Shopping Area Monitoring

Provides a complete solution to safeguard shopping area safety while improving business efficiency.

Fish-Eye Cameras: One device alone allows any angle of coverage for in-store areas, providing panoramic monitoring while capturing every detail of a large shopping area.

Counters & Tellers

In retail sectors, frequent transactions at points of sale leave opportunities for misunderstandings and disputes. Solution provides the perfect technology to provide excellent customer service while protecting business interests.

• **Dual-Lens Teller Cameras:** Monovu Teller Camera is specifically designed for applications where HD, bilateral close-ups of individuals during financial transactions are required.
• **POS Integration:** By integrating with POS systems, this Retail Solution helps collect, confirm, and search specific POS events.

MODE 1

Modern-classic Design

MODE 2 (PiP)

Easy Double Views

On-board Storage

POS Integration
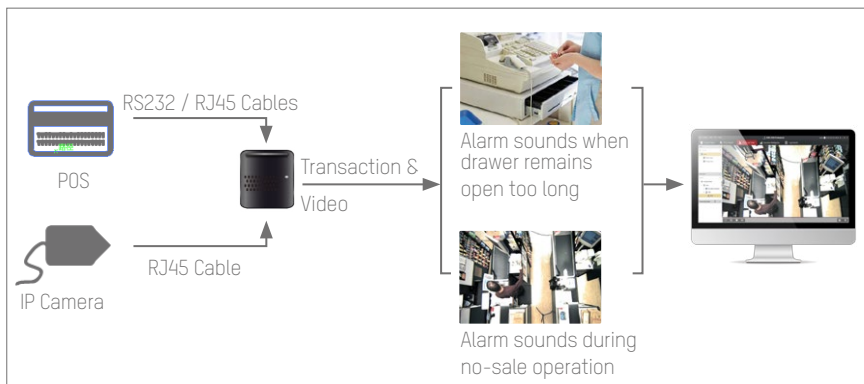

RS232 / RJ45 Cables

POS

IP Camera

RJ45 Cable

Transaction & Video Overlay
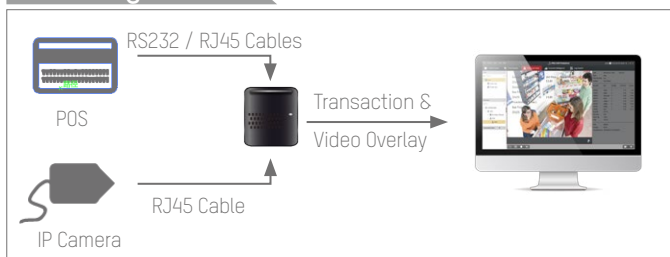
• ATransaction data and HD video are combined and stored, then displayed in the same screen.
• Smart searches of transaction events can be conducted based on receipt numbers, price ranges, item description, quantity range, and more. It's ideal for efficient customer dispute resolution.
• HD transaction video can be used as evidence for police investigation.

RS232 / RJ45 Cables

POS

IP Camera

RJ45 Cable

Transaction & Video

Alarm sounds when drawer remains open too long

Alarm sounds during no-sale operation

• Various POS Event Identification and Alarms: Cash drawer left open; no-sale operation; change over $50 given; refund; and more
• Transaction event alarm rules can be customized
• Abnormal POS events can generate system notifications and be confirmed visually by security personal

Security Center

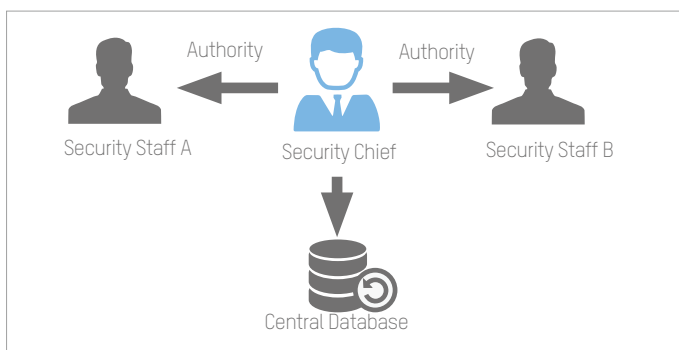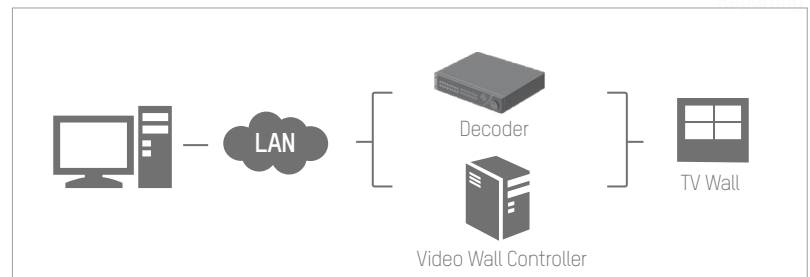| Real-time Tracking	Routine Playback	Exception Alarming	Instant Messaging	Analytic Reporting
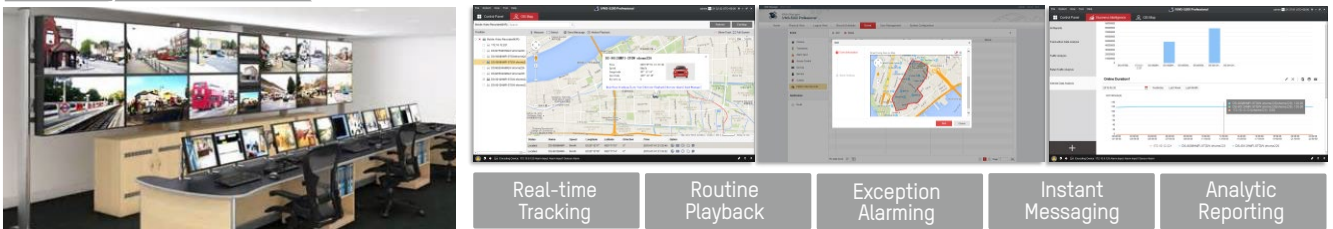
Storing critical video footage of daily operations in a bank's security center is a core component of a total CCTV system. It requires the utmost reliability and manageability for data protection and security operations.

- **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 Professional 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
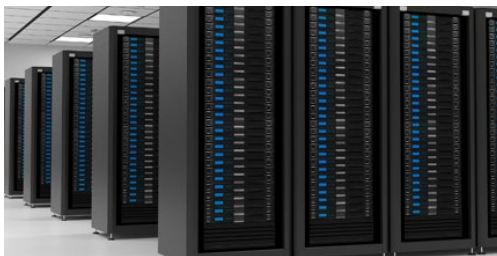

🔒 Storage Server

⚙️ Modularized design and hot plugging for easy maintenance

🔌 Double controller & power module for data safety

📄 Supports CVR mode for better return on investment

Decoder

TV Wall

Video Wall Controller

Security Staff A ← Authority ← Security Chief → Authority → Security Staff B

→ Central Database

Centralized Management
Security Operator Authority
- Centralized management of security personnel and authorities
- Security personnel have assigned authority levels, such as live view, playback, area cameras, or PTZ control
- Higher permission-level users have priority control over the system, i.e., they can takeover PTZ control, force logout of lower-level users, and more

CMS Server → Business Intelligence Report

Entrance 1   Entrance 2   ...   Entrance N
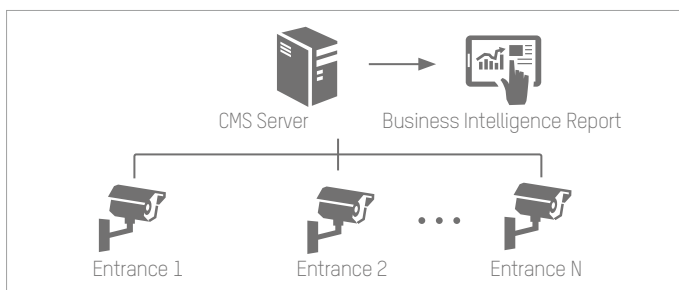
Business operation assitance
### Business intelligence report to improve productivity
- Customer distribution reports, based on data collected from person-counting cameras in shopping areas during a specific time period, can be generated.
- Daily, weekly, and monthly customer distribution reports contribute to improved personnel scheduling and effectively enhance marketing strategies.

Event Alarms (I.e., Line crossing)
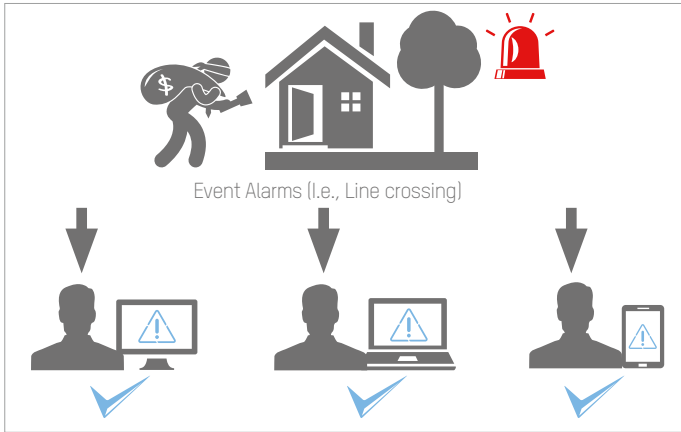
Centralized Management
### Alarm Verification and Handling
- Various types of events trigger real-time alarms and notifications to security operators, like motion detection, line crossing, intrusion detection, face detection, etc.
- Alarm flashing in E-Map notifies security operators
- Alarms link to predefined cameras in the form of pop-up images/video for visual verification
- One-check-all mechanism allows one user to handle alarm events while others get notifications

Client

Heartbeat

Active Server

Standby Server

Data Replication
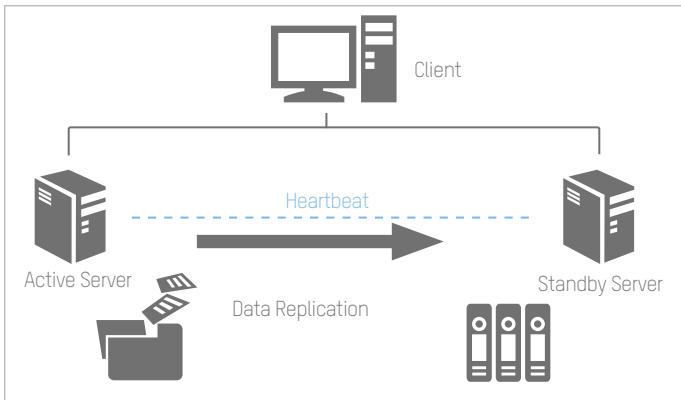
## Data Safety
Server Redundancy Design
- Active & standby servers
- "Heartbeat" function automatically backs up users' information if one server is interrupted
- Ensures users' live view and playback in case of failove

Temporary Backup

Video Uploading

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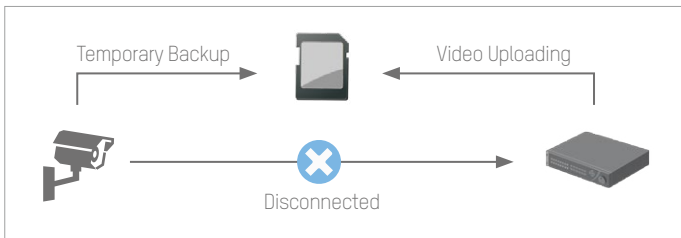
Data Safety
Auto Network Recovery (ANR)
- Auto backup if network connection is interrupted
- Data moves from SD card to back-end device while network connection is restored
- We recommended using brand Micro SD card for ANR storage

Intrusion Detection

18:20   20:30   12:00   23:30   16:10

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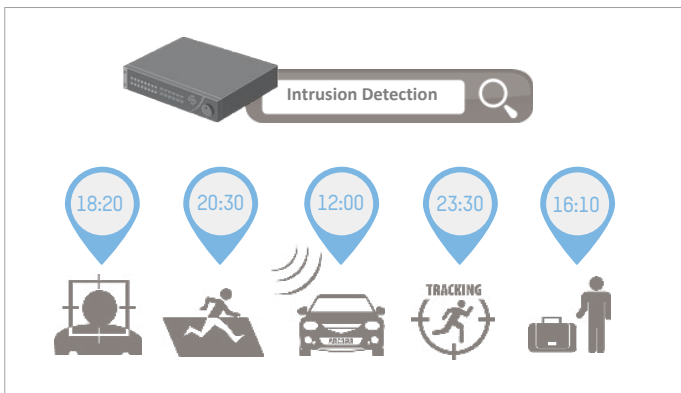
Large Data Management
Smart Search
- Fully compatible with Smart IP Cameras
- Easy and quick event search for snapshots and video recording
- Plays back the target event footage at standard speed and can fast-forward (up to 16x)
- Unrelated video can be skipped during playback

Intrusion Detection

TRACKING
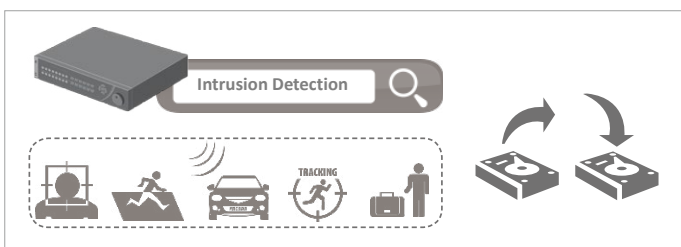
Large Data Management
Smart Backup
- Supports event footage backup
- Saves maximum storage space

RETAIL

APPLICATION REFERENCE

■ Somerset Mall, South Africa

Somerset Mall has installed 130 network cameras to protect the safety of visitors and stores alike throughout the complex, the third-largest shopping centre in the province.

"We had also used their products in other projects and found them to be robust and reliable, delivering very high quality images whilst remaining cost-effective."
Mario Groenewald, technical manager at SSC Infrasek, System Integrator

■ McDonald's Branches, Malaysia

Provides IP solution which also integrated with POS system, to protect 300 McDonald's branches throughout Malaysia, and even helps the stores improve their management efficiency.

"The successful installation and implementation of the integrated POS and CCTV surveillance system is a landmark for McDonald's Malaysia, it provides a safer shopping environment for both customers and staff."
Weison Chiang, Product Manager at AAC Distribution Sdn Bhd, Distributor

■ Mac's Convenience Stores, Canada

Provides security for the entire chain of stores with CMS software to connect individual stores to corporate headquarters.

"The team are true professionals who exemplify the term 'customer service' and their product is top notch in this growing age of technology".
Sean Sportun, Mac's Manager

■ House of Amber, Denmark

To provide House of Amber's unique facility a solution that simultaneously upgraded, maintained, and future-proofed an already-existing CCTV system.

"Additionally, PoE [Power over Ethernet] makes installing the camera much easier, since we only need one outlet. As well, the vari-focal lens is greatly important. Our customers can vary between a high millimeter optical zoom for close-ups, and a vari-focal lens for further away images."
Jens Ole Nielsen, Senior Consultant at Dynateam A/S, System Integrator

■ Al Fitaihi Jewellery Store, Saudi Arabia

75 ultra-discreet IP dome cameras were embedded into the ceilings in the store, to protect its existing prestige décor as protecting millions of dollars-worth of stock.

"This first collaboration has been a great success. A large factor in this is the very high quality of the products and it is fitting that some of the Kingdom's most valuable jewellery is being watched over and protected by some of the world's most advanced technology."
Mr. Mohan, the executive manager of Okaz International, Distributor