RETAIL SURVEILLANCE SOLUTION

Zhejiang Uniview Technologies Co., Ltd. is the pioneer and leader of IP video surveillance. Heritages profound IT technologies, we founded independently in December, 2011. We are the third largest manufacturer in the overall video surveillance market in China and 6th in global market. We insist on open cooperation, focusing on high quality and improving innovative ability.

Product Line:
Network Camera, NVR, IP Storage, Decoder, Keyboard, Switch, Monitor and Network Cable

RETAIL SURVEILLANCE

SOLUTION

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CHALLENGES & SOLUTION

With the rapid rise of online retailers and mobile payments, conventional retails are facing the biggest challenge ever happened in the 21st century. How to explore the potential advantages of offline stores and provide more humanized and secured consumption experience?

Uniview has been dedicating to security industry for years, accumulated experience and knowledge on varied scenes, and presented to conventional retails industry with a brand new retail surveillances solution. It improves customer satisfaction and the potential to a safer and more efficient consumption environment.

SOLUTION OVERVIEW

Challenges

- Shoplifting, robbery and internal fraud
- Transactian disputes
- Supply and inventory control
- Unknown customer preferences
- High labor cost

Solutions

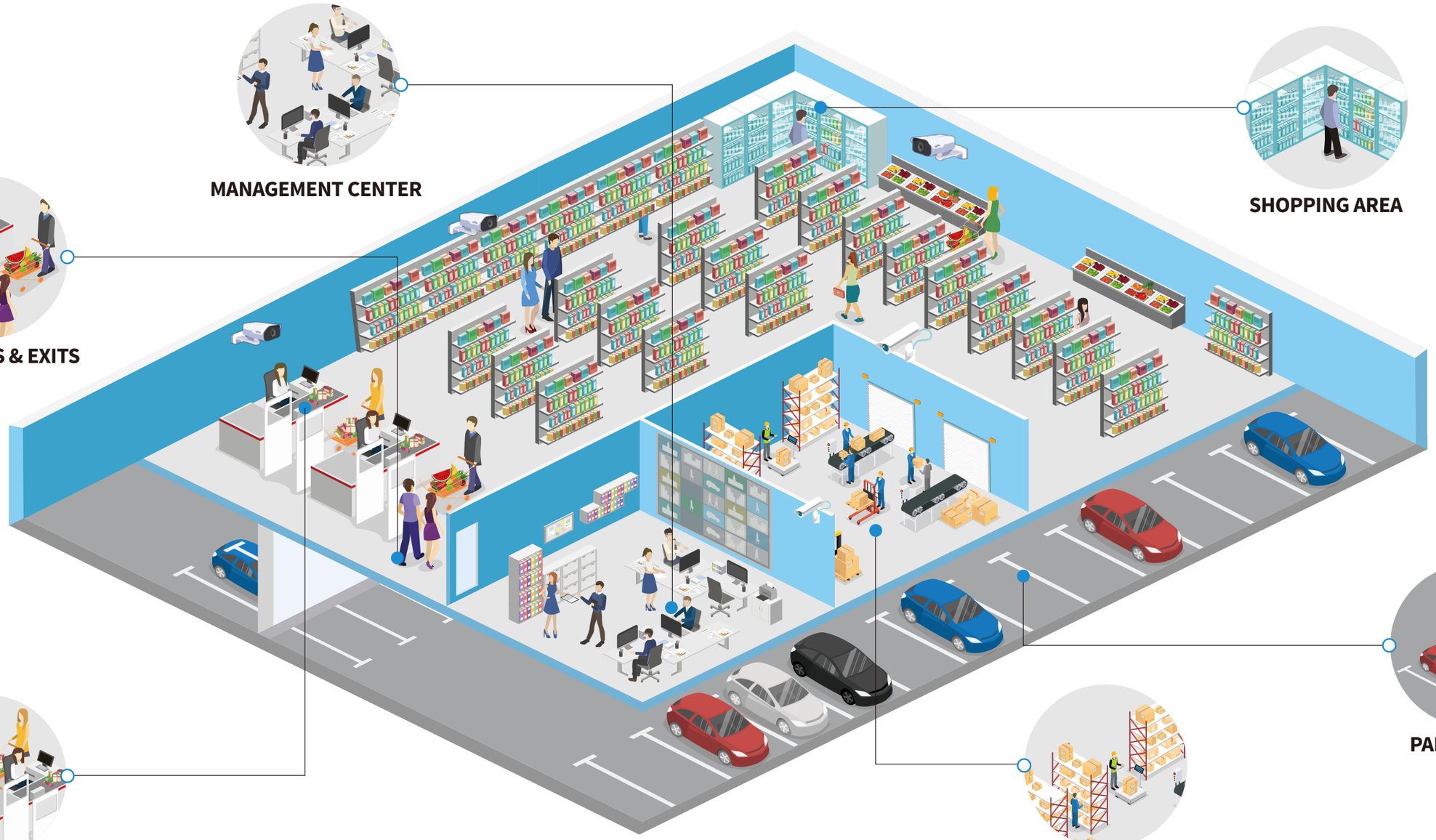
01 Full-time HD monitoring without blind spot secures shopping environments

02 POS integration and HD recordings can be used for investigation and evidence

03 People counting and heat map can be used to do business analysis, helping for a better store management, forward-looking business strategies and less labor cost

04 Higher working efficiency can be guaranteed through multiple monitoring display platforms and remote access methods

RETAIL LAYOUT



MANAGEMENT CENTER

SHOPPING AREA

ENTRANCES & EXITS

CASHIER DESK

WAREHOUSE

PARKING LOT

FEATURES

ENTRANCES & EXITS



Entrance and Exit port are not only the two passages, but the key areas for public security monitoring. Ensuring accurate people flowing data is the priority for retail surveillance solution on security personnel management and assisting business decision.

WDR

UNV WDR cameras combine Sony STARVIS sensor technology with our self-developed ISP processing technology to fully utilize sensor's potential and imaging performance, deliver clear and visible images under high-contrast lighting condition. It is particularly ideal for entrance ways and exits.



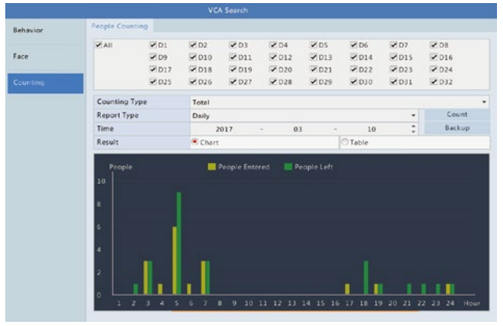
WDR ON

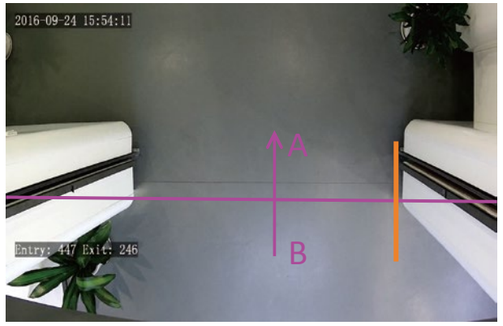


WDR OFF

People Counting

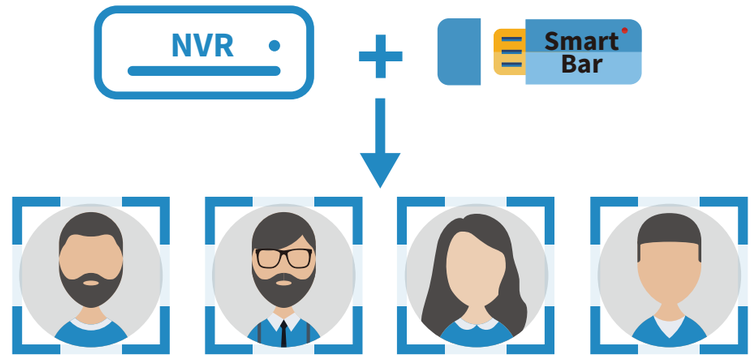
UNV cameras can provide Intelligent Analysis functions such as people counting which supports real-time data of people flow at the entrance. In the meantime, the NVR and EZVMS can output the daily/monthly/yearly report which is helpful for making business decision and re-arranging staff.





Face Detection & Face Search

Integrated with blacklist/whitelist filtering, Face Detection and Face Recognition (realized in a Smart Bar) functions enable UNV cameras to spot a target person and send alarms instantly to the management center.



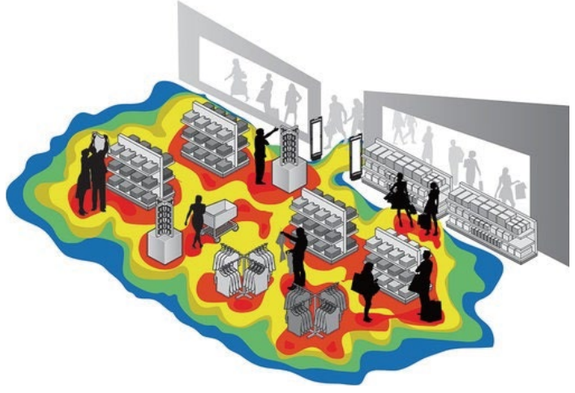
SHOPPING AREA



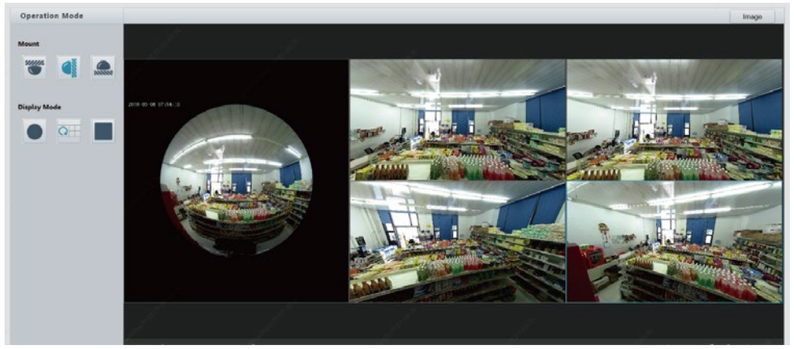
Shopping area is the central area of retail. The surveillance solution should not only monitor overall environment but also the details of every shelf. It helps to reflect the crowd change and detect the abnormal incident.

Fisheye-Heat Map & Dewarping Modes

- Fisheye camera is suitable for large, wide areas such as shopping areas due to the fact that it can provide extensive overview with sufficient details. UNV fisheye fixed domes camera supports heat map functions which helps to do business analysis.



- UNV 4K fisheye fixed dome cameras supports ceiling, wall and desktop mounting modes. It provides up to 16 kinds of de-warping modes including panoramic view integrated with UNV NVR and EZVMS.



Smart Detections-Intrusion Detection & Crossing Line Detection

- Implementing Intrusion Detection in controlled zones such as exhibition areas, enables UNV cameras to protect valuable but fragile goods from thieves or unauthorized entry.



Intrusion Detection

- Crossing Line Detection can be deployed at single-direction passageways such as “Exit without Purchase”. When UNV cameras detecting a crossing line behavior, they can notify the management center immediately to handle the abnormal situation.



Cross Line Detection

Corridor Mode

Due to the fact that the image would be divided and blocked by shelves, it will cause a great waste on conventional 16:9 image display format in long and narrow areas. UNV Corridor Mode helps to effectively reduce invalid monitoring regions and shows more details in the important monitoring area. Both UNV NVRs and EZVMS support live view and playback display in corridor mode.



16:9 Conventional Mode



9:16 Corridor Mode

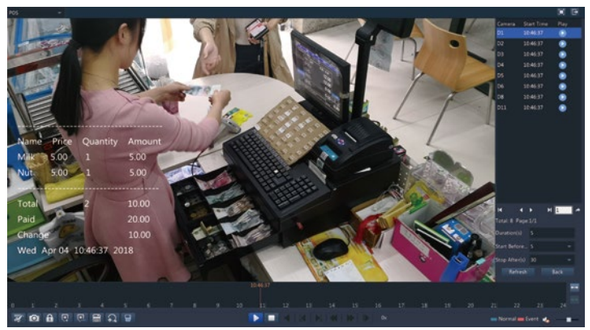
CASHIER DESK



Cashier desk is the area where most disputes take place. It is significant to provide all time HD video surveillance and corresponding integration functions such as POS for later event investigations.

Point of Sale (POS) Integration

Video images and corresponding POS information can be combined together through integration of POS devices and a UNV NVR. POS information can be recorded and displayed on the corresponding video footages. Also it can be used to check video recordings/events through text search.



Smart Detections - Defocus & Scene Change Detection

Implementing Defocus and Scene Change Detection at the cashier desk enables UNV cameras to prevent data loss by deliberate tampering or other monitoring interruptions.

WAREHOUSE



Warehouse is a critical area where stores valuable merchandise. It needs to strictly control the access. UNV retail surveillance solution plays a vital role on goods protection and personnel access management in warehouse.

Super Starlight

UNV Super Starlight camera series, embedded with F1.2 aperture lens and Sony STARVIS image sensors, provides colorful and detailed video images under ultra-low light conditions (0.0005Lux). It adapts to both warehouse and other low light environment.



Super Starlight



Common Starlight

Smart IR

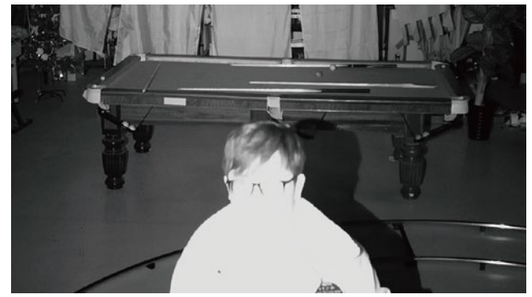
Smart IR is an intelligent IR adaptive control technology which can balance the luminance level between distant and nearby areas. Hence, cameras are able to provide consistent clear image under low Lux scenes.

Certain models of UNV cameras with LED Infrared enable the IR illumination to reach up to 200m (656ft). UNV PTZ dome cameras with LED Infrared enable the IR illumination to reach up to 250m (820ft), and UNV Laser IR PTZ dome cameras can even reach up to 500m (1640ft).

UNV cameras can satisfy different illumination requirements for almost any retail scenarios application.



Smart IR ON



Smart IR OFF

Audio Detection

Most smart detections are based on visual clues to detect abnormal situations, while in some situations, audio information (sudden audio change) is regarded as a better proof for detecting a given event.



Implementing Audio Detection in controlled areas such as warehouse and accounts offices, enables UNV cameras to provide all-round protections for retails valuable merchandise.

UNV cameras support various audio detection types, including Sudden Rise, Sudden Fall, Sudden Change and Threshold.

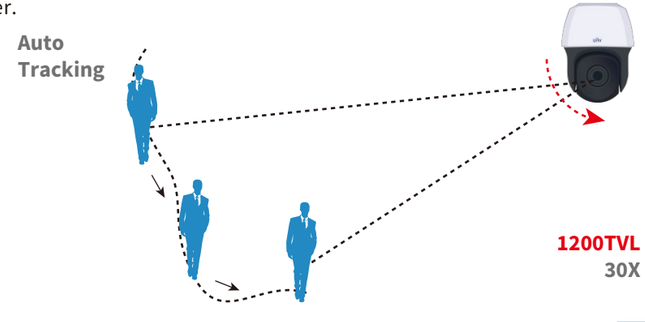
PARKING LOT



UNV PTZ dome cameras are able to configure preset positions and design an automatic guard patrol route. It effectively monitors large parking lots, provide full-time protection for vehicles and property of customers.

Auto Tracking

Once a moving object enters a forbidden area, the path can be tracked and traced by UNV PTZ dome camera with the help of video context analysis. Meanwhile, alarms with detailed information also will be sent to police station or retail control center.



4K Camera

UNV 4K cameras can provide clear and abundant details of monitoring areas with excellent high resolution performance.



4K Resolution



2MP Resolution

MANAGEMENT CENTER



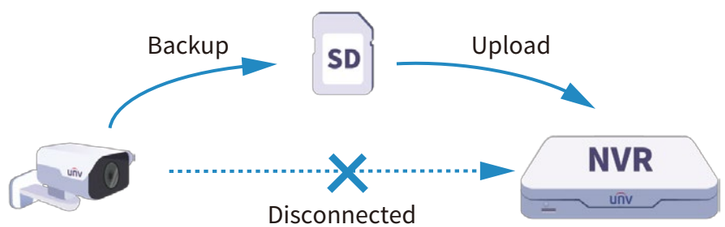
Management Center is the main place for security staffs and retail managers to check live view, playback and data analysis results through various platforms such as EZStation, Web client, EZVMS CS Client and local NVR. Also it is the place to verify alarms and coordinate a response.

System Stability & Data Safety

UNV devices are designed with various high availability functions to ensure consistent monitoring and recording process, as well as prevent data loss from unforeseen devices' errors and protect customers' privacy.

1. System Stability

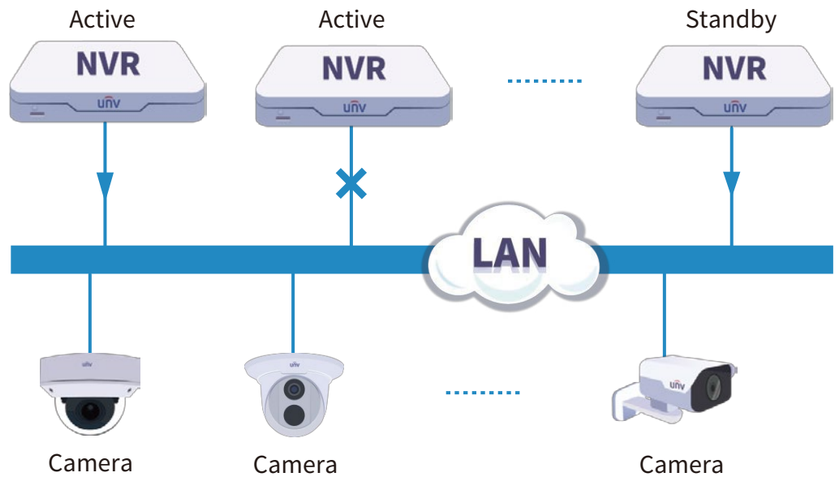
- During the period of Auto Network Recovery (ANR). UNV cameras can automatically store video recordings into the camera's SD card. Once the network is restored, it will automatically send video recordings back to storage server. Retail managers will not lose any important video recordings, even network fails temporarily.



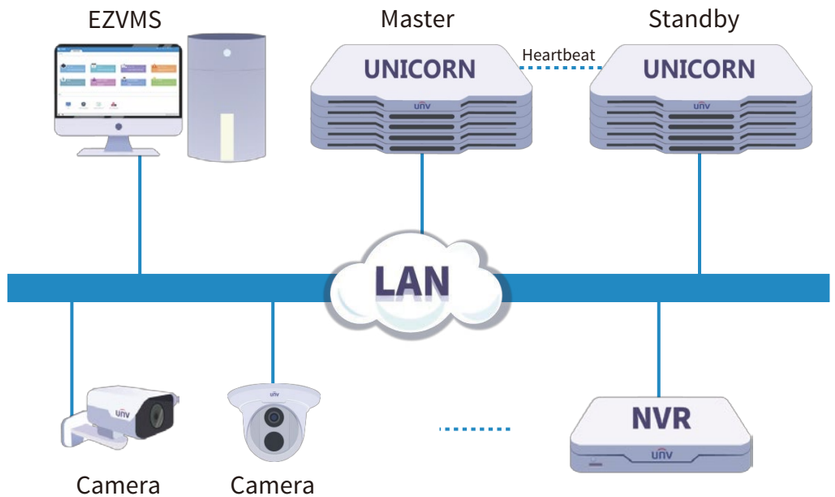
- Multiple RAID (Redundant Arrays of Independent Disks) Modes (RAID 0/1/5/6/10/50/60), are built into UNV NVRs and storage servers for better data reliability and higher data safety.

RAID
1/5/6/10/50/60

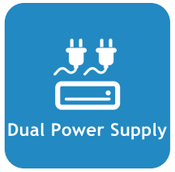
- UNV NVRs are deployed with N+1 hot backup capability. In the same networking system, if any active NVR is out of service, the Standby NVR will automatically take over.



- UNV Unicorn can be deployed with a Hot Spare capability. If the Master Unicorn fails down, the Standby Unicorn will take over service immediately. All service and data will transfer back to Master Unicorn when it recovers.

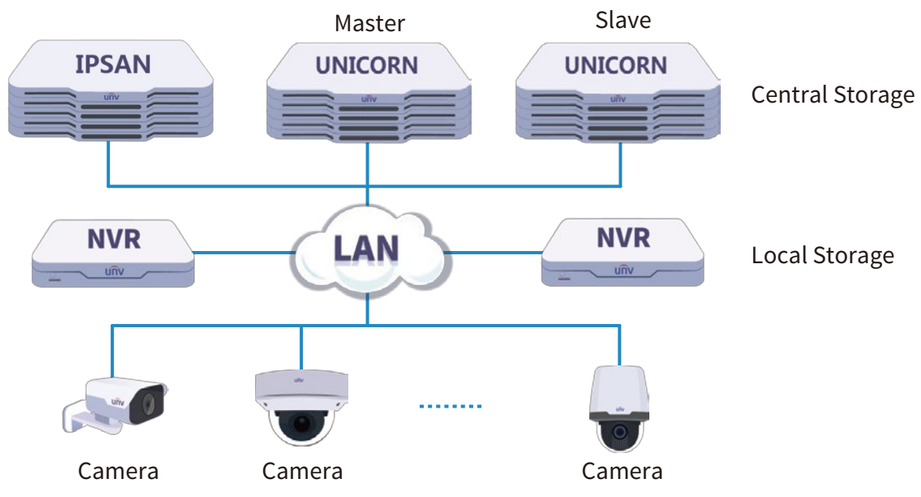


- Certain UNV NVRs and UNV Unicorn can be deployed with Redundant Power Supply to ensure continuous services when power supply failover occurs

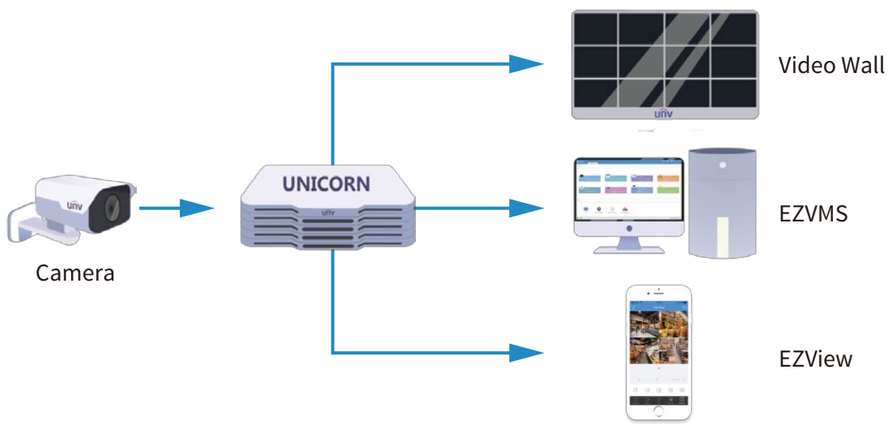


2. Data Safety

- To meet different storage preferences and needs, there are flexible storage mode options such as Local Storage and Centralized Storage. And storage mode options could be chose based on the different concern of priorities, such as reliability, cost effectiveness or better redundancy of important video recording backup.



- UNV Unicorn is designed with high transfer capabilities which enable multiple users to check live view or playback of the same camera through only one video channel of bandwidth transmission.



- Admin users can divide into different authority levels through manager authorization. Furthermore, admin users also can log out lower-level users to save resources if needed.



- Video recordings can be watermarked with custom content to prevent protect video recordings from unauthorized editing.

Smart Search & VCA Search

Specifying a target area and using smart search would only take a few seconds to find desired video recordings, which could save time and cost greatly.

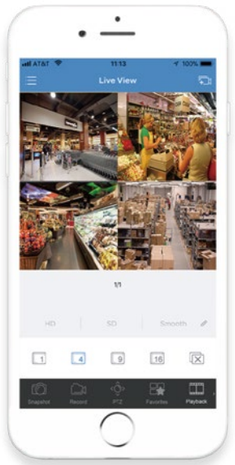
VCA Search supports to search models based on Behavior, Face Detection and People Counting. All different search modes are designed to find desired video recordings easier and quicker.

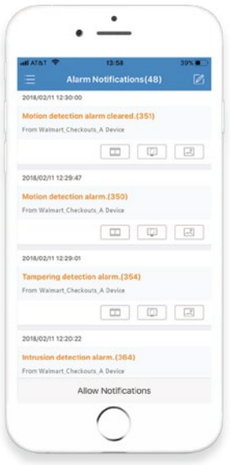




Remote Management

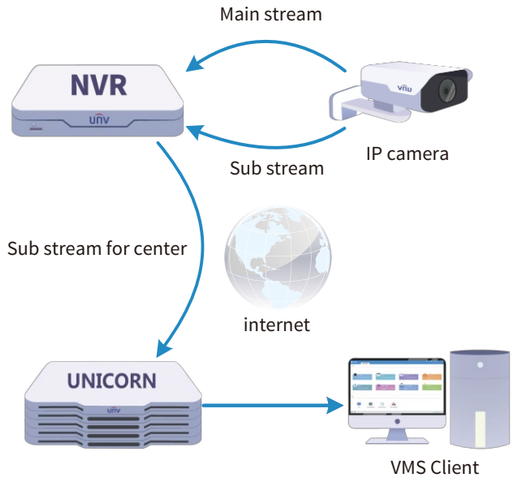
Retail managers can check live view, playback and alarm notifications anytime and anywhere through UNV's APP EZView. It helps retail managers to easier work with higher efficiency.





Cost effective design

Uniview provides Ultra 265 plus Sub Stream solution. When retail managers check live view and playback, the system will automatically adopt Ultra 265 and Sub stream, which saves 62.5% bandwidth.



UNV IP storage adopts unique structure which supports 48 bays at a height of 4U with front panel hot swap, intelligent frequency modulation CPU and multistage speed fan.


4U48 bays


hot swap front panel


multistage speed fan

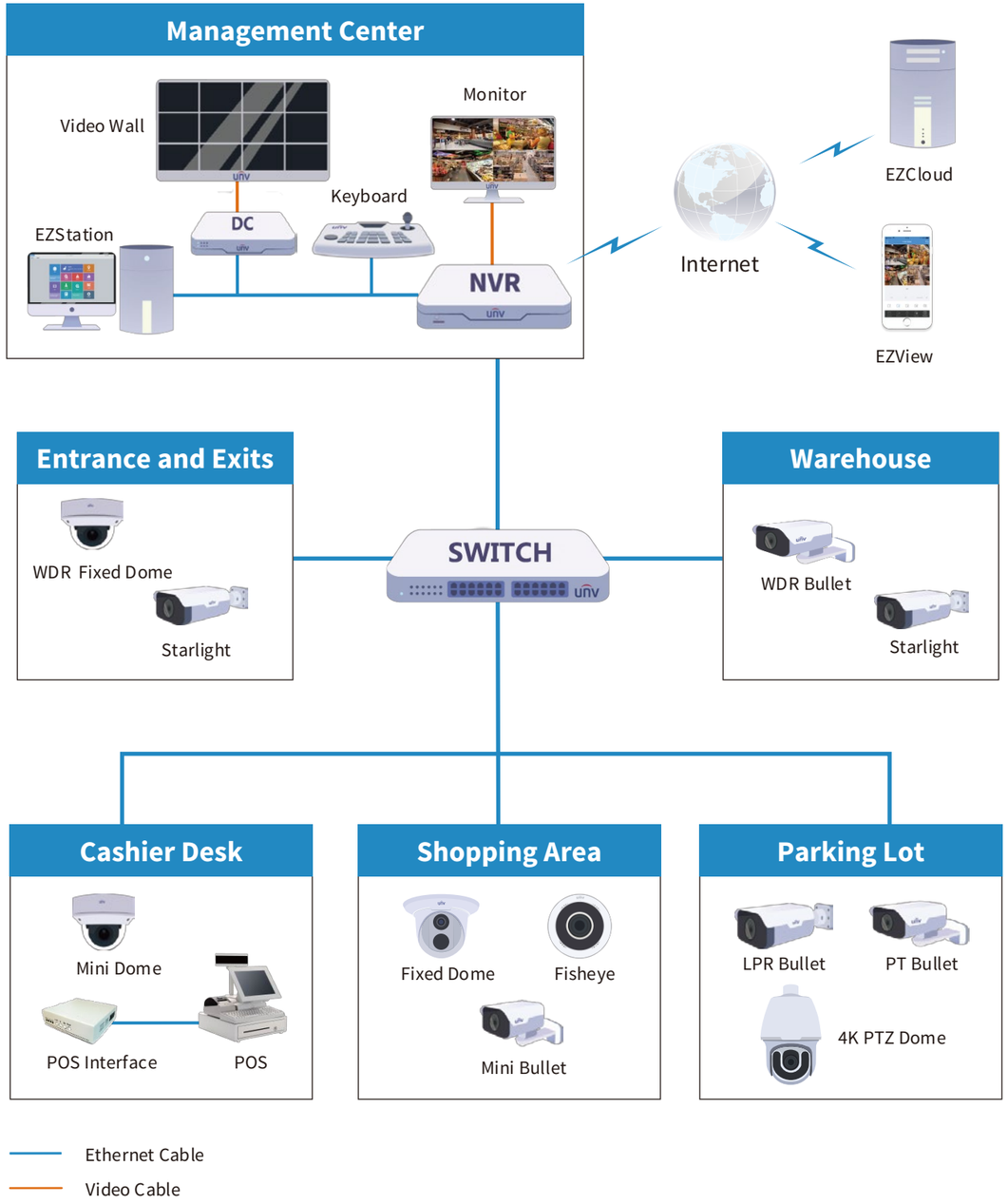
Monitors & Video Walls

We provide various display size options on monitors, video walls and corresponding decoders. All UNV devices are designed and manufactured at highest standards to satisfy 24/7 constant monitoring requirements.

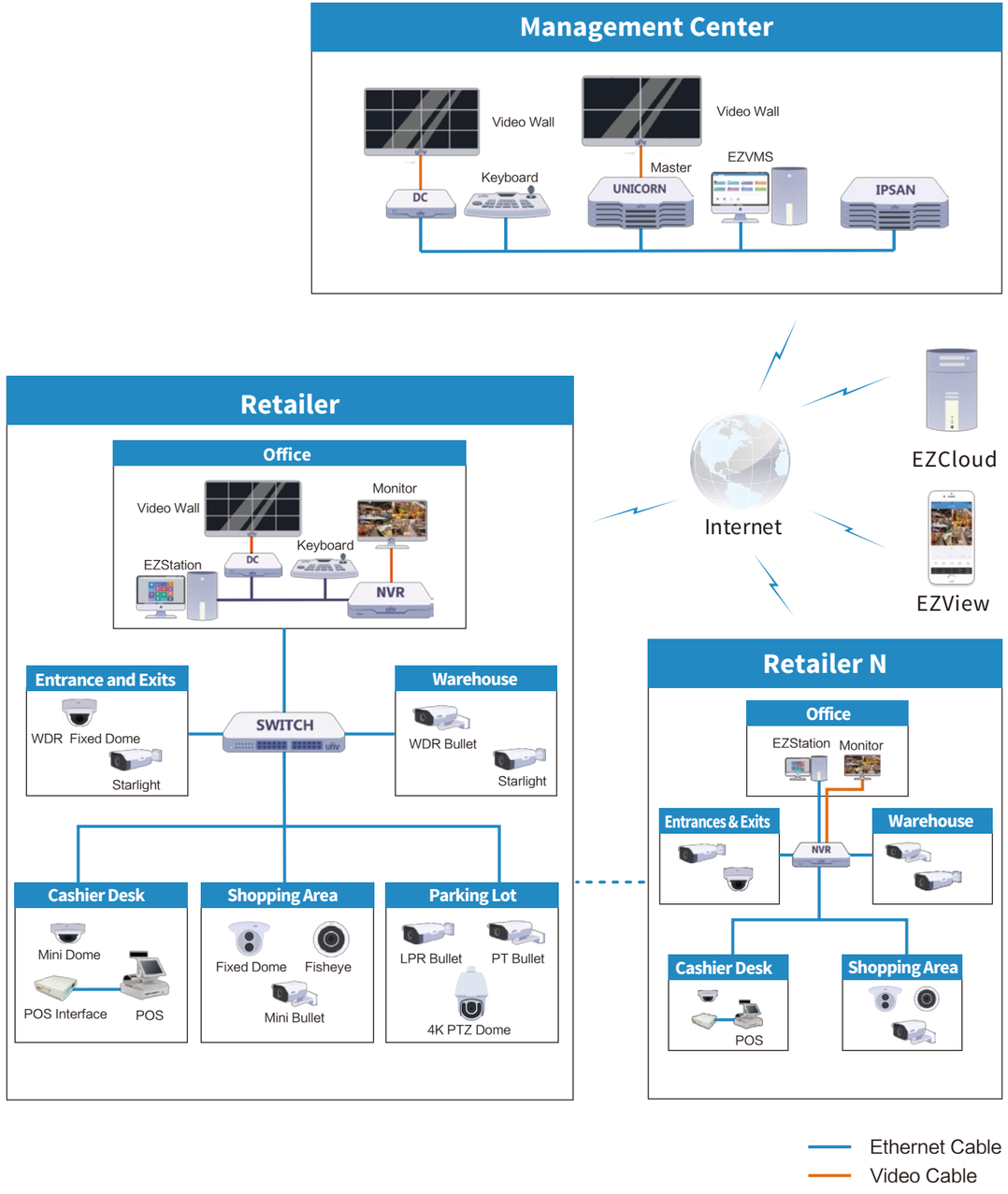




SOLUTION NETWORKING-LAN



SOLUTION NETWORKING-WAN



CASE REFERENCE



UAE Carrefour

Uniview offers a complete solution including over 200 IPC, NVR516 for management and storage, 6 decoders and 1 keyboard, VMS – EZStation to manage the system. The solution covers whole area of the hypermarket including entrances and exits, shopping area and cash desks. The redundant design and RAID NVR guarantee high level of data safety. The smart functions can help to prevent potential crime.



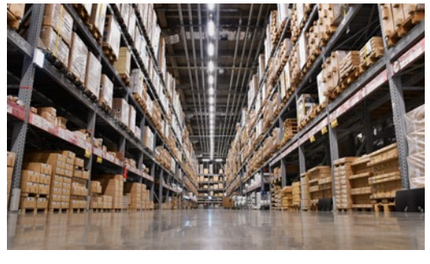
IKEA Kuwait

Uniview provided a whole video surveillance solution. 320 IP cameras are installed in IKEA, covering the whole shopping areas, elevators, aisles, control room, parking lot, entrances etc. The solution mainly focus on swift and sharp focusing and special front panel design of camera to ensure customer has a good experience in image capture and maintenance. In addition, as one of Onvif Full members, UNV cameras has excellent compatibility so that it can work perfectly with Milestone and Dell Storage server.



Yonghui Chain Stores

Uniview offered a complete solution to cover 580 Yonghui chain stores which distributed in 19 provinces and cities. Uniview provided 10000 channel cameras and distributed NVR storage with people counting and audio recording technology to ensure the safety of shopping and service in all chain stores. In addition, the effective data analysis was offered by Uniview to enhance the whole value of video surveillance.



J&T Express

Uniview provides a HD surveillance solution for J&T express around all over the Vietnam. The solution covered 605 branches with 3500 channel cameras, and adopted distributed NVR storage. In addition, the management center can check live view from every channel cameras of all the distribution centers and branches. The solution improves monitoring and management efficiency significantly.