Product and software system introduction

- Product /System Software Introduction
  - Vehicle driving assistant and monitoring system
  - Video monitoring and management system (CCTV)/AI software
  - Access control system
  - Intrusion System
  - Radar detection system
- Automation integration platform

Vehicle visual driving aid and monitoring system

Product List

- AHD In-vehicle camera
- IP camera
- AHD HD in-vehicle recorder / Fleet video return + GPS positioning
- In-vehicle LCD TFT monitor / Wire

Vehicle visual monitoring system – Product list

Vehicle Camera

Rearview camera (Rearview assistance monitoring)		
AHD9006	Car side IR waterproof dome camera	
AHD9007	Car side waterproof mini camera	
Rear camera (vehicle reverse monitoring)		
AHD9009	In-vehicle radio IR dome camera	
AHD8007	Car rear IR waterproof square camera	
AHD9011	Car front and car rear wide angle waterproof camera	
AHD9012	Rear-view super wide-angle infrared dome camera	
Car side camera (vehicle side blind spot monitoring)		
AHD9010	Car side IR waterproof camera	
In-vehicle camera (Front view monitoring)		
AHD8005	Front-mounted mini stereo camera	
AHD9008	In-vehicle radio IR dome camera	
IP Camera (In-vehicle monitoring)		
N8075-EC	Front-mounted mini stereo camera	
N9018-R	IR fisheye IP camera for car use	

AHD high quality car video recorder / fleet video streaming + GPS positioning

D5002	4+1 channels AHD dual SD cards HD in-vehicle recorder	
D5001	4+1 channels AHD HD in-vehicle recorder	
D9001	8+1 channels AHD HD in-vehicle recorder	
D5001G GPS+4G	4+1 channels AHD HD in-vehicle recorder Fleet video return + GPS positioning	
D9001G GPS+4G	8+1 channels AHD HD in-vehicle recorder Fleet video return + GPS positioning	

Vehicle Monitors

DP701	7″ in-vehicle LCD TFT monitor	
DP702	7″ in-vehicle LCD TFT monitor(rear-view mirror)	
DP901	9″ in-vehicle LCD TFT monitor	

Vehicle cabling

Vehicle video cables (3Meters/5Meters/10Meters/15Meters/20Meters)	

Vehicle visual driving aid and monitoring system software

- Vehicle video monitoring operation platform
- GPS and video fleet management system

Vehicle video monitoring operation platform

Cloud data server

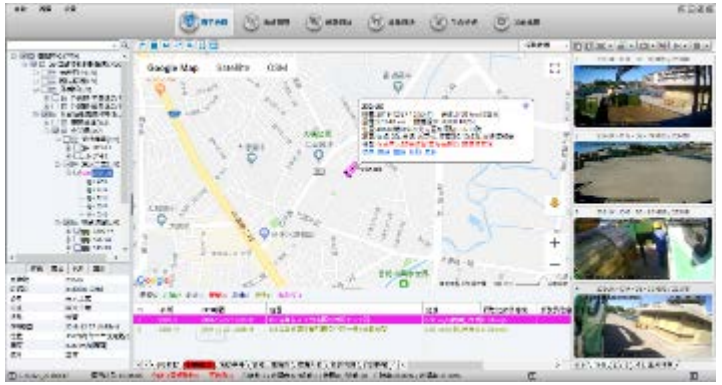
Platform function :

- Database configuration and maintenance
- Vehicle video, alarm events, etc.
- User management
- Vehicle DVR equipment distribution management
- Vehicle access management
- Vehicle media data (video, intercom, monitor, capture, parameters) forwarding
- Client access distribution management
- WIFI automatic connection management

Vehicle video monitoring operation platform

PC Client Browsing

E-map



Real-time video

Track replay

Playback

Software features :

- Real-time video
- Alarm message
- Real-time monitoring
- Video file download
- Playback
- Vehicle track search and replay
- Preview capture
- Electronic fence alarm display

Analysis report :

- Daily mileage report
- Parking schedule
- Driving track report
- Parking without stalling summary
- Driving speed analysis
- Speeding report
- Alarm summary

Vehicle video monitoring operation platform

GPS and video fleet management system

PC client browsing

Daytime lens image quality

Night lens image quality

Rainy lens image quality

Vehicle video monitoring operation platform

Mobile client browsing

ios

Android

Video monitoring management system

- IP Camera Series
  - S / E Class
  - C / R Class / Encoder
- Network Video Recorder
  - Embedded NVR Series
  - INTEL NVR (H Series/HD NVR series)
- Media Center (Decoder/Media Player/Workstation)

IP Camera Series – S / E Class

Sclass 4K STARVIS H.265 H.264

S-Class camera models with 5 year warranty

S class 12 / 8 Megapixel **STARVIS**

N9098-RS	N3091-S	N3091H-S	N3091M-S	N3091MH-S	N6093-S	N6093H-S	N6093M-S	N6093MH-S	N1091-S (Lens excluded)

Eclass STARVIS H.265 H.264

STARVIS Only For 5, 3, 2M not Include BC, SE, RE

E-Class camera models with 3 year warranty

E class 5 / 3 / 2 Megapixel **STARVIS**

N5014-E (30X / 20X)	N4032-E(30X) N4012-E(20X)	N5032-E(30X) N5012-E(20X)	N9013-E N9033-E N9073-E	N3011-E N3031-E N3072-E	N3011H-E N3031H-E N3072H-E	N3011M-E N3031M-E N3072M-E	N3011MH-S N3031MH-S N3072MH-S	N6017-E N6037-E N6078-E	N6017M-E N6037M-E N6078M-E	N6013-E N6033-E N6076-E	N6013H-E N6033H-E N6076H-E	N6013M-E N6033M-E N6076M-E	N6013MH-E N6033MH-E N6076MH-E	N1011-E N1031-E N1072-E (Lens excluded)	N6019M-EX N6039M-EX N6079M-EX

SE class 5 Megapixel **STARVIS**

N3011-SE	N3011H-SE	N3011M-SE	N3011MH-SE	N6013-SE	N6013H-SE	N6013M-SE	N6013MH-SE	N1011-SE (Lens excluded)

RE class

N9018-RE	N9015-RE	N9012-RE

IP Camera Series – C / R Class / Encoder

Eclass STARVIS H.265 H.264

STARVIS Only For 5, 3, 2M not Include EC, SE, RE

E-Class camera models with 3 year warranty

NEW

EL class 5 / 2 Megapixel **STARVIS** COMING SOON

N5076-EL (18X)	N5077-EL (18X)	N5078-EL (18X)	N3076-EL N3016-EL	N9079-EL N9019-EL	N907A-EL N901A-EL	N607A-EL N601A-EL	N607B-EL N601B-EL

E class 4 / 2 Megapixel **EC HDR Entry**

(Lens excluded)

N9041-EC N9071-EC	N9042-EC N9082-EC	N9043-EC N9073-EC	N3041-EC N3072-EC	N3041H-EC N3072H-EC	N3041M-EC N3072M-EC	N3041MH-EC N3072MH-EC	N6042-EC N6082-EC	N6047-EC N6078-EC	N6047M-EC N6078M-EC	N6043-EC N6076-EC	N6043H-EC N6076H-EC	N6043M-EC N6076M-EC	N6043MH-EC N6076MH-EC	N1041-EC N1072-EC	N8075-EC

Eclass Rclass H.264

C class 5 / 3 Megapixel

(Lens excluded)

N9011-C N9031-C	N9012-C N9032-C	N9033-C N9013-C	N3011-C N3031-C	N3011H-C N3031H-C	N6012-C N6032-C	N6017-C N6037-C	N6013-C N6033-C	N6013H-C N6033H-C	N1011-C N1031-C

R class Fisheye Entry 5 / 3 Megapixel

N9018-R 5M	N9015-R 5M	N9018-R 5M	N9015-R 3M

Encoder H.264

S2071	S4071

60FPS / SD Card	120FPS / SD Card

Network Video Recorder

Series Eclass H.265 H.264 EC Embedded NVR

NEW Eclass EC H.265 H.264

COMING SOON

R8 Series

R6 Series

R4 Series

	R80321	R80481	R80641	R60321	R60481	R60641	R40161	R40321	R40481
	Linux System								
Max. Channel	32CH	48CH	64CH	32CH	48CH	64CH	16CH	32CH	48CH
HDD slot	8			6			4		
Support HDD	1 ~ 10T								
Coding	H.265 / H.264								
Display	HDMI X2								
Bandwidth	300Mbps	400Mbps	600Mbps	300Mbps	400Mbps	600Mbps	160Mbps	300Mbps	400Mbps
WAN Port	2								
PSE (Optional)	16 Port (Optional)								
RAID	0, 1, 5, 6, 10 (Optional)								
Dimension	1.5U								

Series Eclass Embedded NVR

NEW Eclass EC H.265 H.264

R2-E Series

COMING SOON

	R20041-E	R20081-E	R20161-E
	Linux System		
Max. Channel	4CH	8CH	16CH
HDD slot	2		
Support HDD	1 ~ 10T		
Coding	H.265 / H.264		
Display	HDMI x2 / VGA		
Bandwidth	50Mbps	100Mbps	160Mbps
WAN Port	2		
PSE (Optional)	4 Port (Optional)	8 Port (Optional)	8 Port (Optional)
RAID	N/A		
Dimension	1U		

Eclass H.264

R2 Series

	R20041	R20081	R20161
	Linux System		
Max. Channel	4CH	8CH	16CH
HDD slot	2		
Support HDD	1 ~ 10T		
Coding	H.264		
Display	HDMI / VGA		
Bandwidth	50Mbps	100Mbps	160Mbps
WAN Port	1		
PSE (Optional)	4 Port (Optional)	8 Port (Optional)	8 Port (Optional)
RAID	N/A		
Dimension	1U		

Network Video Recorder Intel NVR

H Series

For ATM or In-Vehicle

Fanless

H20321

H40321

	H20321	H40321
OS	Windows 7 / Ubuntu Linux (Optional)	
CPU	Intel®i5	
Memory	8 GB	
PCI-E	3 Mini PCIe Socket	1 PCI-E 3.0 x16
SATA	2 SATA III (6 Gbps)	4 SATA III (6 Gbps)
Serial	4 COM RS-232/422/485	2 COM Ports (2 rear)
USB	6 USB 3.0 (External) 1 USB 3.0 (Internal)	4 USB 3.0 (rear) 2 USB 2.0 (front)
Storage Device	2x2.5" SSD/HDD	Support 3.5" HDD x4
Graphics Interface	DVI-I/DVI-D/DisplayPort	HDMI/DisplayPort/DVI-I (Optional)
Graphics Card (optional)	x	v
RAID (SAS, optional)	x	0, 1, 5, 6, 10,50,60
Software	HDRC STD 32CH (Standard)	
WAN Port	2	
	* You may also choose HDRC PRO, HDRC-F, HDRC-R · 3Smart RC, 3Smart Face software.	

RAID card or Graphic card(Only can choose one)

COMING SOON

H80641

	H80641	
OS	Windows 10 / Ubuntu Linux (Optional)	
CPU	Intel Xeon E3	
Memory	8 GB	
Hot-swappable	8	
Input, Transmission bandwidth	512 Mbps	
Recording bit rate	256 Mbps	
Simultaneous receiving and recording	64 CH	
Software	HDRC PRO 64CH (Standard)	
RAID (SAS, optional)	0, 1, 5, 10 (software raid)	0, 1, 5, 6, 10, 50, 60
Graphic Card (optional)	v	
Redundant power supply	v	
WAN Port	2	
	* You may also choose HDRC ADV, HDRC-F, HDRC-R · 3Smart RC, 3Smart Face software.	

Network Video Recorder Intel NVR

HD NVR Server

Series Eclass

H.265 H.264

Redundant power supply

RAID 0/1/5/6/10

HOT-SWAP

HDMI

HDNVR Server	IA0641	IB1281	IC1281
OS	Windows 7 / Ubuntu Linux (Optional)		
CPU	Intel Xeon E3		
Memory	8 GB		
Hot-swappable	12	16	24
Input, Transmission bandwidth	640 Mbps		
Recording bit rate	384 Mbps		
Simultaneous receiving and recording	128 CH		
Software	HDRC PRO 64CH (Standard)		
RAID (SAS, Optional)	0, 1, 5, 6, 10, 50, 60		
Graphic Card (Optional)	v		
Redundant power supply	v		
	* You may also choose HDRC ADV, HDRC-F, HDRC-R，3Smart RC, 3Smart Face software.		

JBOD (SAS)	IA0001	IB0001	IC0001
Hot-swappable	12	16	24

Network Video Recorder Intel NVR

NEW

HD NVR Server

Series Eclass H.265 H.264

Redundant power supply | RAID 0/1/5/6/10 | HOT-SWAP | HDMI

COMING SOON

HDNVR Server	IA0641-E	IB1281-E	IC1281-E
OS	Windows 10 / Ubuntu Linux (Optional)		
CPU	Intel Xeon E3		
Memory	8 GB		
Hot-swappable	12	16	24
Input, Transmission bandwidth	640 Mbps		
Recording bit rate	384 Mbps		
Simultaneous receiving and recording	128 CH		
Software	HDRC PRO 64CH (Standard)		
RAID (SAS, optional)	0, 1, 5, 6, 10, 50, 60		
Graphic Card (optional)	v		
Redundant power supply	v		
	* You may also choose HDRC ADV, HDRC-F, HDRC-R + 3Smart RC, 3Smart Face software		

JBOD (SAS)	IA0001-E	IB0001-E	IC0001-E
Hot-swappable	12	16	24

NEW

MSS
Streaming media proxy server and media center

COMING SOON

L20011	L20041	L40041
2 Gbps	22 Gbps	42 Gbps
Windows 10	Windows 10	Windows 10
HD MSS Standard	HD MSS Standard	HD MSS Standard

Media Center

TV Wall Decoder

Decoder H.265 H.264 new 4K

B20321 32 CH

HDMI x 2

16 CH / D1
8 CH / 720P
4 CH / 1080P

Decoder H.264

B20081 8 CH

HDMI x 2

16 CH / D1
8 CH / 720P
4 CH / 1080P

B40161 16 CH

Media Center

J21281
Display x3

J41281
Display x4

J61281
Display x6

J81281
Display x6

Workstation

G20641
Display x3

HDCC Dua 64CH (Standard)

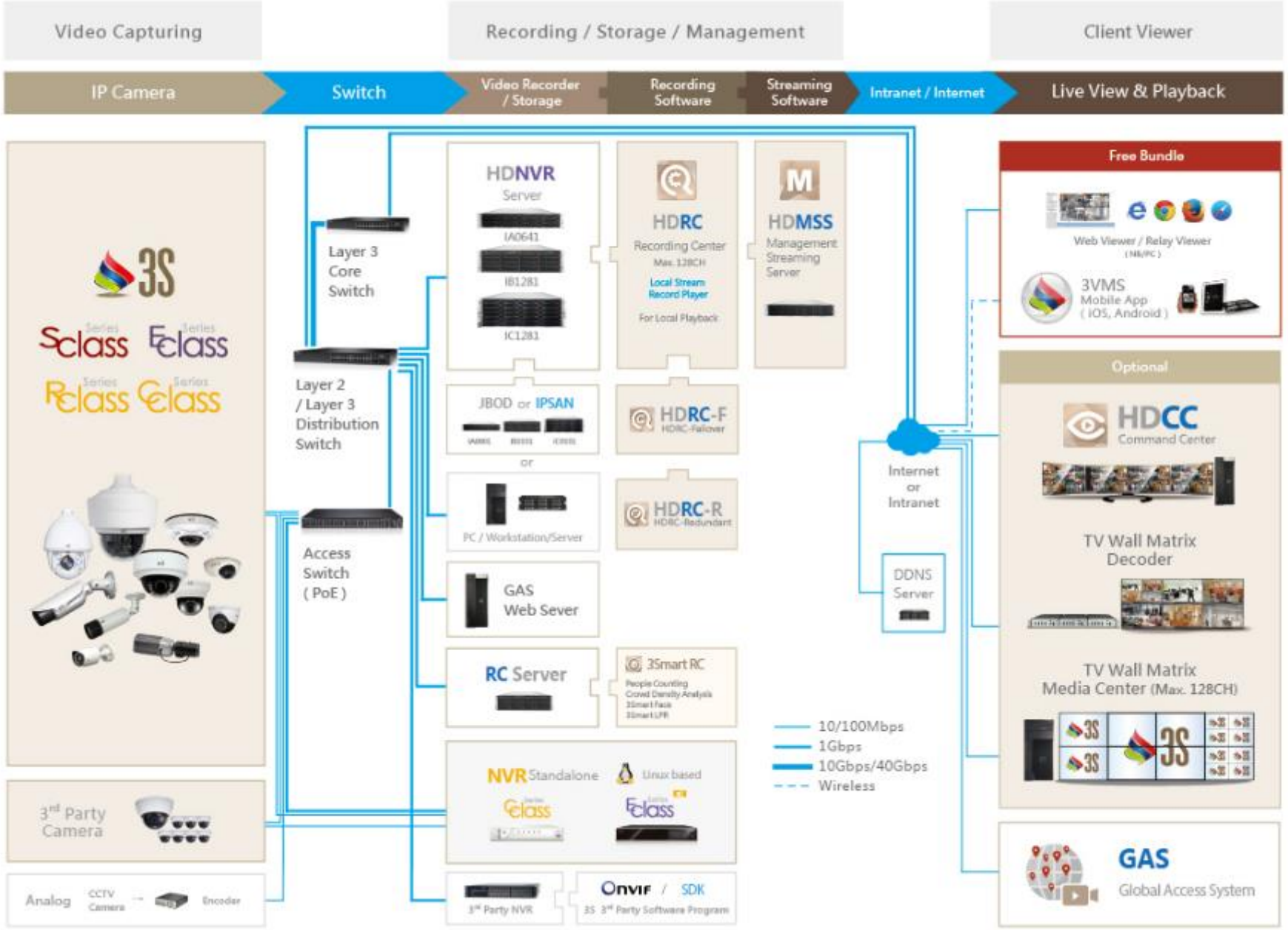
G41281
Display x4

HDCC Quad 128CH (Standard)

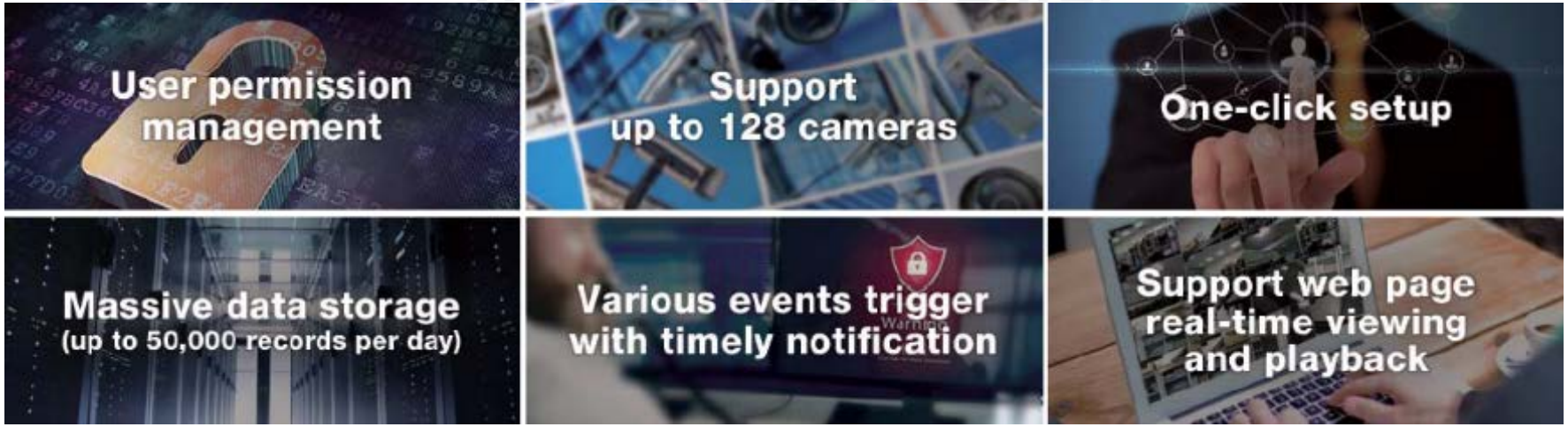
Video Management system and software

- 3S Video Security System Structure
- Video Management & Streaming Software
- AI - Intelligent Video Analytics
- Mobile／Thin Client Viewer
- GAS - Global Access System
- Smart Tools

3S Video Security System



HDRC HD Recording Center



All day recording
24 hours day and night surveillance
Instant control situation
Immediate response

Schedule recording
The date and time according to schedule video
Intuitive interface
Easy Setup

Event recording
Event Trigger
Abnormal
Alarm
Email notifications
Event Log

Backup
Scheduled Upload
Recorded in full recovery
Retention days
Backup notification
Record Report

File management
Continuous Video
Excellent organizational structure
Space-saving 20%
Performance improvements of 50%

Database
Quick Search

3rd Party support

Multi languages

Innovative HD recording engine technology

Increase 20% storage with well-organized disk area

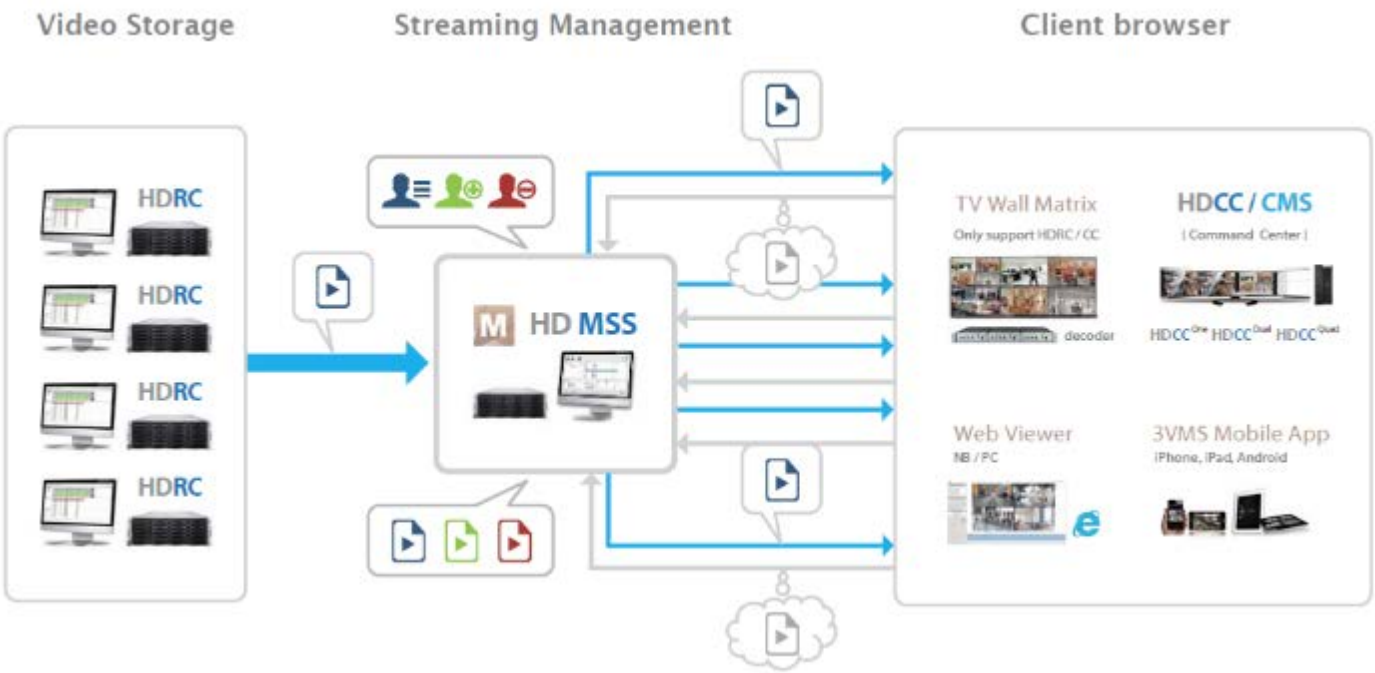
Continuous recording Sequence of Disk and Data

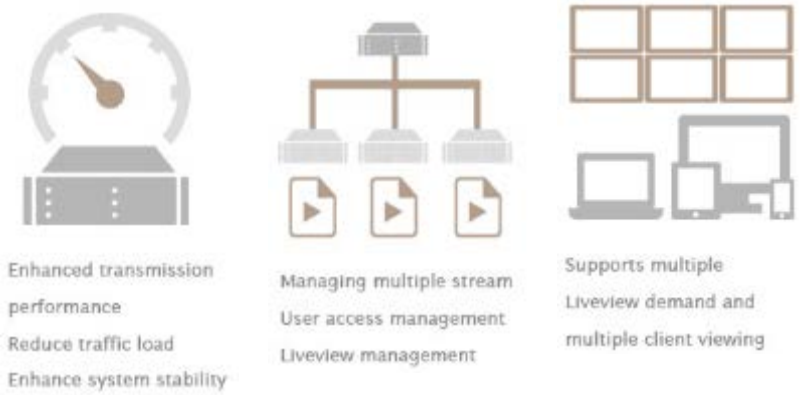
↑ **50%** Improve performance

↓ **20%** Save storage space

Innovative HD recording engine technology can increase the storage space on the same HDD space under the compression format, saving storage space management and performance (over 20%), while improving the efficiency of archive search and access to the replay (50%), because of the small space saving and promotion of energy technology, energy efficiency management so that video images of the triggering event, so HDRC a powerful video management system.

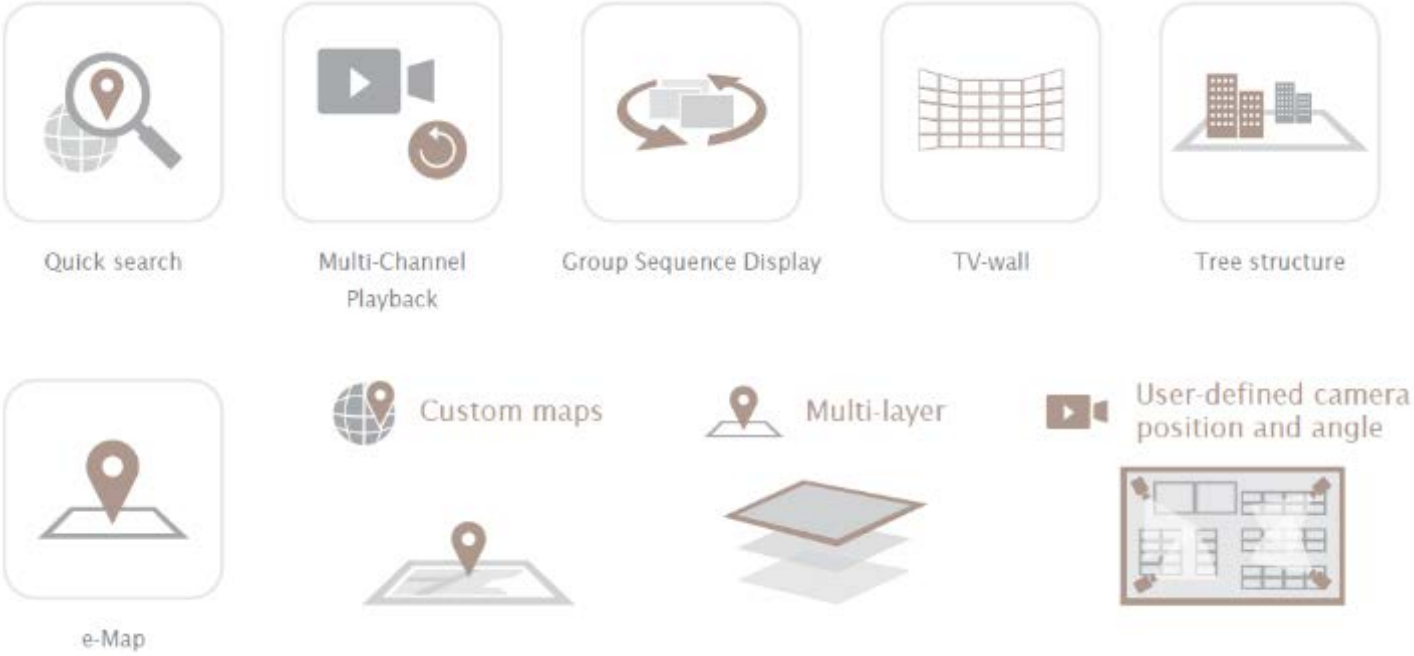
HD MSS HD Management Streaming Server

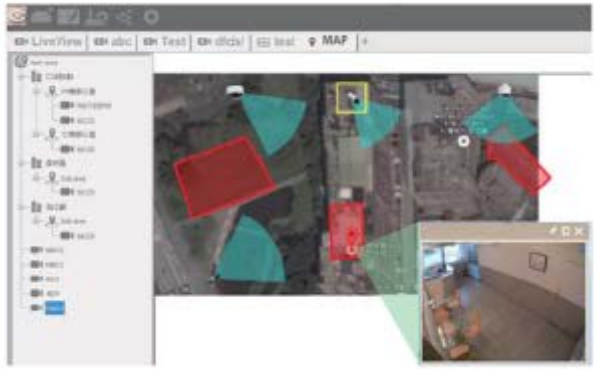




- Management up to unlimited video/audio stream in for live viewing.
- Management up to 256 video/audio stream out for live viewing.
- Stream live to any device, anywhere.
- Distributed architecture and TCP/IP protocol for all environments.
- Custom user groups.
- H.265 / H.264 / MJPEG format supported.
- Motion and alarm messages relay simultaneously.
- Support video live view and Stream relay.
- Provides account permission to set playback and PTZ functions.
- Manage users can watch real-time use, monitoring the number of transferred stream.
- You can watch the traffic load.
- Multi-card switching, managing traffic.
- Support multiple real-time viewing.
- MSS supports multiple real-time video to multiple needs of Client Viewer.
- MSS can capture and relay HDRC video stream to HDCC for playback and live view.
- Copy the same stream to multiple client view.

HDCC HD Command Center





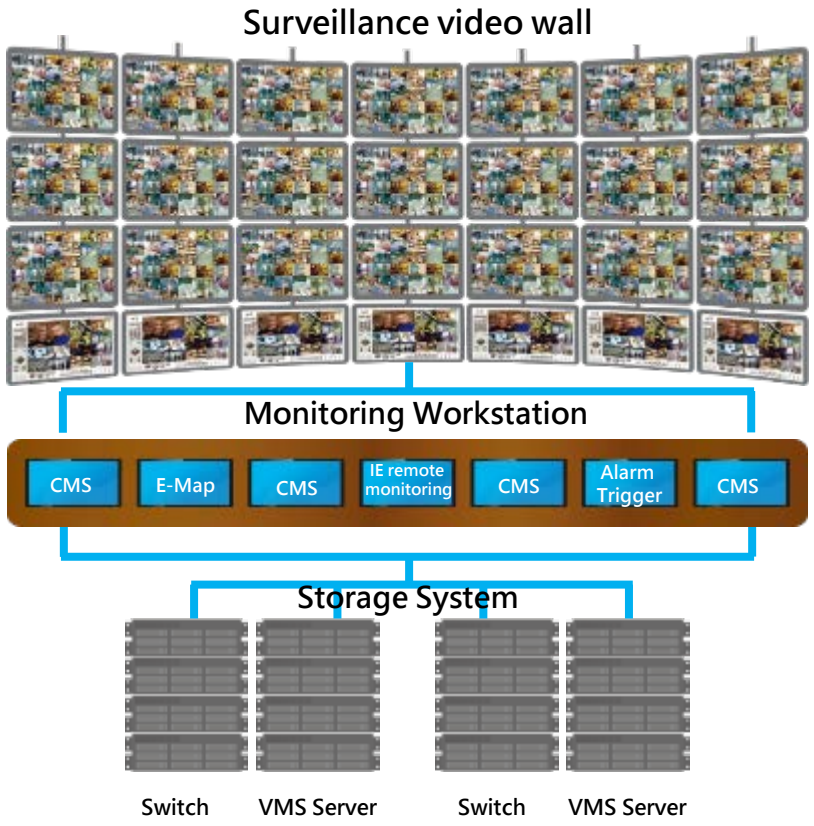
e-Map allows users to upload diverse layers of maps in various formats such as jpg, png, bmp format. Users can make use of floor plan images to create desired map tree structure and modify the icon of camera type on e-Map to easily recognize the type and direction of cameras. Users can freely create related map links for each e-Map so as to quickly access to related maps. Moreover, double-clicking the camera on device panel, it will direct users to camera's e-Map layer and pop-up a liveview window. Easily obtain camera's specific location also view current camera situation.

HD Command Center

	Free trial HDCC Dvr	HDCC Dual	HDCC Quad
Maximum Number of concurrent Live view (CH)	32	64	128
Number of Monitor Support	1	2	4
Maximum Number of Recording Center Server	1	8	Unlimited
Synchronized Playback	4	8	24
Display Layout Mode	1, 3, 4, 6, 7, 9, 13, 16	1, 3, 4, 6, 7, 9, 13, 16, 20, 25, 36, 49, 64	
Layout Auto Rotate	X	✓	✓
Group Auto Rotate	X	✓	✓
Number of Group	2	Unlimited	Unlimited
USB joystick Support	✓	✓	✓
Multi-Language Support	✓	✓	✓
E-Map	—	✓	✓
Live View Layout Save and Create	—	✓	✓
TV Wall	—	✓	✓

HDCC HD Command Center

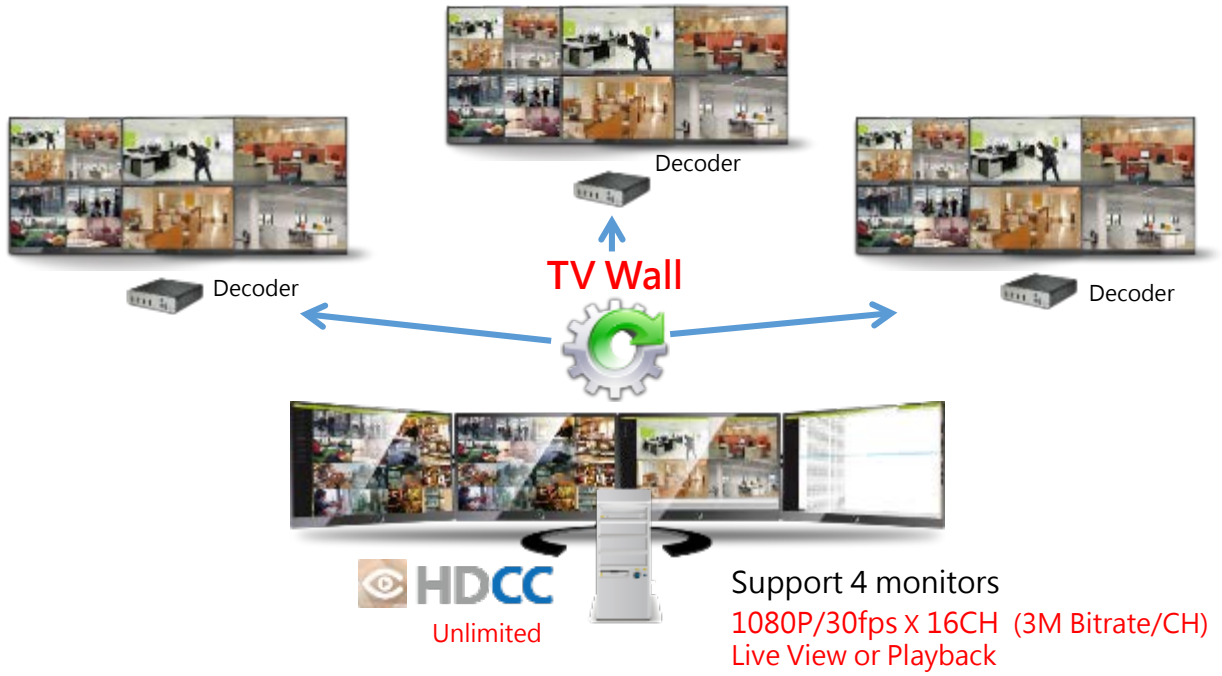
Powerful decoding and video wall capabilities



Highly scalable and open architecture

HD playback engine

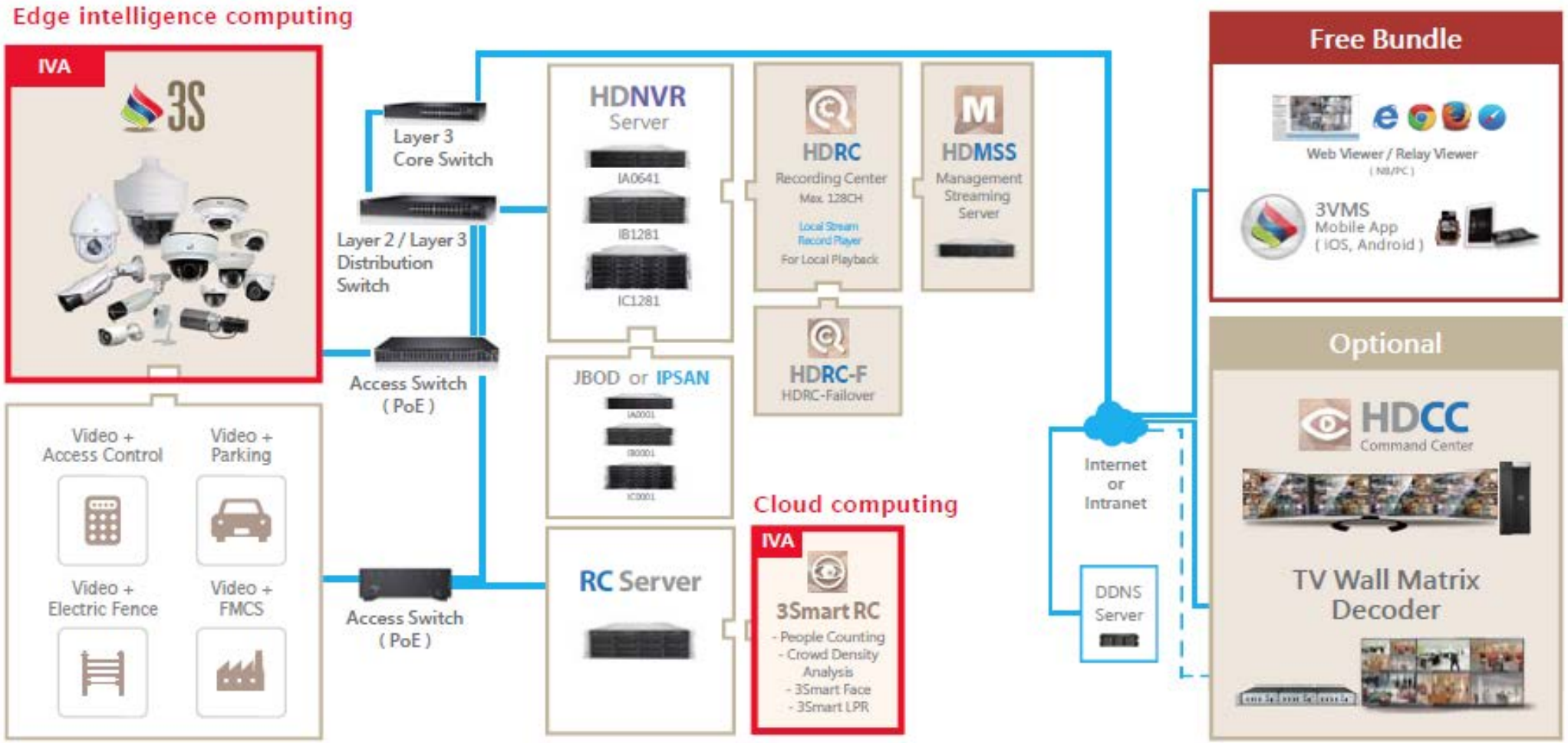
Unlimited Monitors



AI – Intelligent Video Analytics

- AI Intelligent video recognition system architecture
- IP Camera IVA
- 3Smart RC IVA
- People Counting / Crowd Density
- 3Smart Face
- License Plate Recognition

AI Intelligent video recognition analysis system architecture



AI / Edge intelligence computing

For IP Camera

IVA Advanced

Face Detection

It can capture the face image in real time or afterward for further analysis.

License Plate Detection

The frontend device with algorithm. Which is able to capture the content of license plate of running/stopped cars. It can save time and be more efficient.

Reverse Direction Detection

It will trigger alarm when system detects the passenger moving in opposite direction.

License Plate Recognition

For slow/stopped cars: the image can be identified at frontend device directly. For high speed cars: the image will be taken at frontend device and it will be sent be backend system for further analysis.

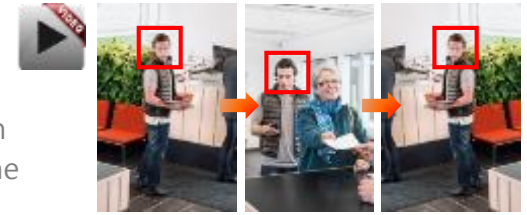
AI / Edge intelligence comp

For IP Camera

IVA Advanced

PTZ Auto Tracking

Auto Tracking can track people/ objects in motion automatically. It can strengthen the security.

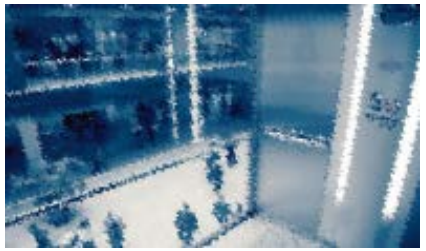


Enhanced Motion Detection

It can detect the objects in motion in specific areas. It can define the rang of the area that need to be monitored. It can be used indoors to detect the objects in motion by using the difference of filtering light precisely.

Abnormal Video Diagnosis

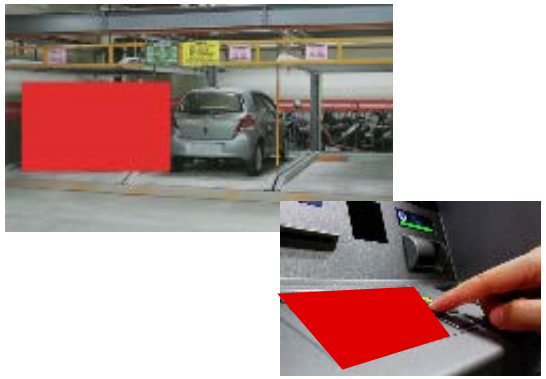
It can detect if the image id over-exposure/too dark/blurry/blocked by objects/lens moved/signal lost or other abnormal events. If these events happen, and make the image changed.
The algorithm will send signal to alert.



Privacy Mask

User cam block certain area for privacy purpose. The block area won’ t be recorded/stored to the device

Example:
Add blocked area at ATM key pad to secure clients privacy.



AI / Cloud computing

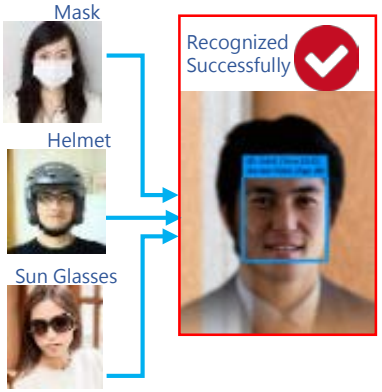
3Smart RC IVA Advanced

Face Recognition

Identify ID with face features and not affected by hair style and makeup. Suitable for indoor access control and black list and VIP list in stores and banks.

Abnormal Face Detection

It can also function normally when user wears mask/helmet/sunglasses.



License Plate Recognition

LPR analyzes plates for cars in motion or at rest as long as the image is at least 80x100 pixel. It can be used in parking lot entrance or fast lane on highway. Captured image can be passed to server for matching to get analyzed report.

People Counting & Density

- people counting reports provide high reliability for in and out number. Provides a line chart analysis report for the number of customers entering and leaving.
- Crowd Density reports density high reliability. It can analyze four regions. Software flow at low/medium/high distinction.

AI / Cloud computing

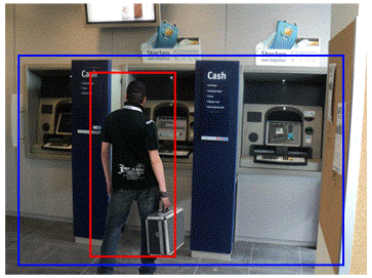
3Smart RC

IVA Advanced

People Loitering

It can detect personnel/objects hovering in monitoring area to prevent the crime occurs.

Loitering Detection



People & Object Intruding Detection

Break-in detection built on the camera will send alert when suspicions person is in the closed room. It can distinguish pets/light changing the avoid false alarm.

Object Status Change

It can detect the object status. When the status is changed, it will trigger the alarm in time.

Dynamic Video Concentration

It can compress the videos which have be recorded for long time, and display all the events happened in the scene.
At the same, the time information can be displayed.

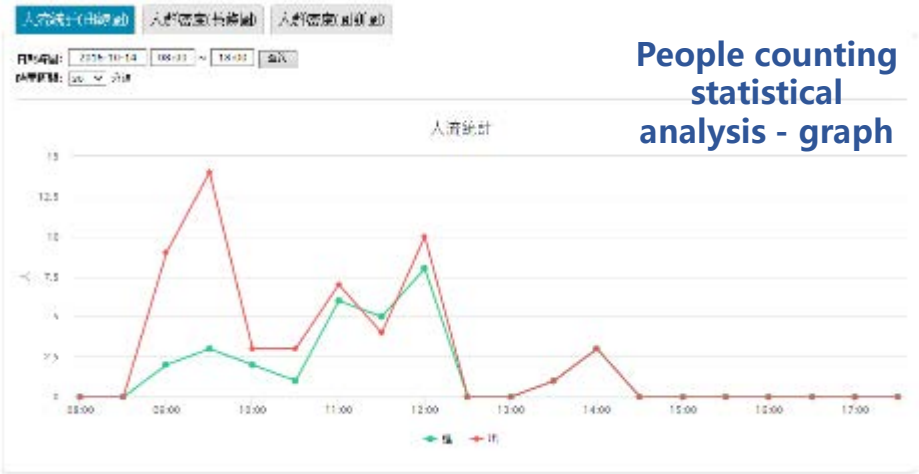
Advance Target Search

It can fast search the specific feature of object from different scenes.
For example:
100channeks/2400hrs video files can only take 4 hours to complete the searching task.

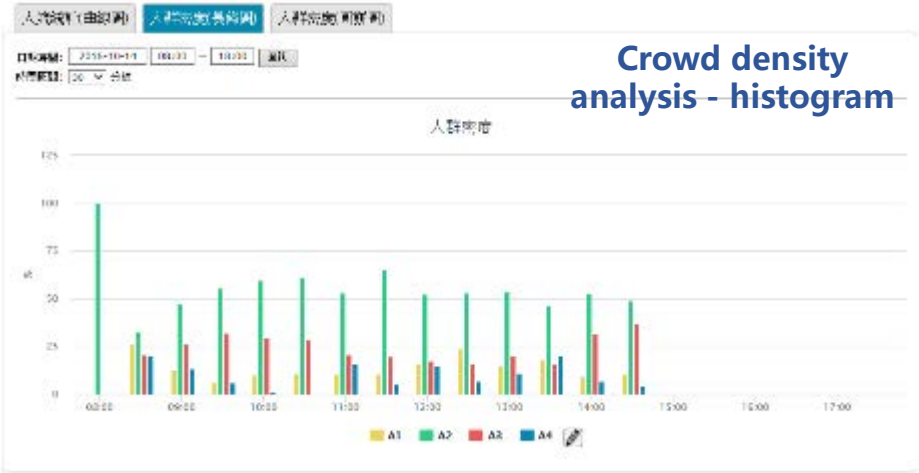
People Counting Analysis

Crowd Density Analysis

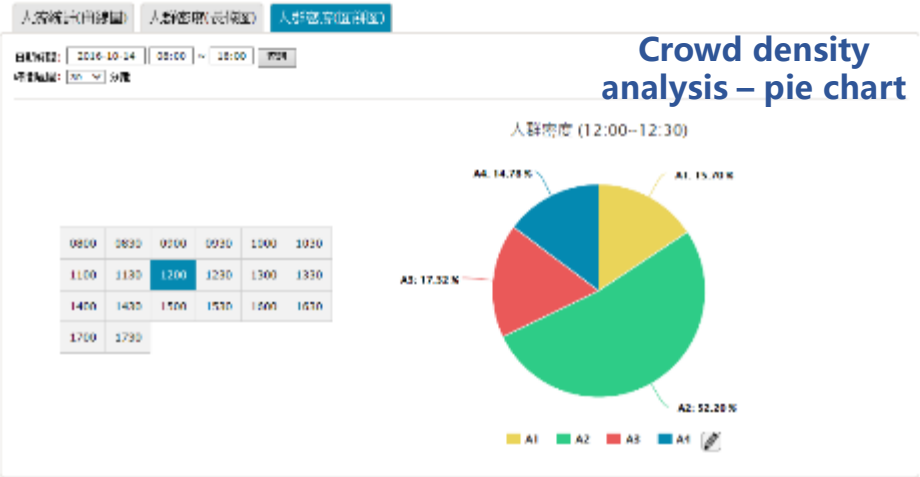
People Counting/ Crowd Density-Report



People counting statistical analysis - graph



Crowd density analysis - histogram



Crowd density analysis – pie chart

BIG DATA

Report generated by people counting and crowd density analysis can be analyzed remotely. It enables customers to monitor real-time market information and use for customized service.

3Smart Face

Advanced IVA

Face Detection

Capture pictures from real-time or recorded video and use captured picture to do further matching and analysis.
Capturing will be done at front-end camera and matching will be done at rear-end server to speed up efficiency.

Face Recognition

- Face recognition is a non-contact speedy and intelligent recognizing system. 3S provides standard and customized versions with different features to meet different customers' demand. It is claimed to be the best solution that helps prevent thefts and criminals .
- 3Smart Face provide advance core face recognition technology. It can precisely identify a person after matching together with gender, age and black / VIP list. Widely used with attendance management.
- 3Smart Face is widely used in SMB, governmental org., smart building, factory and smart cities.
- 3Smart Face has standard and customized version to chose for different requirements.

3Smart Face

Advanced IVA

3Smart Face Features

- Suitable for applications in access control attendance management, visitor management, and VIP identification
- Non-contact identification technology, convenient and meets hygiene requirements
- Can replace access cards to prevent stolen cards
- Support 1:1 or 1:N identification
- Store images or data to protect privacy as needed
- Create face profile in 10 seconds
- Complete identification record (Log)
- Can be applied to crime prevention and blacklist notification

3S Visitor Management Application

- Create visitor profile in 10 seconds
- Use facial features for ID
- No need to print or wear a identification card
- Easy to view visitor records with images
- Export visitor record

Crime Prevention

Monitoring Aid

Works with major brands of IP Camera

Blacklist Management

VIP Identification

支援行進間辨識(Option)

Non-contact application

Easy integration with monitoring system

Replaces access card

BIG DATA

Reports produced through the face recognition function can be used for remote data analysis for large data analysis, enabling customers to instantly grasp market dynamics, provide consumers with more timely and personalized services, and improve core competitiveness.

Face recognition

Access control system management integration

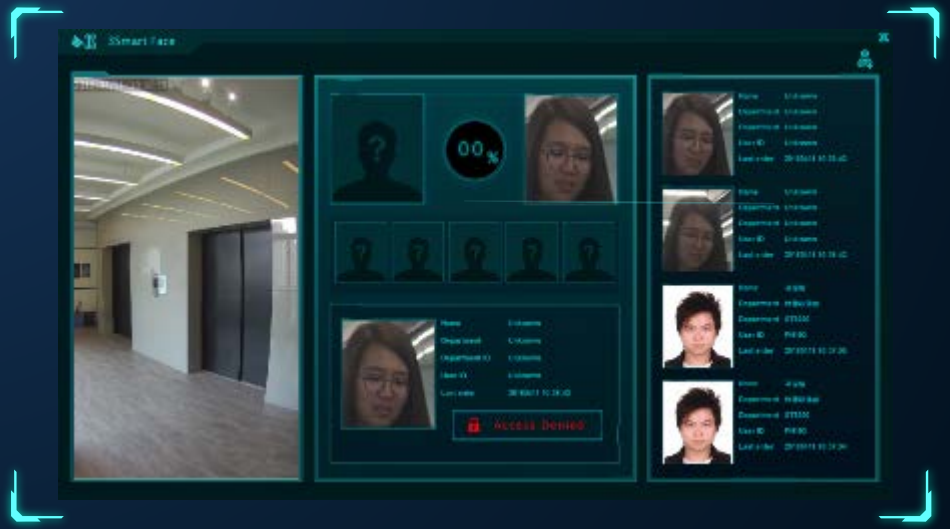
Access control attendance management

After user is identified by facial recognition system, the system sends I/O signal to access control module to open door.

Employee facial recognition opens the door

Non-employee facial recognition fails.

The door remains locked and an alarm is sent



3Smart Face Facial recognition introduction

3Smart Face Facial Recognition

Advanced IVA

3Smart Face recognition can match captured face with the faces in database quickly. Customer can create list for employees including their names, dept. ID # and entrance/exit records, as well as black list and VIP list.

Facial recognition

Access control system management integration

Employee face recognition to allow access

Access Granted

3Smart Face Facial recognition introduction

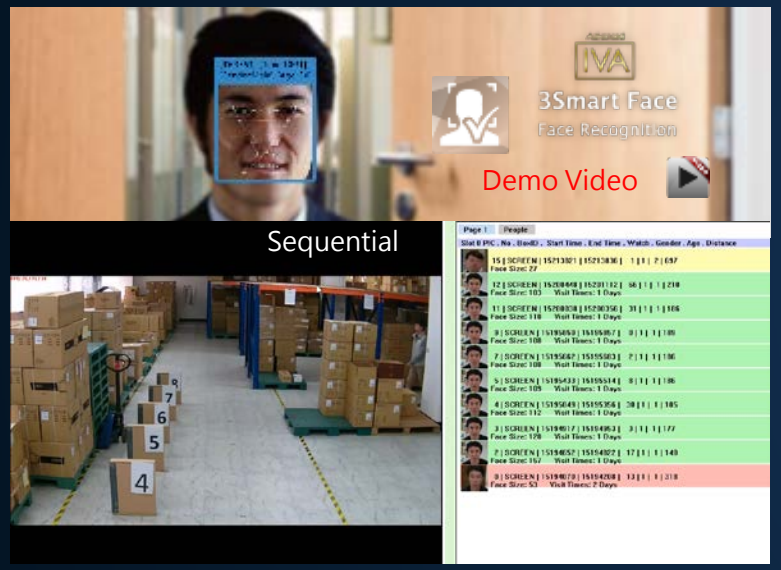
3Smart Face Facial Recognition

Advanced IVA

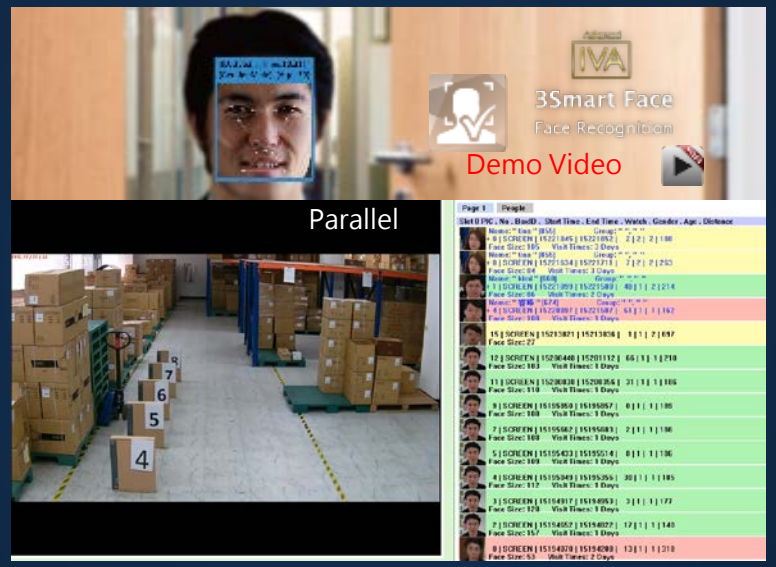
3Smart Face for accurate single-person identification, side-by-side identification and multi-person face recognition。

3Smart Face Facial recognition introduction

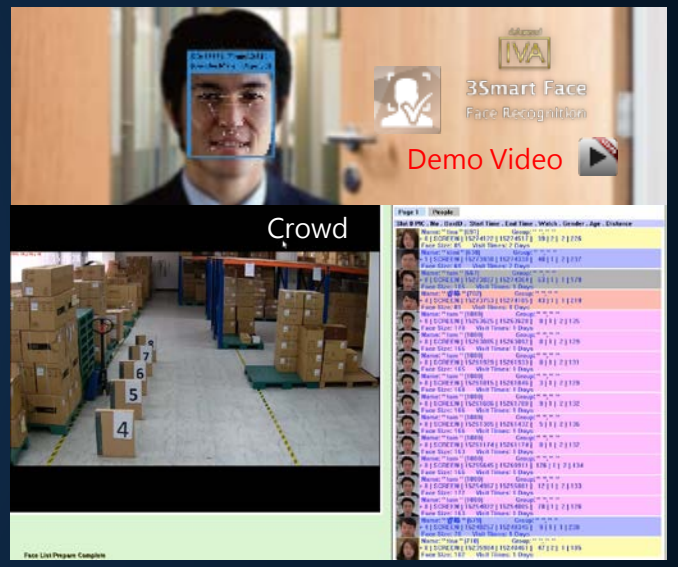
【 Sequential 】



【 Parallel 】



【Crowd】



License plate recognition system

- System Introduction
- System Features
- System Applications

- Vehicle stop detection/At still LPR
- Slow vehicle for entrance/exit
- General road
- Highway

3S LPR System Introduction

As a supplier for video surveillance solution, other than providing LPR solution for business, factory, residential areas' parking or paying entrance, 3S also aim at helping traffic in the cities and prevent accidents, speeding and any activities again the laws. 3S provide total LPR solution to retrieve plate info. and car features to help solve issue under police manpower deficiency issue. 3S has excellent video surveillance technology to recognize license plate and perform start image capture to improve traffic situation.

3S LPR application:

Parking Lot Entrance

Paying toll/fee Entrance

Normal Traffic

Highway Traffic

3S LPR System Features

LPR at front-end camera

3S LPR can use front-end camera to match plate info directly. It can grant pass or block according to the database list in the camera.

Real-time LPR

3S LPR can capture plate info. during motion or still status. 3S use front-end camera to capture plate info. And use back-end server to match plate info. Manager can prevent crimes instantly by triggering the alarm when match found.

Support different plates

Military plate, embassy plate, non-reflective plate and customized plate can be recognized. All plates in Taiwan (front and rear), Hong Kong are OK.

Single line only

Double lines not supported

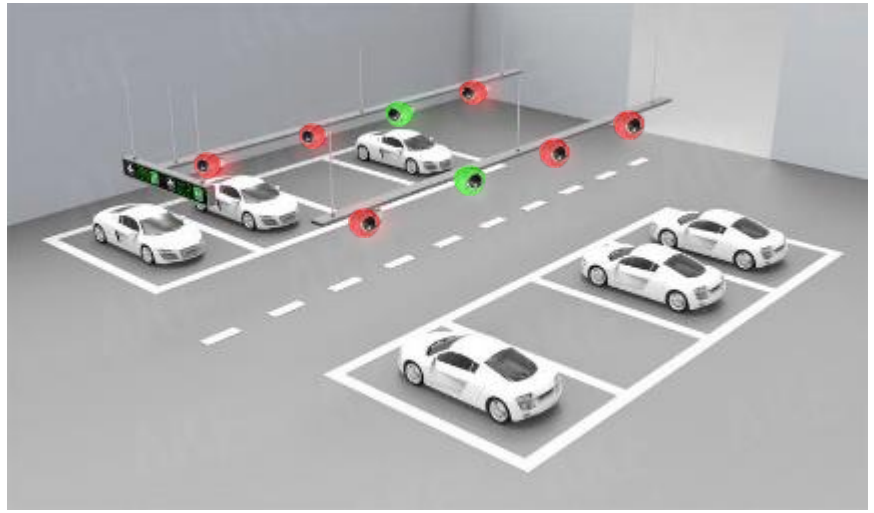
3S LPR System Features

Capture fast moving plate

On highway fast lanes, front-end camera can retrieve plate and transmit to back-end server for further analysis. Manager can clearly see the car during fast traffic and get more info. from the car and the traffic.

Combined camera and light indicator

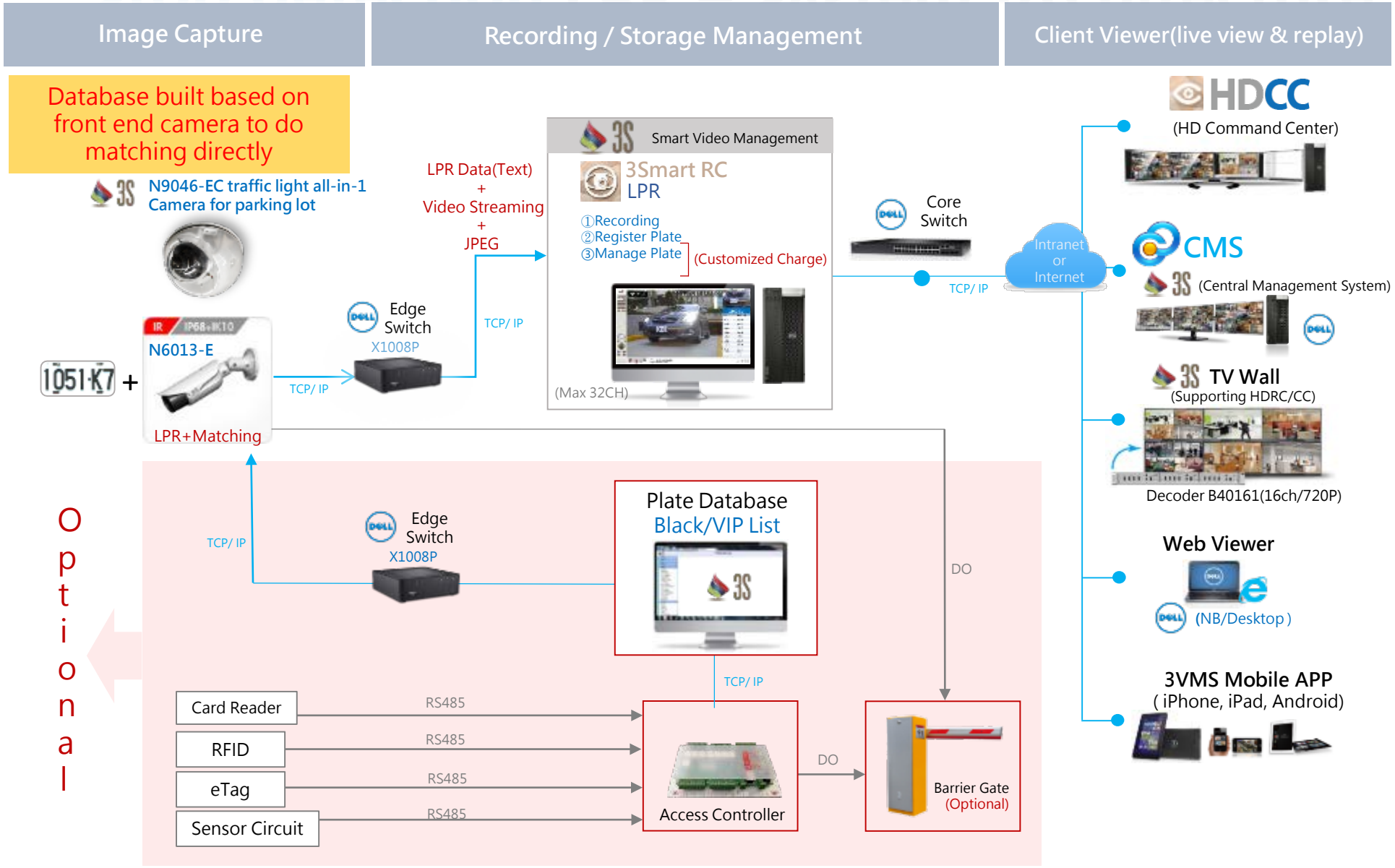
3S excellent RD team innovates light indicator for parking lot specifically. We combine LPR with light indicator to show the parking space status. With the camera function, driver can find the car position and the parking space easily and fast by inputting plate number. We kill 2 birds with 1 stone.



LPR Application Introduction

- Stop detection LPR & traffic light all-in-1 camera
- LPR for slow vehicle at entrance/exit
- General road & highway system

Stop detection LPR – System Architecture

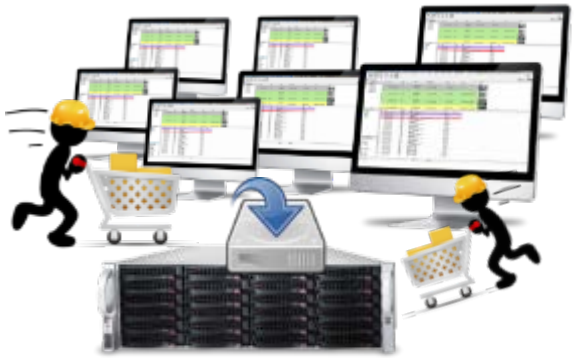


Stop detection LPR – System Application

Community House/Hotel/Parking Lot/Office Building

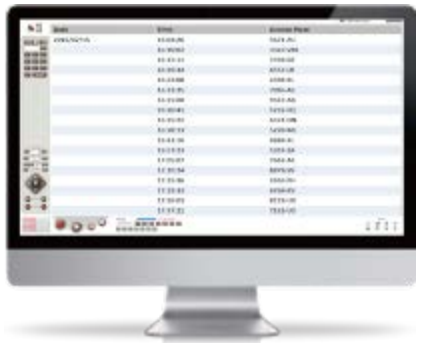
3S LPR matches empolyees' and visitors 'vehicles with vehicles registered in black and VIP lists. Except liable log and stored videos, it also allows remote recording and retrieval functions so as to save cost and prevent theft and destruction of vehicles in the parking lot.

Powerful backup system & video storage



Liable Plate Log

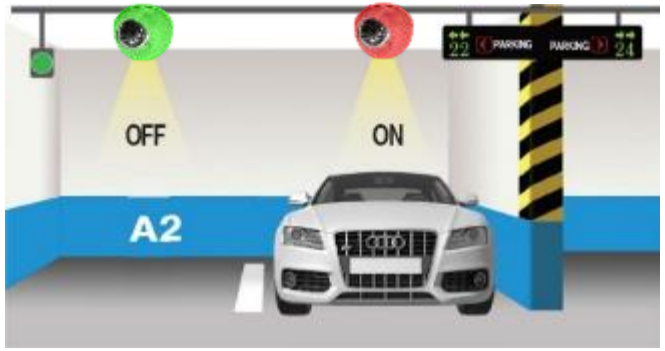
LPR Data Text



■ It avoids theft in parking lot and effectively maintain parking order and vehicle safety.

Stop detection LPR and traffic light all-in-1 camera

When the car get to entrance, driver can based on the light to see which parking space is available. It can save lots of time for drivers. In addition, with the picture taken by the camera, driver can enter plate number to find the car fast in in-door parking lot buildings.



Traditional way of indicating lights

NEW **3S invented LPR + traffic light camera**

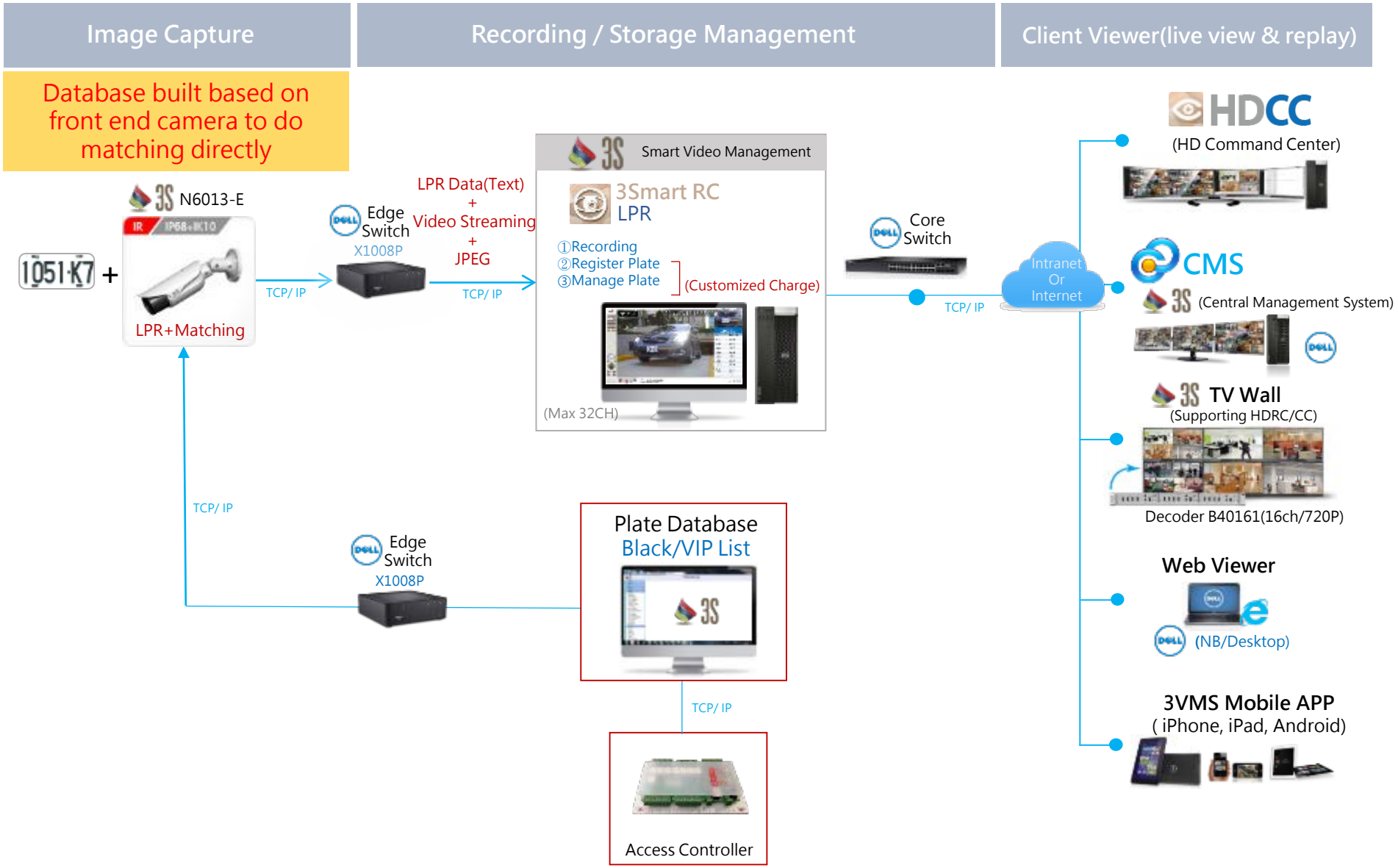
N9046-EC (w/cover)

4MP / H.265 / HDR

- 4MP 1/3" CMOS Sensor
- H.264 / H.265/ MJPEG
- Fixed lens 6mm F1.6
- H.265/H.264 : 2592x1520@22fps / MJPEG : 2592x1520@15fps
- Rotation 90° & 270°/180°
- LDC (Lens Distortion Correction)
- HDR (High Dynamic Range)
- Advanced Image Function (3D noise reduction)
- Embedded Microphone
- IVA (Intelligent Video Analytics
- Support 802.3af PoE(optional)
- Support Micro SD card (SDXC)

Slow vehicle at entrance/exit LPR system architecture:

No need to stop vehicle



Slow vehicle at entrance/exit LPR Application

No need to stop vehicle at entrance or exit

Community House/Airport Parking Log/ Hotel/Parking Lot/Office Building/ Hospital/Shopping Mall

3S LPR matches empolyees' and visitors 'vehicles with vehicles registered in black and VIP lists. Except liable log and stored videos, it also allows remote recording and retrieval functions so as to save cost and prevent theft and destruction of vehicles in the parking lot.

Powerful backup system & video storage

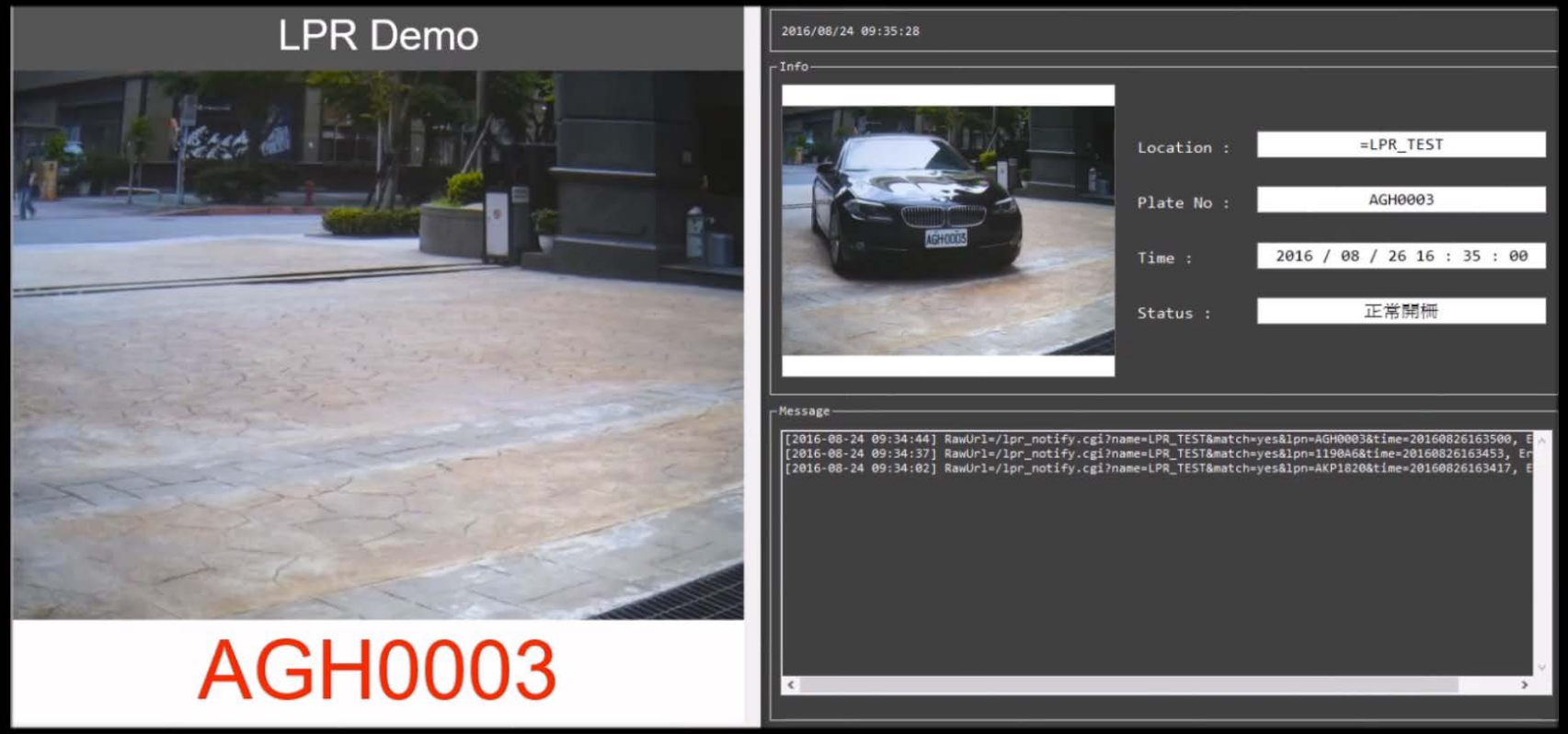
LPR Data Text

Liable Plate Log

3Smart RC

License Plate Recognition

【For slow moving vehicles at entrance and exit, there is no need to stop the vehicle.】



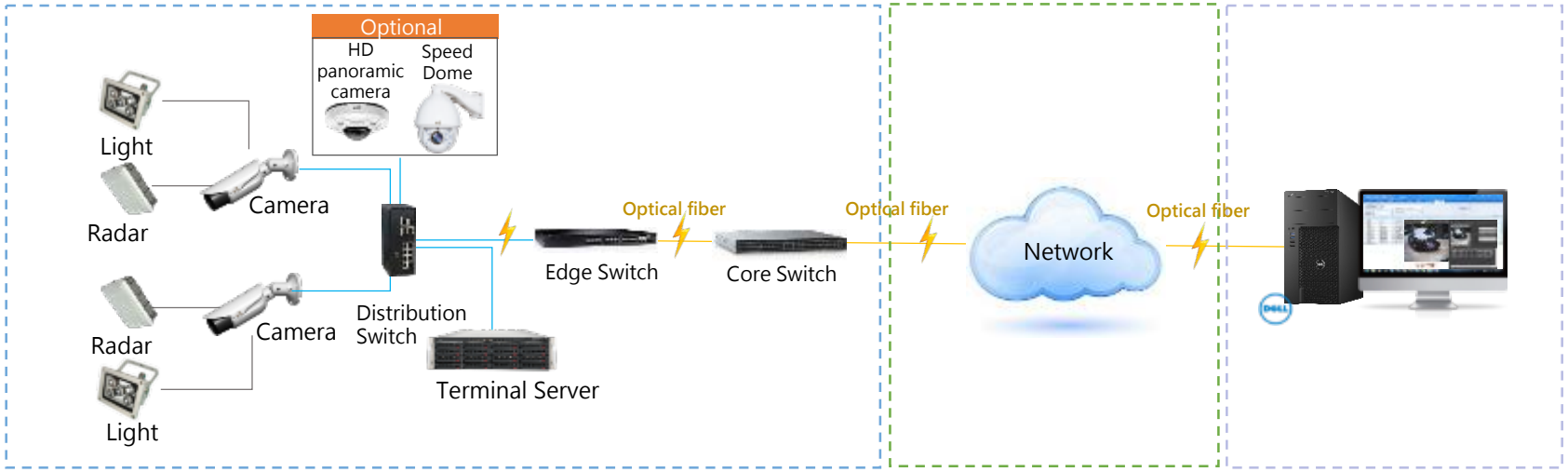
General road & highway system

Vehicle capture system schematic diagram

Frontend System
Complete data collection of vehicle photos with features, plate numbers and plate color, and complete image identification, vehicle speed detection, traffic detection, vehicle model identification, speeding/back-up capture, data cache and compressed data upload.

Network System
Complete data and image transmission and exchange via network system.

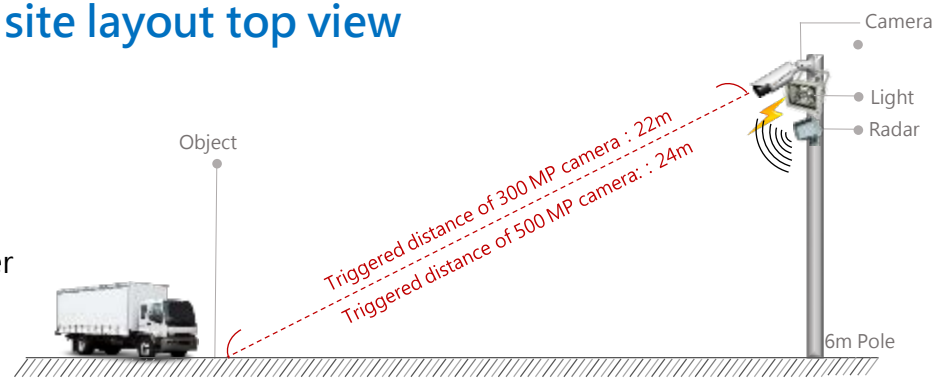
Backend System
Complete data aggregation, processing, storage, management and sharing. It is a central management platform as well as storage system.



Frontend system is composed by：

- Speed measuring unit：microwave radar
- Image identification processing：camera & light
- Frontend data processing：terminal server
- Network transmission：distribution switch & optical receiver
- Video monitoring：HD panoramic camera & auxiliary light

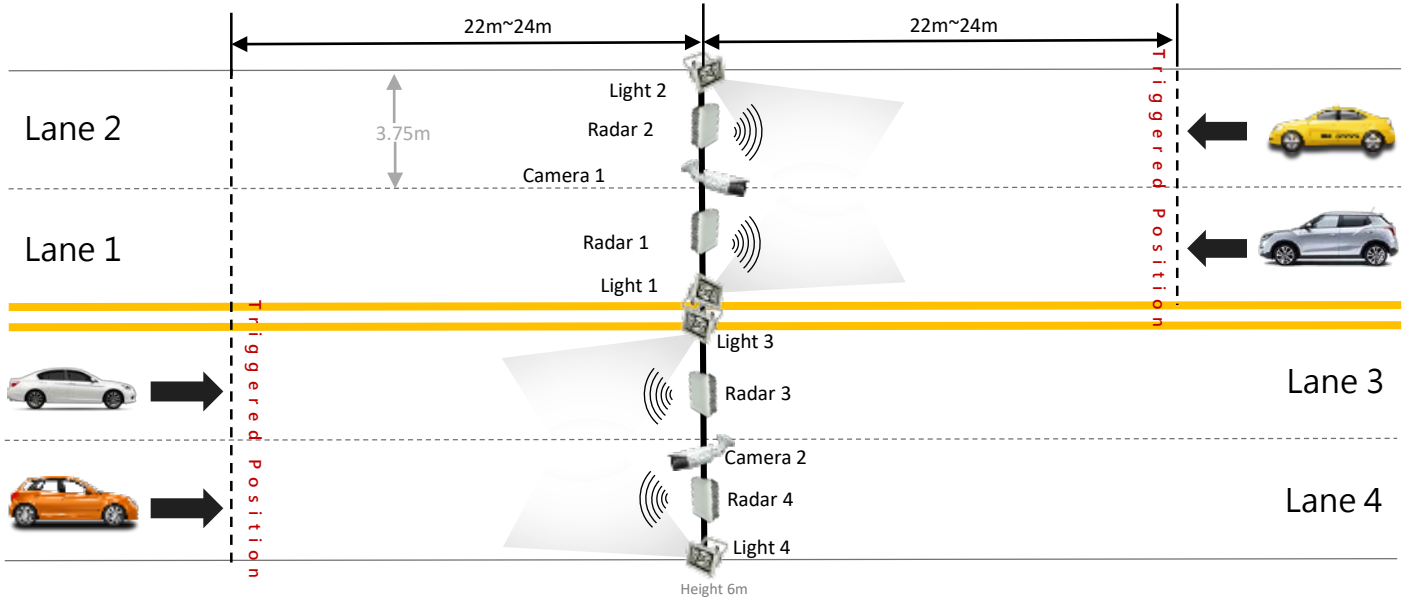
On site layout top view



General road & highway system Onsite Top View

- 1MP camera is used with extra lights for each lane (width 3.75m) to ensure full coverage of the view.
- Camera and extra light are mounted on the same pole (height 6m). 1MP and triggered object distance is 22 to 24 meters.

2-way 4-lane Schematic



- 3MP Camera real scene capture image

【Day】

【Night】 Clear image of driver

Capture location, time, driving direction, lane, plate numbers

- 5MP Camera real scene capture image

【Day】

【Night】

Capture location, time, driving direction, lane, plate numbers

General road & highway system Installation Diagram

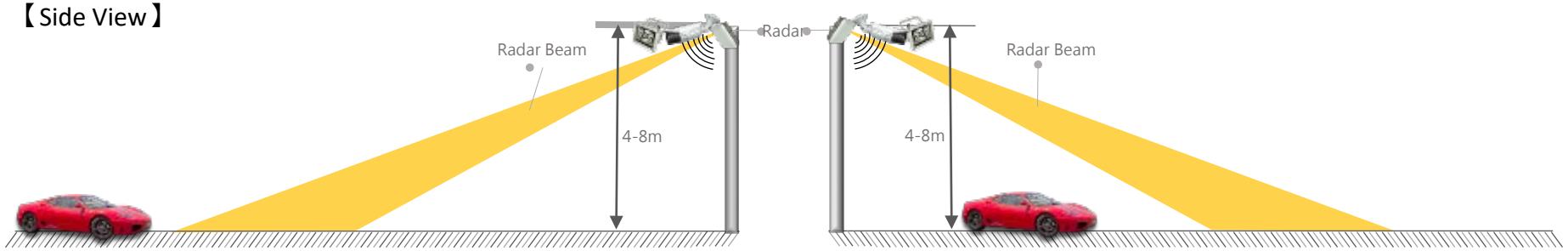
In-coming speed test (Capture front plate)

Radar is installed in the forward direction of the lane. Height is 4 to 8m above road surface, ±2m from the center axis of the lane, and 25±1º of the vertical angle (the angle of the radiation axis is relative to the vehicle.) Quantity of lane monitored is +1.

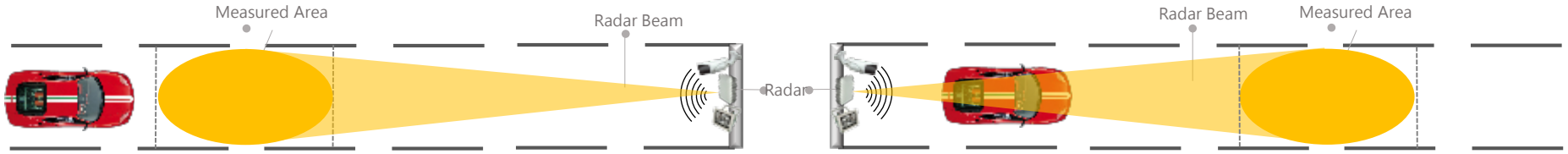
Out-going speed test (Capture rear plate)

Speed tester is installed in the forward direction of the lane. Height is 4 to 8m above road surface, ±2m from the center axis of the lane, and 25±1º of the vertical angle (the angle of the radiation axis is relative to the vehicle.) Quantity of lane monitored is -1.

【Side View】



【Top View】



■ Top-mounted installation

Mobile/Thin Client Viewer

GAS—Global Access System

Smart Tools

Mobile / Thin-Client Viewer

Web Viewer (Device)

For IP camera / Decoder / NVR / Encoder

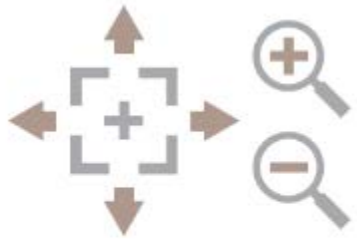
- Support IE, Chrome, Firefox and Safari ...etc. browsers
- Multi-language support
- Mouse wheel control zoom in and zoom out
- Support live view and playback
- Support live view Max.16ch (on decoder and NVR)
- Support live playback Max.4ch (on NVR)

Relay Viewer (For HDRC)

For HDRC

- Support IE browsers
- Multi-language support
- Mouse wheel control zoom in and zoom out
- Support PTZ control
- Support live view and playback
- Support live view Max.16ch
- Support play back 1ch

Alarm Watch



PTZ

Remote Live View Display

Remote Playback

Mobile / Thin-Client Viewer

3VMS App (iPhone, iPad, Android)

■ Instant alarm push notification (Requires cloud platform)

The 3VMS Mobile App can receive mobile phone push notifications. Alarm notifications are continuously received with video for fastest alarm response time.

Login screen to register

Receive alert notification when 3VMS is turned on

Receive alarm notification when 3VMS is not turned on

After receiving the alarm push notification, enter the 3VMS Mobile App to view the live image. This provides immediate support for alarm notifications.

■ Intuitive interface operation

Real-time View	Playback	PTZ	Intuitive UI	Event Snapshot	Group Management
Drag / Slide	Video Confirmation	PTZ	Digital Zoom	Manual Snapshot	Configuration Grouping

3S Global Access System is a centralized webpage platform supporting 3S video systems around the world. 3S video systems all over the world can operate independently and can be expanded unlimitedly. The GAS platform can integrate all video systems into a centralized management interface with multiple layers of maps. Users can instantly view all the field sites and complete settings quickly.

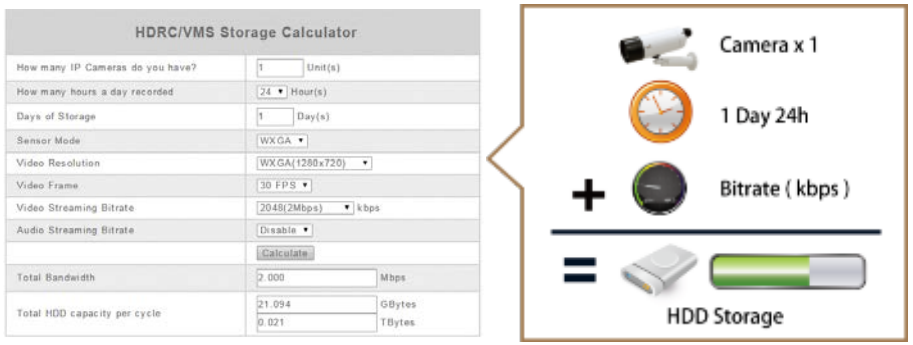
The GAS system is suitable for large-scale fields such as factories, military bases, police stations, banks, and other similar facilities. As GAS has a strict authority setting, every operated process will be recorded intact. There will be no concerns regarding information security as well.

Field support globally | Up to 8 events synchronization | Customized monitoring sites and maps | Single web page platform for integrated management | Layered Map with video touring function | Multi-layer Map Management | Multi-level permission management | Simple UI design | Support PTZ Control | Multi languages

Smart Tools

Storage Calculator

To calculate storage space & total bandwidth accurately



Web Wizard

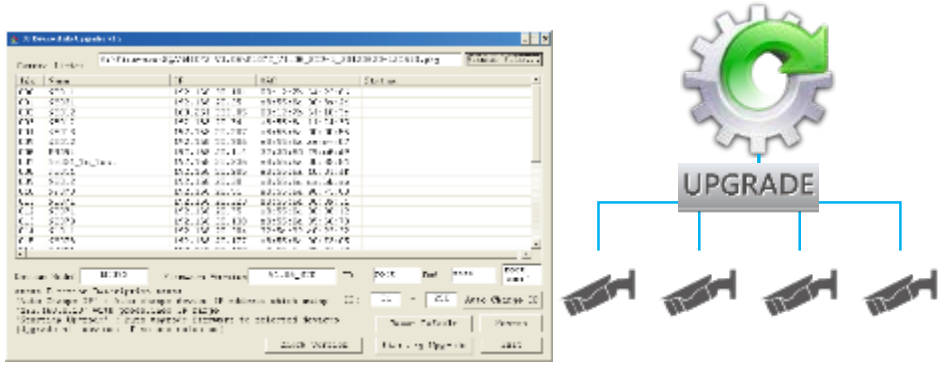
To configure video & image setting in a batch

Camera Finder

Quick & easy setup all of the cameras via LAN

Auto Upgrader

To upgrade cameras' firmware in a batch



Access Control System

Access Control System – Product List

Non contact IC cards

Product name	CM011	CM111
	Mifare Classic	MIFARE DESFire EV1/EV2
Product image		

I/O Controller

Product number	NI430	CC021	CC011	S2071
	Mifare Classic	Mifare Classic & MIFARE DESFire EV1		--
Product name	Converter	Access Control Controller	Access Control Controller mainframe	Alarm Server
Product Image				

Card Readers

Product number	CA012	CA011	CA013
	Mifare Classic / MIFARE DESFire EV1/EV2		
Product name	Parallel type Simple reader	Parallel type Sensory reader	Parallel type Sensory reader
Product image			

Fingerprint reader

Product Number	--	--
Product Image		

Access Control System – Product List

Barrier Flap Gates

Product number	--	--
Product name	60CM Single(Double) side-open door	180CM Single(Double) side-open door
Product image		

Electromagnetic lock

Product number	--
Product image	

LED Marquee display

Product number	--
Product image	

Publish Recorder

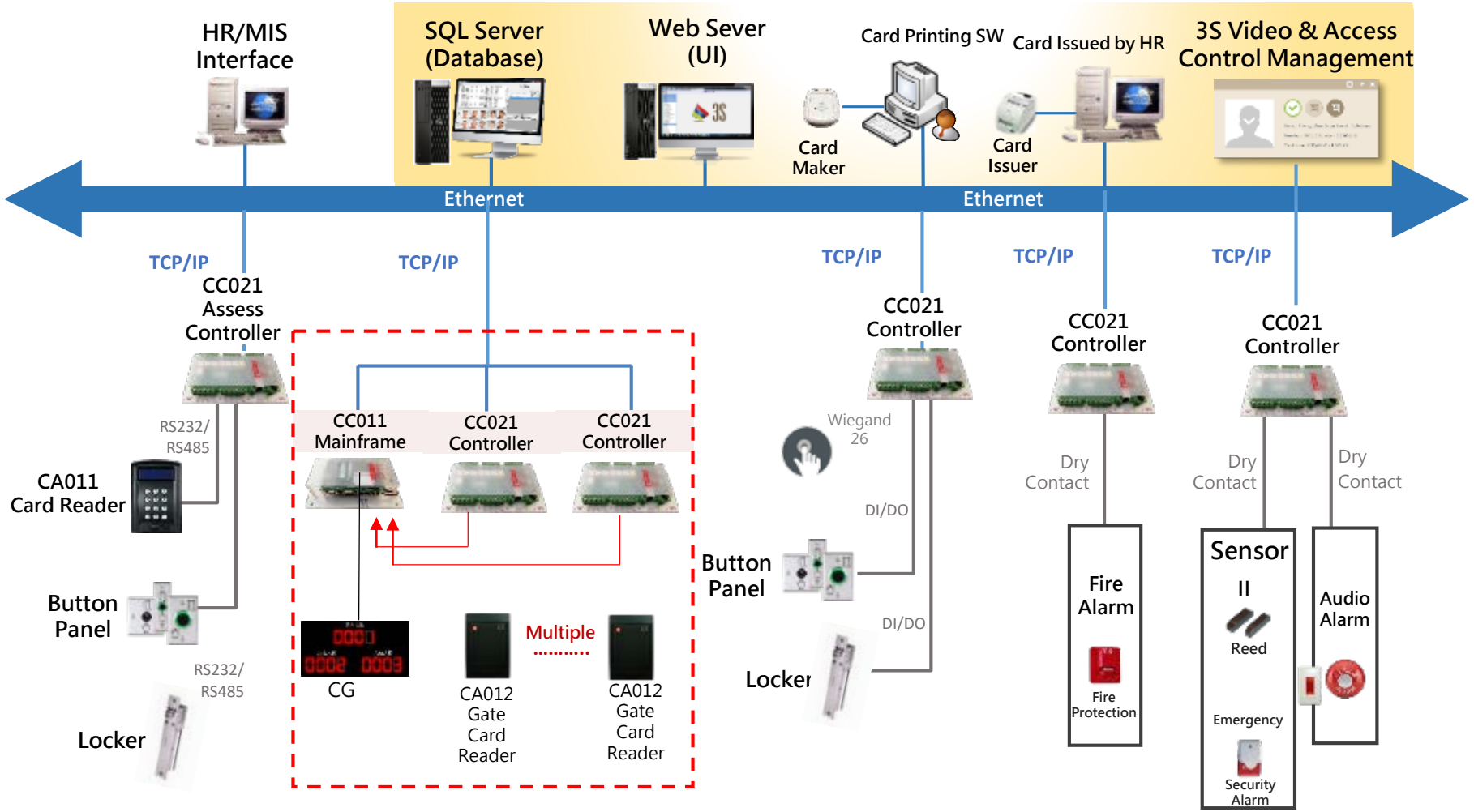
Product Number	CA021	CA121
	Mifare Classic	MIFARE DESFire EV1/EV2
Product Image		

Access control software

Product number	Access control system (basic version)	Attendance System	Recording coded software
Product image			

Access control system software

Access Control System Architecture (Card + Fingerprint)



Standard Access Control

In/Out Record Synchronized Version

Finger Print Version

Fire Alarm Version

Audio/Video Sensor Version

Access Control System – Software Functions

3S access control management system with complete access control ：

Data Setup

Employee data
Vendor data
Dept. data
Company dad
Equipment data
Privilege group
Time zone
Day off data

Privilege Setup

Personnel privilege setup
Equipment privilege setup
Personnel privilege lot change
Group privilege lot change
Dept. door group reorganization

Temp. Card

Temp. Card Lend/Return
Temp. Card Lend History

Equipment Control

Equipment network status
Time setup/search
Equipment quantity search
Use card number to search equipment status
Swipe card quantity
Time group setup
Setup time to open
Reset privilege data
Setup day-off mode

Report Data

Card record
Equipment usage list to search personnel
Use card number to search personnel

System Admin.

Logout system
Change password
User setup
Setup door group
Setup parameter
About system

Access Control System – Function Features

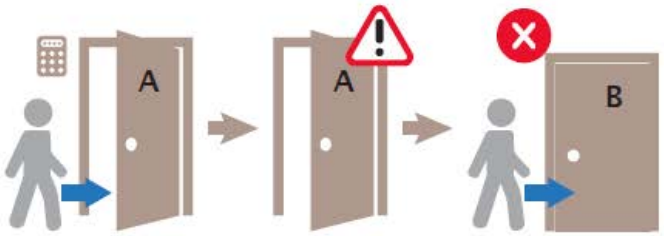
Anti-sneak opening mechanism

AB each swipe a card to get in.

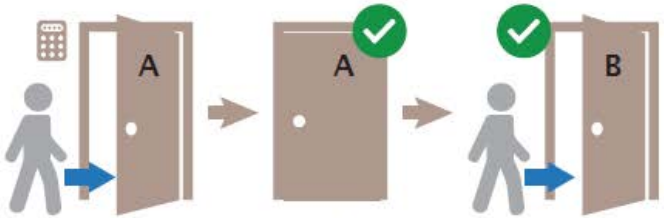
When AB leave together,
A swipe a card to go out.
Then, B does not swipe a card to go out.

B wants to enter the door next time,
the card cannot be swiped

Two door interlock system



When a person swipes a card to get into door-A,
if door-A does not close completely.
Then, door-B will not be open, even if a person has a card.



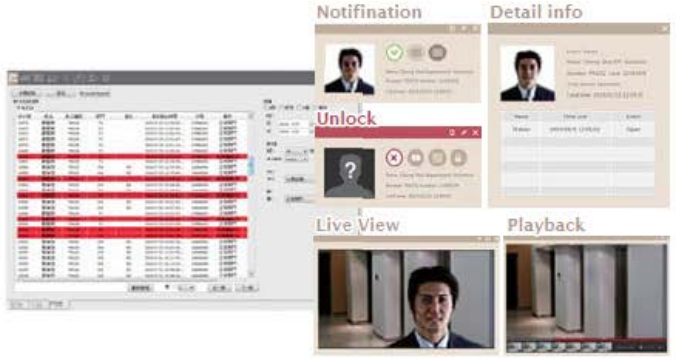
As soon as door-A close completely, door-B will be open.

Basic function of access control

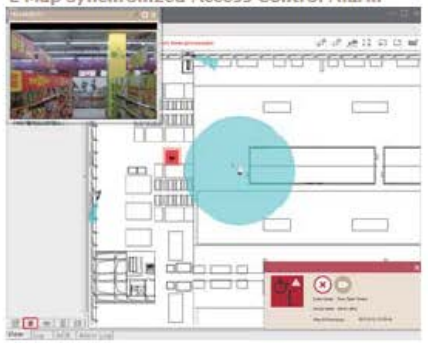
- Interlock function: Two door interlock, Multiple door interlock
- Door opening function: Multiple door opening, first time opening, privilege opening, centralized remote opening, anti-sneak opening mechanism
- Application function: Attendance, meal attendance, access control
- Management function: Black and white list (personnel card swipe and photo comparison), door section management, group management, permission management
- Statistical reports: Statistical reports for people entering and leaving the door, statistical tables for number of cards used, etc.; all types of query results can be exported as text files.
- Data Import: The data and photos can be imported from external files.
- Event record: Record events from various systems or card usages. Score severity, record event type and search
- Card modulation: Provide multi-identification print template with graphical template design interface.

Access control and video synchronization

- Client / Server Instant Monitoring System
- Face recognition instant matching
- Electronic map alarm synchronization
- LED status alarm synchronization
- Intrusion alarm synchronization
- Fire alarm synchronization
- Multi-point remote monitoring
- Card swipe records for instant viewing and playback
- Monitoring screen shows the entrance and exit status, the number of people, and search events



E-Map-Synchronized Access Control Alarm



Infrared Anti-intrusion System

Infrared Anti-intrusion System – Product List

Infrared Anti-intrusion System

Product name	Infrared detector	Infrared detector	Control Server	Alarm Server
Product number	--	--	--	--
Protective distance	80m	120m	--	--
Product image				

Radar Detection System

- Traffic Application
- Water Application
- Perimeter application

Radar Detection System – Product List

Traffic Application

Product Name	Speed Test Radar	Reverse Direction Radar	Smart Test Radar
Product Number	--	--	--
Product Image			

Water Application

Product Name	Radar wave water level meter	Radar wave flow meter
Product Number	--	--
Product Image		

Perimeter Application

Product Name	Short-range perimeter radar	Long-range perimeter radar
Product Number	--	--
Product Image		

Automated integration platform

- ASCM Automation Security Control Management

– ASCM System Architecture

– Features Introduction

– Integrated Applications

- ASCM Security System Integration

– ASCM auto tracking person in video w/ AI

– ASCM integrates with access control

– ASCM integrates with fire alarm

– ASCM integrates with anti-intrusion fence

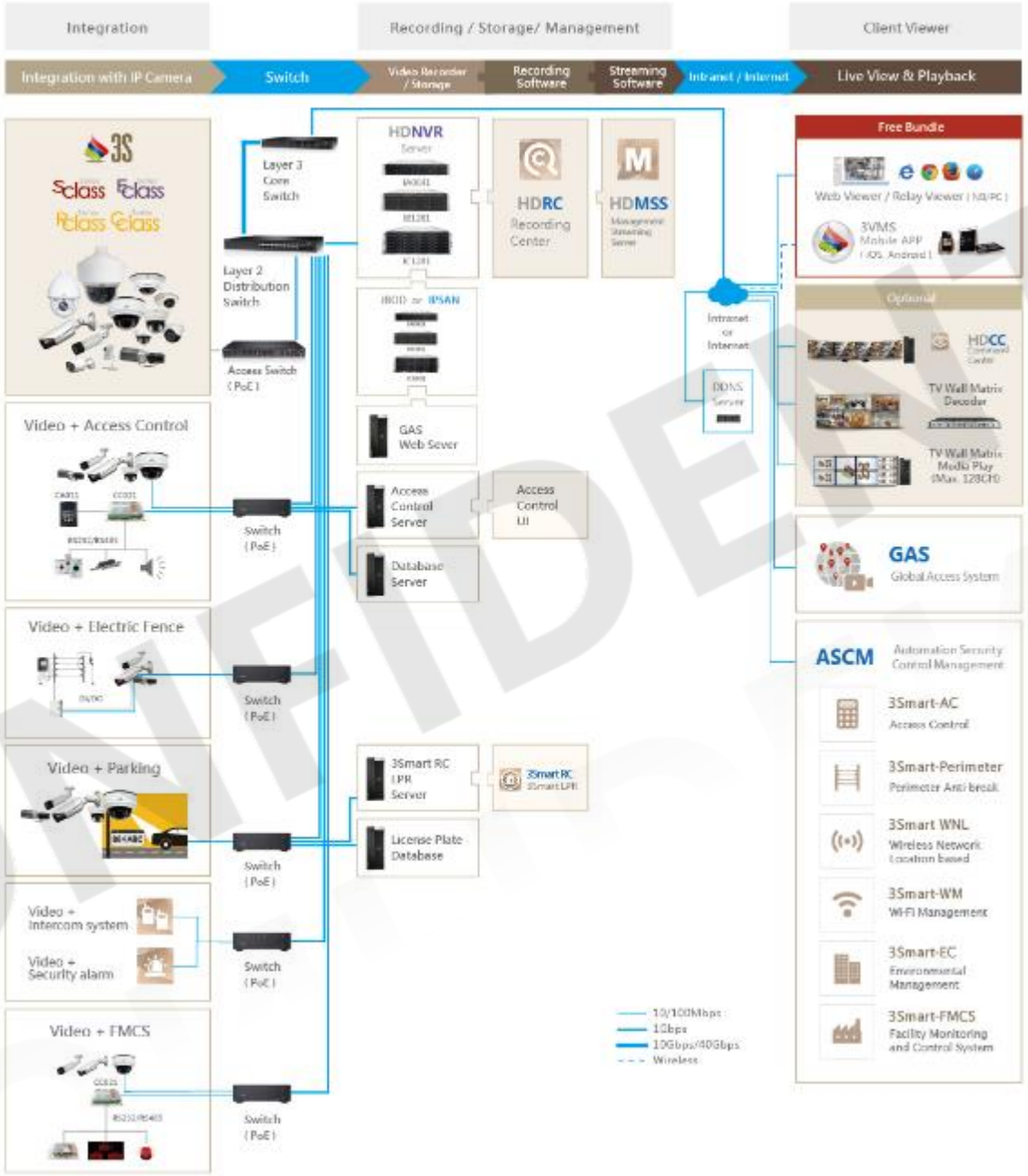
– ASCM integrates with audio alarm system

– ASCM integrates with LED alarm display

– ASCM integrates with wireless positioning system

– ASCM integrates with POS

3S Smart Security System Integration



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ASCM

Automation Security Control Management

ASCM (Automation Security Control Management)

Automation security control management, ASCM, includes video surveillance system, centralized video monitoring platform and intelligent video analysis system. Each system can operate independently or integrate with our featured software for face recognition, parking management, perimeter intrusion detection, and intelligent video analysis. Newly evolved technology transformed traditional passive video surveillance to proactive analysis and early warning mechanism. Our system links various applications to generate intelligent, automated, and instant alarms.

It also connects with other large-scale systems, access control equipment, wireless positioning, building management, fire-fighting equipment, lighting equipment and other heterogeneous systems so as to interoperate and interface cross-domain data from different applications and data formats. The data management platform enhances the scalability of the number and type of system devices, greatly reducing the inconvenience of slow response from traditional systems with massive manpower consumption, and difficulties of subsequent reviews.

3S ASCM is an integrated and automated security control system with high stability.

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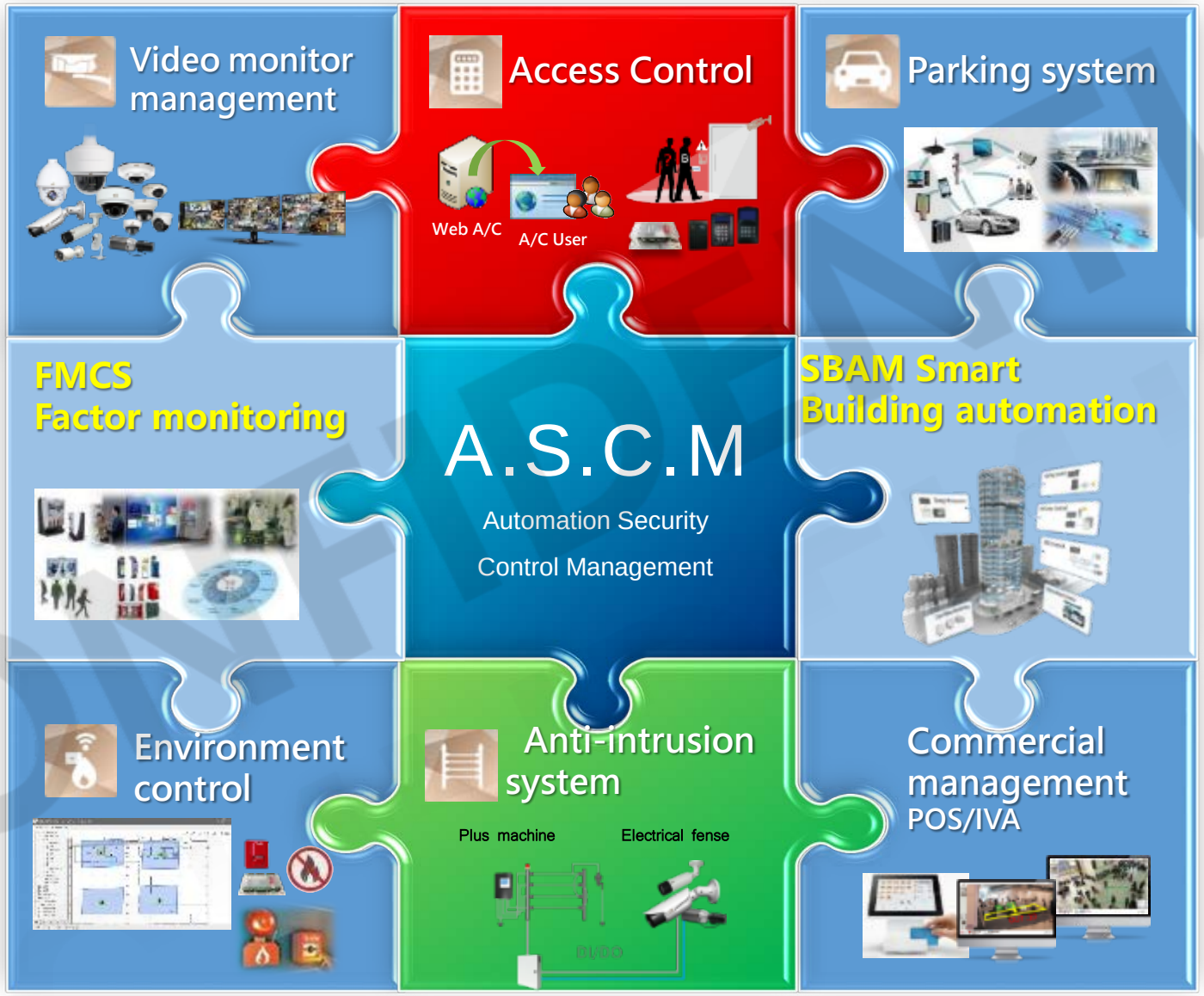
ASCM – Integrated Applications



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ASCM integrates with security subsystems

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ASCM auto tracking person in video with IVA

Auto person track

ASCM platform

TCP/IP

TCP/IP

■ Auto person tracking

ASCM platform person auto tracking and IVA

When front-end camera matched person in black list, 3Smart Face will send alarm to ASCM platform. Connected camera will automatically track person with the same directions the big screen aims at.

■ Big screen directing

■ Person trace tracking

Big screen directing

Track prisoners sequentially or continuously with image features to track movements.

Tracking person in black list

Capture image of every person entering the prison and send to ASCM to do person matching and person trace tracking.

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ASCM integrates with access control

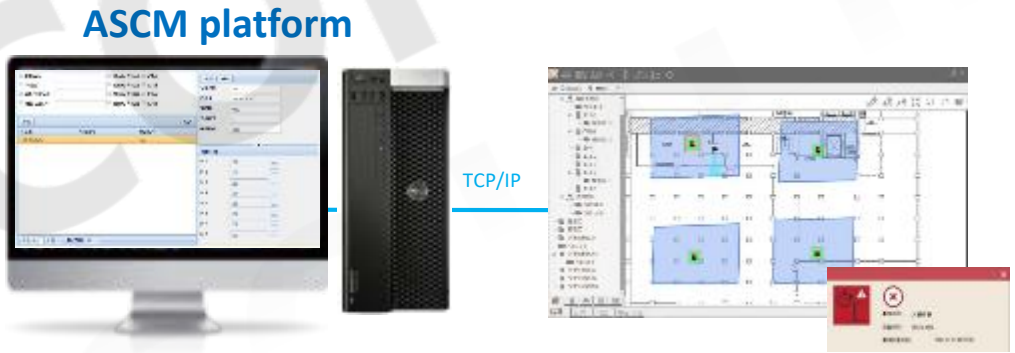
Access Control sync Video

If the card or the person is not authorized, access control system will pop up synced video and inform managers immediately.

E-map sync Access Control

Through simple UI, drag reader on E-map and sync video to provide real-time access control with video.

ASCM integrates with fire alarm



Access Control sync Fire Alarm

When a fire alarm occurs, synced controller will release corresponding door group. At the same time ASCM with pop up window allows control center to have contingency plan and evacuate people in time.

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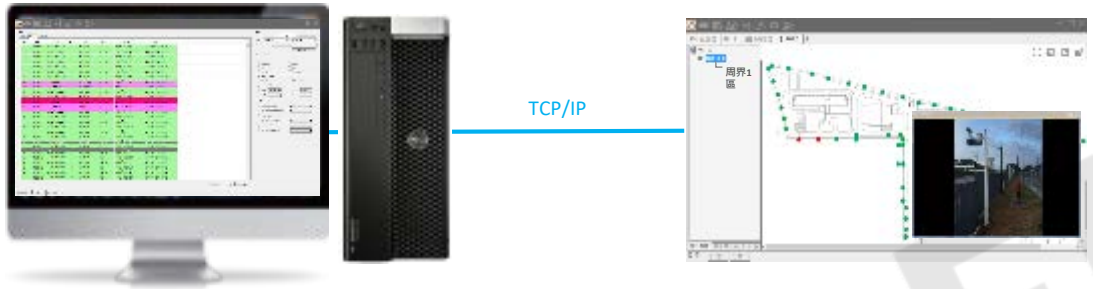
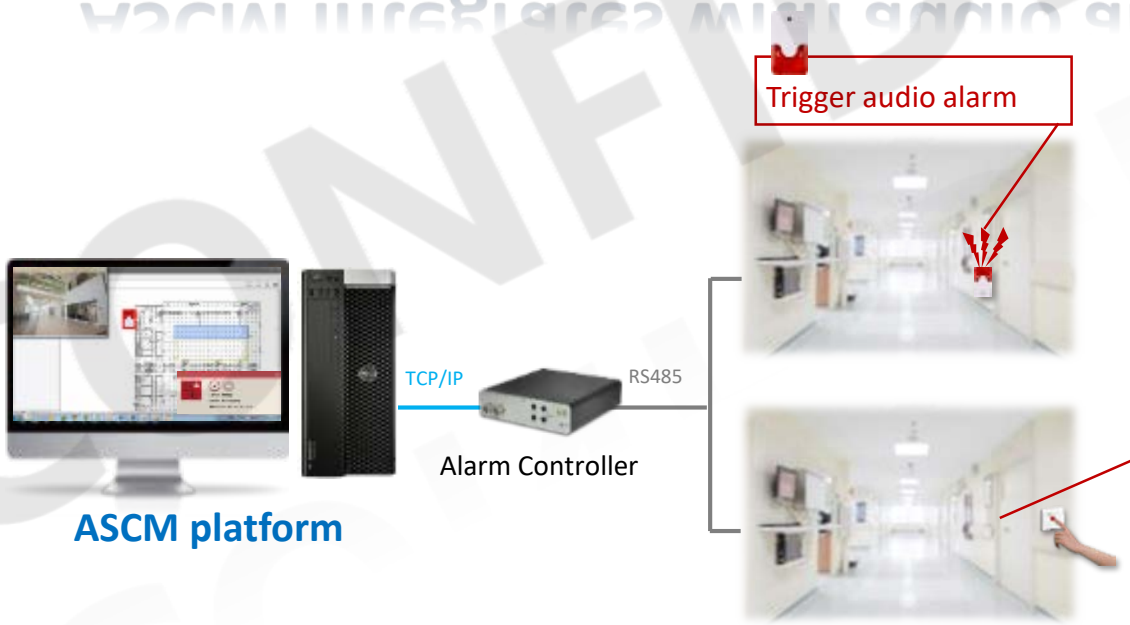
ASCM integrates with anti-intrusion fence



Anti-intrusion fence sync Video & E-Map

When the infrared grating is interrupted, intrusion alarm will be triggered and sync with camera, alarm bell and ASCM platform.

ASCM integrates with audio alarm system



Audio alarm w/video monitoring

When 3Smart Face triggered audio alarm, alarm controller can trigger audio alarm and manually press alarm. Audio alarm will sync with ASCM platform so central control can also check location in e-Map on ASCM.

If audio alarm not triggered, manually press the alarm.

When auto alarm not triggered or special occasion in prison, manual alarm can be set to trigger audio and video monitoring.

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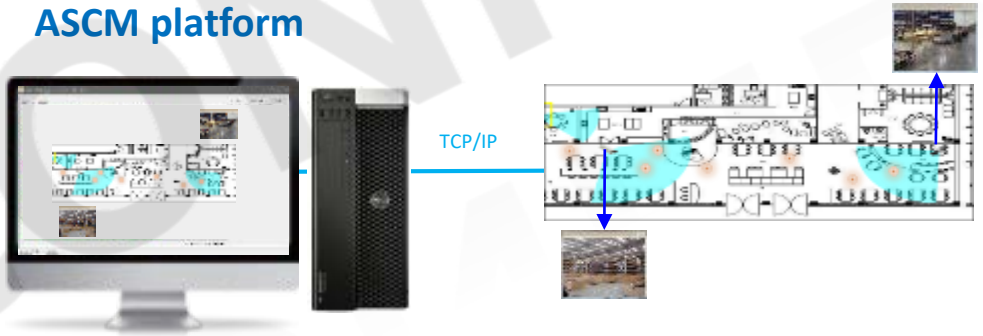
ASCM integrates with LED alarm display

LED display broadcast audio & word

When 3Smart Face trigger LED audio & word display and send alarm to ASCM platform, ASCM will capture specific person and sync to LED display to warn people nearby with audio and word message.

ASCM integrates with wireless positioning system



Wireless Positioning sync Video & E-map

Driver sometimes take down UWB sticker to avoid being positioned. To prevent that, after the car had been positioned, tag UWB positioning sticker with cameras near by to reconfirm and send alarm to manager in control center.

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ASCM integrates with POS

Cashier at front desk

3S POS platform

Order # : A20180628B123

Tag order #

Use mouse to select and tag order #, remote sync order status instantly.

ASCM platform

Quick search video of transaction and provide sync video.

POS table management

Click table # to search transaction video.

ASCM platform

Search transaction by table # and provide sync remote video.

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THANKS

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