

SMART EVOLUTION

in IP SURVEILLANCE



IP SOLUTION



Why IP ?

With hundreds of onsite cameras designed to ensure safety and optimize surveillance, a new challenge arises: how to effectively manage huge video streams and retrieve event footage.

IP is the latest concept that brings intelligence, efficiency, and convenience to modern video surveillance. Enriched with Smart technologies, IP cameras, PTZ Dome cameras, and NVRs are all specifically designed to deliver smart security in the modern marketplace.

Representing this concept is IP Camera Series. Meeting all bandwidth and storage utilization requirements, this series offers unparalleled image quality and customer convenience. Similarly, PTZ Dome Camera Series features excellent HD, smooth Pan/Tilt/Zoom, and smart tracking functions to ensure the elimination of all blind spots within the camera's area of coverage. At the core of this solution is NVR series. With the ability to connect all cameras together, this NVR series simplifies the process even further. Features such as live viewing, recorded video, smart video playback, and event playback/backup are available. In addition to these features, this NVR series is also notable for multichannel recording, HD video preview, massive storage capacity, and system stability, providing an ideal choice for professional surveillance applications.



How this type of security works

With hundreds of onsite cameras designed to ensure safety and optimize surveillance, a new challenge arises: how to effectively manage huge video streams and retrieve event footage.

IP Cameras
Based on IP cameras and PTZ, the video streams are "Smart tagged" and then transmitted to NVR.

NVRs
With IP Solution, one can easily track an illegally-parked vehicle, a specific person's face, vandalism of camera equipment, other accidented events via the Smart Search & Playback feature.

[09:35:24] Face Detection

[12:54:07] Line Crossing Detection

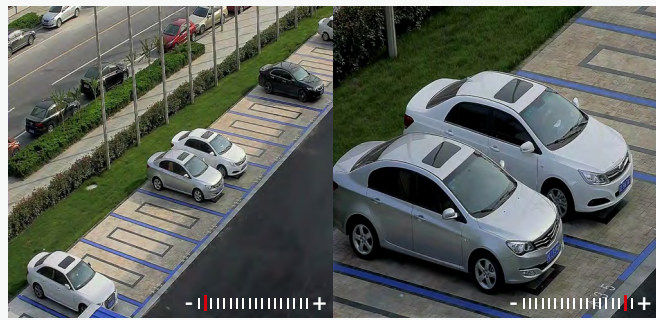
[16:47:56] Intrusion Detection

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6MP Real-time Video

With up to 6 megapixel resolution (3072 x 2048) recording at 30fps, these 4Smart IP cameras offer unparalleled image quality and a real-time surveillance experience.



Motorized VF lens

Employing an industry-leading optical design, the IP camera series is equipped with motorized VF lenses. The advantages include sharp and clear pictures even in low light or at longer focal lengths, consistent aperture at all focal ranges, and a motorized VF lens that supports autofocus ability without the need of manual adjustment.



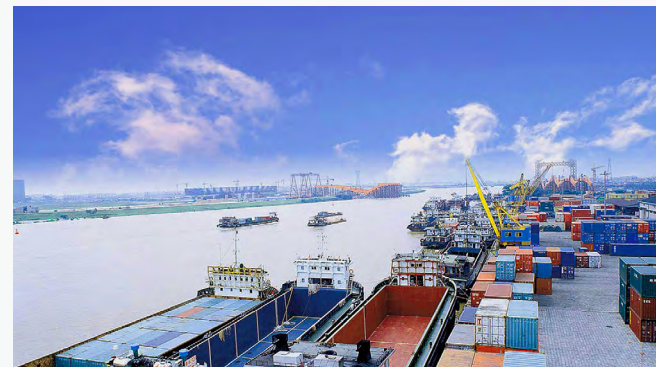
Line Crossing Detection

This function can detect objects such as persons or vehicles crossing a defined virtual line. It is an ideal solution for monitoring entrances, parking lots or other limited areas.



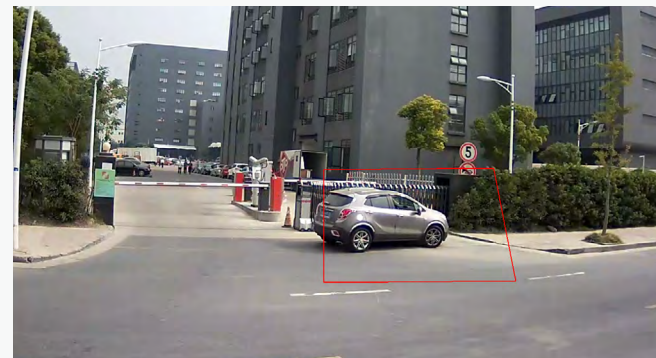
People Counting

This series supports counting of individuals via a defined area. Additionally, a statistical report is generated to help end users better evaluate their customer flow data and trends.



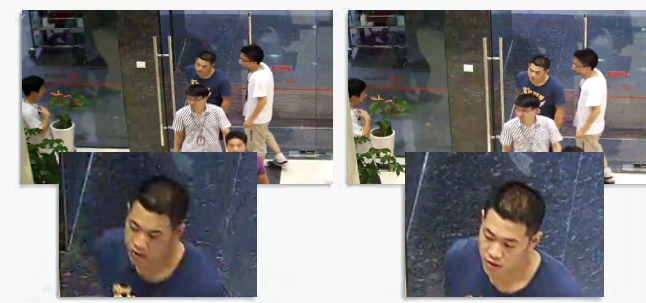
Anti-erosion Housing

IP cameras come with special painting anti-erosion housing that is resistant to sea salt (customization process required).



Intrusion Detection

In the case of intrusion detection, the camera simultaneously auto-triggers the alarm and event recording. Applying the latest algorithms, it automatically analyzes the intruder's dimension ratio to reduce false alarms. These features are extremely beneficial for defined area protection.



ROI Codec

Based on user-defined ROI (Region of Interest), the camera can decrease a non-ROI's image quality to save maximum bandwidth and storage, thereby transmitting data on ROIs more intelligently. The ROI data is therefore able to include greater details and better image quality under the same bit rate streaming conditions.



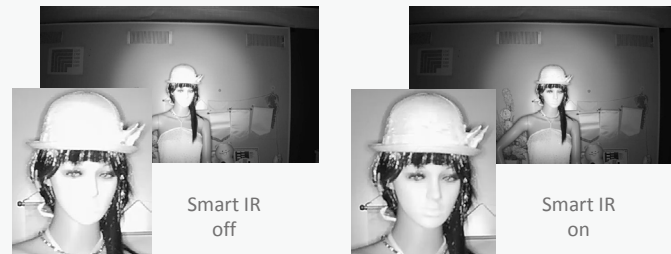
Hikvision 4-Line Smart IP Camera

Conventional IP Camera

Low Stream Latency

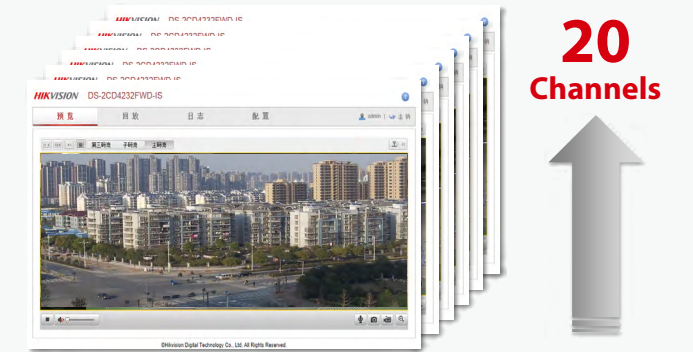
IP cameras greatly decrease the network stream latency for better real-time viewing.

E.g: 140ms at 720p/2M; 160ms at 1080p/4M.



Smart IR

The improved R function allows for adjustment of the IR strength to have better visibility depending on the specific requirement.



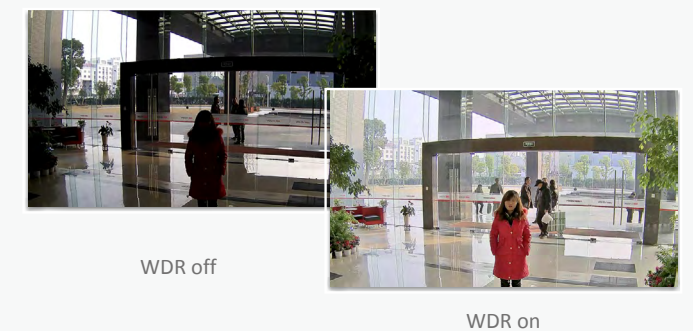
Network Access

The IP camera has a much bigger throughput capability and can support up to 20 simultaneous channels of live viewing.



Rotate Mode

In a vertically-shaped scene such as hallway or corridor, a horizontally-shaped image could result in pixel wastage. With rotate mode, the IP camera maximizes the whole pixel usage.



120dB WDR

With super high dynamic range (120dB), unique WDR technology brings out the camera's powerful light-handling ability in producing crystal-clear images even under extremely strong backlight conditions.



Defog

Through the image correction algorithm, the Defog function improves the whole image's visibility and clarity even in very foggy weather.



EIS (Electronic Image Stabilization)

EIS technology allows the camera to negate the blurry effects caused by camera shake and get more stable images.



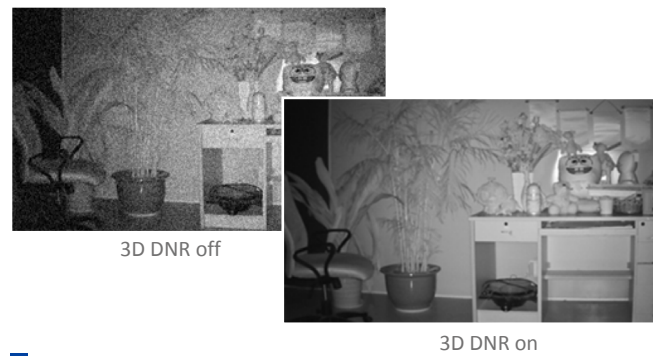
P-Iris

The IP camera adopts the most advanced iris control technology: P-Iris, which keeps an accurate and consistent sharpness and depth of view.



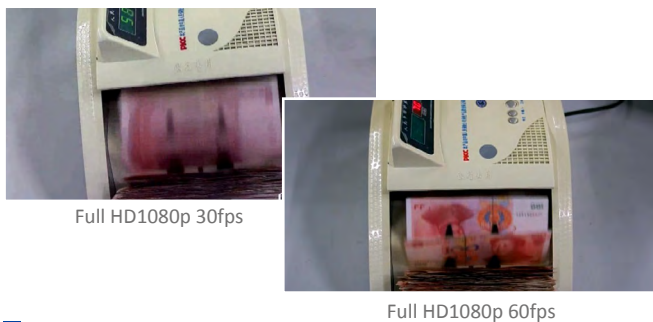
Low-light

The newest generation of low-light technology allows excellent visibility even in extremely dim lighting conditions.



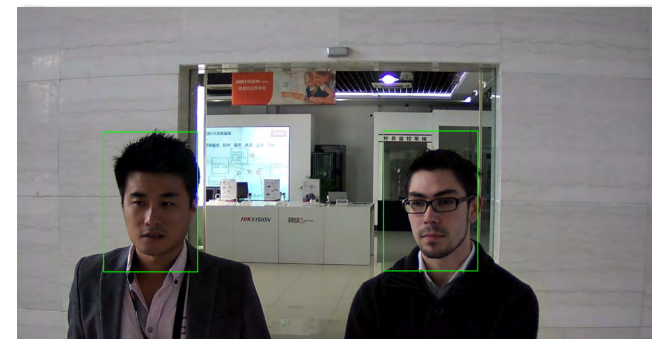
3D DNR

By taking advantage of advanced ISP (Imaging Signal Processing) technology, the camera is able to deliver crystal-clear image quality in low light conditions without an increase in image noise.



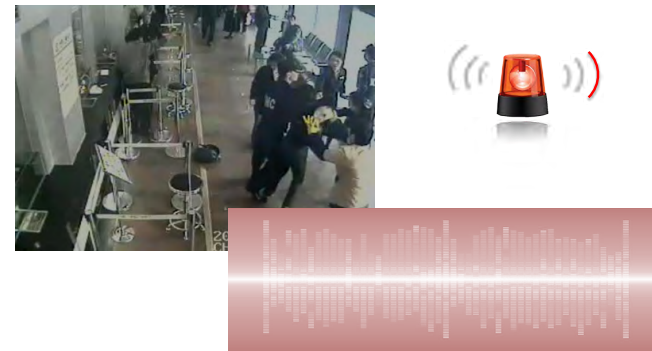
Up to 60fps

Certain applications require detailed surveillance, such as cash handling areas. IP camera with its high frame rate in HD / Full HD resolution can capture detailed images with supreme image quality.



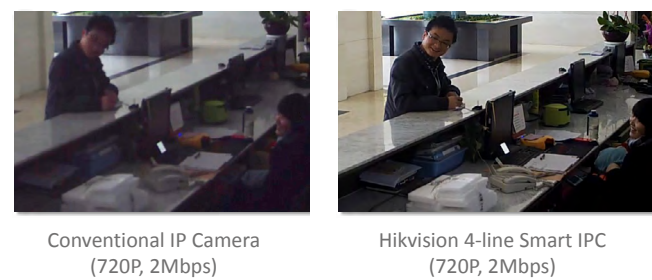
Face Detection

Applying face detection technology, the network camera can accurately detect human faces, analyze their facial features, and trigger an alarm.



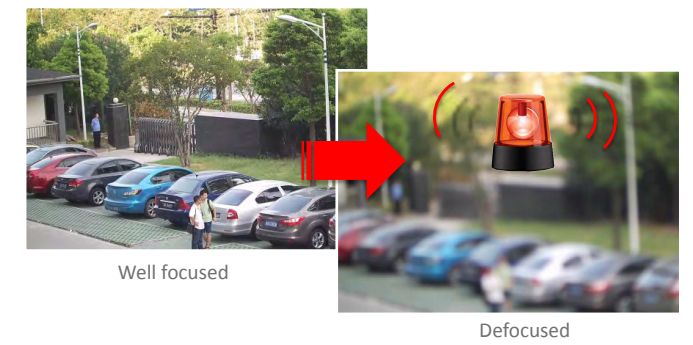
Audio Detection

IP cameras can detect and analyze ambient sound or any sound surge to trigger an alarm when an unrecognized voice occurs. Furthermore, it can also filter out background noise interference and detect any audio stream exceptions.



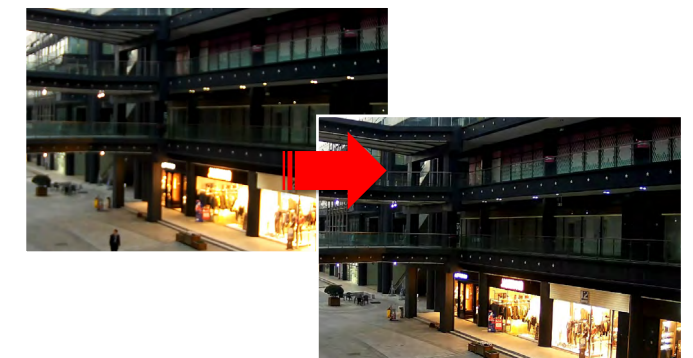
Low Bit Rate

By applying an advanced codec algorithm, IP camera encodes at maximum efficiency and further minimizes the system's load and storage requirement. For example, at a very low bit rate streaming condition, such as 2Mbps at 720p resolution, the camera increases the image quality up to 30%.



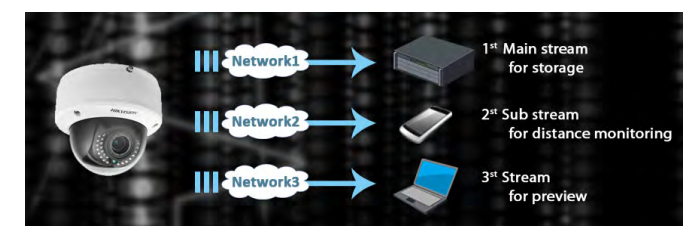
VQD (Video Quality Detection)

The camera automatically self-diagnoses video quality to detect any issues relating to storage, network connection, lens direction, defocus, or tampering.



ABF (Auto Back Focus)

The Auto Back Focus technology allows the camera to adjust positioning of the image sensor to obtain optimal focus; this feature can also be accessed via web client.



Triple Streams

Triple streams give greater flexibility to users by allowing different data streams to be sent simultaneously, and each for independent purposes:

- Main stream: full resolution
- Sub stream: low resolution
- 3rd stream: flexible choice (full, low or dynamic resolution)



IP67

All IR array bullet series cameras satisfy the IP67 standard: a rating given to outdoor cameras that defines the camera's ability to protect against dust and water.



Smart Auto Focus

By applying advanced optical and mechanical technology, the IP cameras boast easier focusing without any need for adjustment in the initial camera setup. Its self-lock function helps resist tampering.



PoE plus / High PoE

The Network PTZ dome cameras support PoE plus or High-PoE power supply to simplify product installation.

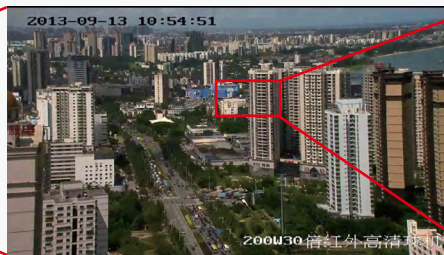


Cooling/Heating

PTZ dome cameras have double-layer aluminum housing for better insulation and cooling performance. The cameras also include thermostatic control, which can automatically control the function of heater and fan. Some models can bear up to -40° C to 65° C (-40° F to 149° F).



2MP, overview



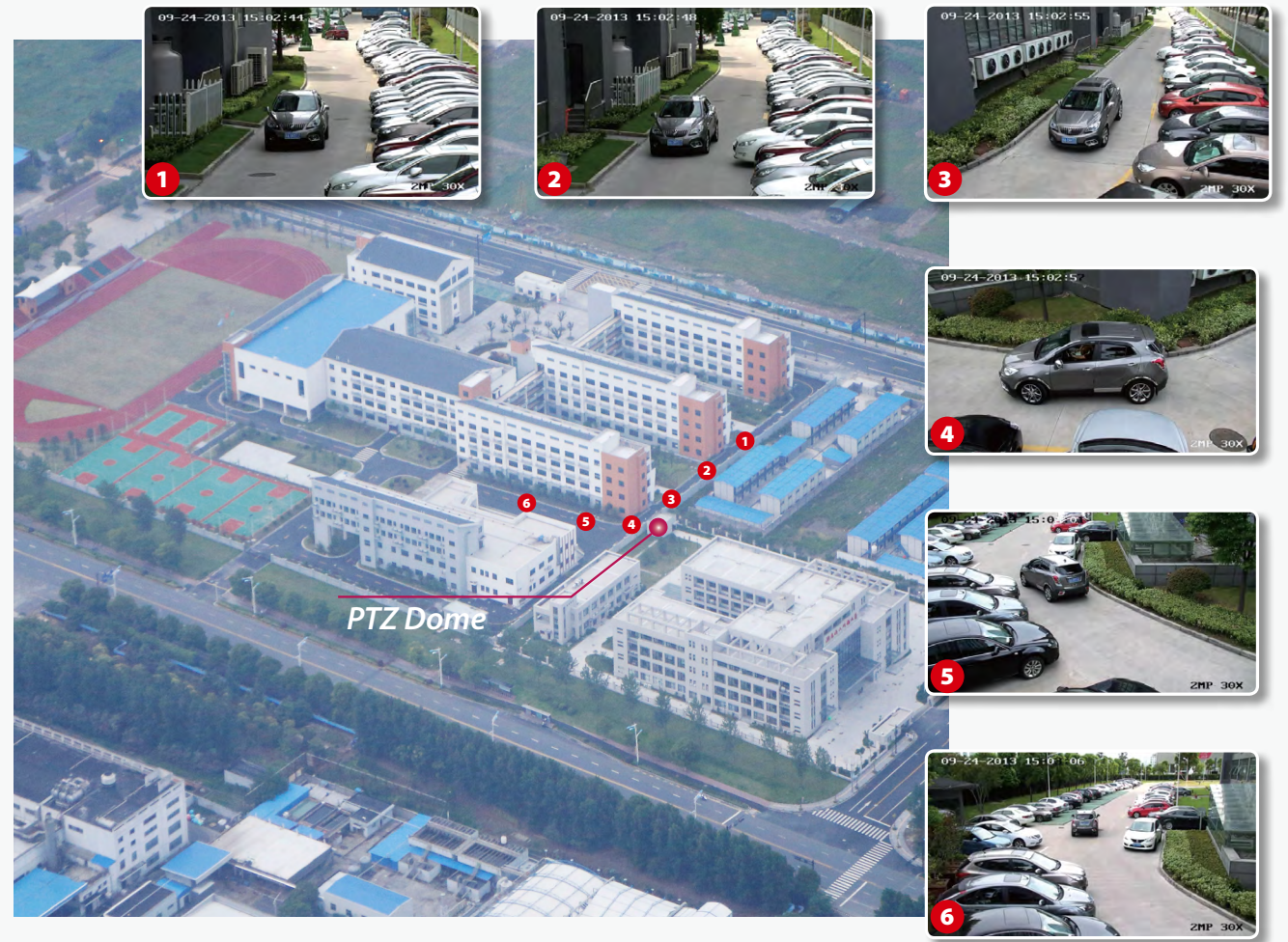
2MP, 8X optical zoom



2MP, 30X optical zoom

Excellent HD

The PTZ dome cameras incorporate independent HD camera modules. Based on ISP (Image Signal Processing) technology, the HD camera modules can provide 3MP (2048x1536), 2MP (1920x1080) and 1.3MP (1280x960) real time HD solution, as well as 30x zoom capability to enable a closer view to get more details.



Smart Tracking

The "Smart tracking" function is an innovative technology for PTZ dome cameras. It increases the effectiveness of surveillance systems in places where the occasional presence of people or vehicles requires special attention after working hours, such as at bank vaults, hotel corridors, parking garages, office buildings and schools.

With this function, when a moving object (a person, vehicle, etc.) enters a monitored area, PTZ dome cameras automatically detect it and adjust their focal length to track the object. When this object moves out of view, the camera will automatically return to its designated position. Additionally, when users want to change the target during tracking, they need to simply click the new target in the view screen, and the camera will change to track it. "Smart tracking" PTZ dome cameras also offer target contour discriminant and human face detection technology that ensures the target always stays in the middle of the picture during tracking.

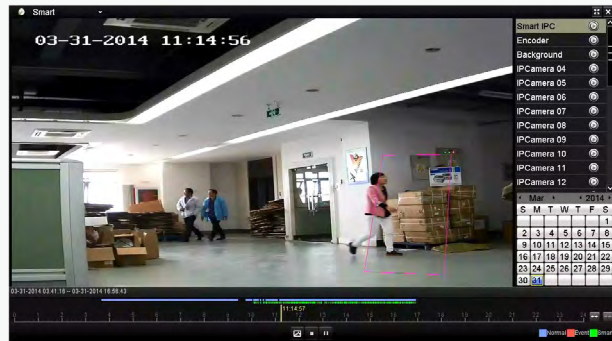
The "smart tracking" feature realizes the goal of an unmanned video surveillance system, and offers a single PTZ dome camera the ability to cover a wider range of area for more comprehensive information. This helps the user decrease the number of cameras and ultimately save money.



Third-party Integration

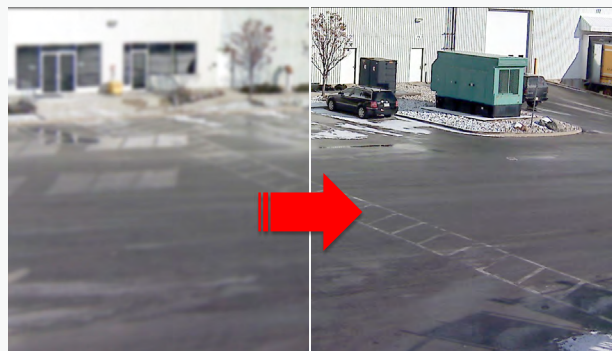
All network cameras support standard protocols such as ONVIF, CGI and PSIA, as well as third-party VMS software such as NUUO, Milestone, Genetec, exacqVision, and more.

NVR Series



Smart Playback

These NVRs use Smart technology to increase playback efficiency and play video footage at different speeds: both normal and 16x. Additionally, NVR series makes searching through recorded data a far more efficient endeavor with 3 different video search criteria: traversing virtual plain, intrusion detection, and motion detection.



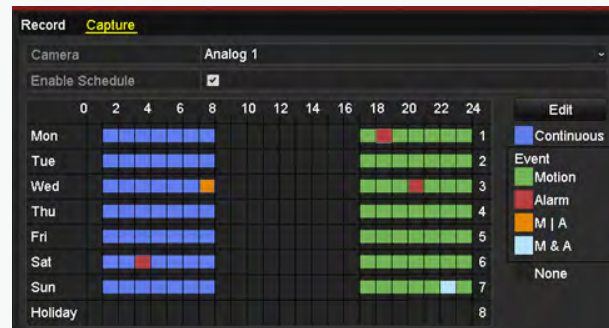
Video Quality Diagnosis

This NVR series can automatically self-diagnose to detect any issues relating to blurred image, abnormal brightness, et cetera.

CMS

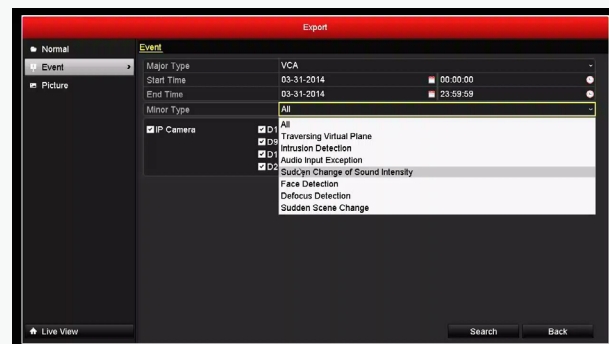
Now with more options to manage your on-site surveillance, CMS is the intelligent Video Management System choice for an easy-to-use, highly reliable, and feature-rich customer platform. Providing security management, centralized alarm control, video analytics, and open integration, CMS easily adapts to the global demand for better and more robust security.

- Intuitive GUI
- Free DDNS and customizable service
- Multiple storage and database solutions
- Low ownership cost



Event Playback Video

Event playback video effortlessly detects and views notable security events. Video search criteria includes: alarm input, motion detection, and VCA (video content analysis) events. Concurrently, the VCA search criteria includes facial detection, audio detection, intrusion detection, and traversing virtual plain, among others.



Event Backup Video

Event backup provides additional customer protection by easily locating noteworthy events via a similarly specified criteria method. This includes options such as alarm input, motion detection, and VCA events.



IP TOTAL SOLUTIONS



Typical Application



Perimeter

High definition PTZ or IR array network camera ensuring around-the-clock safety.

Warehouse

Automatically sends an alert when an intruder enters during off-hours.

Corridor

With rotate mode, it's able to capture videos of the image of the corridor.

Hall Entrance

True WDR to handle the contrast light interference, and to protect from bad weather.

Security Room

Up to 256-channel IP video, supporting up to 5-megapixel resolution.

Entrance

Super long IR range with line crossing capability.

Hall

Provides both a panoramic view and high-definition detail.

Parking

Detects and automatically tracks any intruder.