use-IP

Hanwha Vision

2023

SOLUTIONS OVERVIEW H1

Solutions

As customer needs have diversified and become more sophisticated, the video surveillance industry has needed to match those changes by customising its products. Working closely with end-users, system integrators, consultants and technology partners, Hanwha Vision has been able to analyse customer pain points and develop customised solutions which solve real-life problems. Hanwha Vision understands that there is a need for specific solutions for each vertical market, rather than just general-purpose security products. With technological expertise spanning hardware design, manufacturing and software development, and in partnership with carefully selected technology solution providers, we are able to offer vertical solutions backed up by proven product reliability and the highest possible levels of pre and post sales service.

WISENET

BANKING
CITY SURVEILLANCE
CAR PARK MANAGEMENT / ACCESS CONTROL
HOTEL

LOGISTICS
PRISONS & COURTHOUSES
RESIDENTIAL
RETAIL

TRAFFIC MANAGEMENT
TRANSPORT
HEALTH
INFECTION CONTROL

EDUCATION

SECURE BY DEFAULT
ONVIF®
open security & safety alliance

Contents

Our Solution Partners

We are delighted to be the 'partner of choice' for many analytics solution providers and video management software (VMS) developers. Together, we can help consultants, systems designers, installers and systems integrators provide their clients with sophisticated solutions that exceed their expectations.

E GROUP

Intelligent security AI solutions on EDGE ideal for smart city and parking applications.

A.I. Tech The Vision of the future. Now.

Innovative and advanced video analytics solutions in the field of Artificial Intelligence and Artificial Vision.

a2

AI-based video analytics for smart and safe cities.

Banking Solutions

For trustworthy branches & ATMs

In recent years, financial institutions have undergone significant transformational changes, installing large numbers of ATMs and self-service kiosks to improve service, enhance marketability, and reduce labour costs. But with convenience come potential new risks and vulnerabilities, and banks are working hard to improve security at these locations and giving customers peace of mind.

Hanwha Vision provide a range of video analytics solutions that not only play a key role in making banking locations more secure, but also capture vital footage and information to help banks with transaction disputes and forensics.

Highlights

Never miss a thing

- **High definition day/night cameras** for real-time evidence and crime deterrence even at night.
- **360°, fisheye and multi-sensor cameras** to efficiently give the operators a complete view of an area and ensure there are no blind spots.
- **World's Best 150dB WDR** helps to accurately produce images in difficult lighting conditions, such as scenes that simultaneously contain contrasting bright and dark areas.
- **Audio analytics** automatically recognise critical sounds such as explosions, scream and broken glass and can immediately alert emergency services.
- **Privacy masking** facility to blank out sensitive areas, such as the PIN keypad on an ATM machine.

Video analytics

We offer a range of intelligent video applications that help banks to enhance operation efficiency, while improving customer experience:

- **Analysis of customer demographics:** gender, age, etc. to better understand and react to customer needs.
- **Queue management.** Advanced analytics help measure peak times and deploy additional staff as necessary to reduce wait times and queue length.
- **Footfall behaviour analysis** over the course of each day, week, month to help optimise staff utilisation.
- **People counting**, with occupancy monitoring for controlling the number of people on premises.
- **Face mask detection**, to alert personnel of anyone wearing a mask or face cover.

Efficient operations

- **Decoders** to enable videos to be shown on screen without the need for a PC.
- **Scalable recording platform**, utilising network video recorders and server based solutions from industry-leading vendors.
- **Centrally managed** video surveillance solutions with automatic failover.

Entrance and counters

Entrances and teller counters are the most important areas in banks and call for the highest level of visibility.

- X and P-series cameras, which support 150dB WDR images and 4K resolution even during night-time and with backlight, provide clear images with fine details of people and objects. WDR produces clear close-up images of people's faces at entrances and exits, where ordinary cameras normally struggle to cope with areas exposed to multiple lighting conditions, resulting in overexposed or underexposed images.
- To make the cameras' visual presence minimum, fish-eye cameras are recommended, as they can provide 360° degrees coverage with just one camera and provide an unobtrusive solution.
- X-series cameras are embedded with sound classification function, which recognises abnormal sounds, such as gunshots, shattering glass, screams and explosion, so that the users can respond to emergency situations fast.
- Pinhole height strip cameras covertly capture a person's face and approximate height.
- PoE extender cameras offer a cost-effective way to add a camera to an existing system or install a new two camera video surveillance solution. By sharing loop in and out Ethernet connectivity, cabling requirements and installation time are reduced and end-user disruption is minimised.

Unobtrusive monitoring for ATM machines

- **Covert cameras** provide unobtrusive, round-the-clock monitoring for ATM machines. Recording transaction details is important but so is the need to respect customer privacy, the cameras will cloak certain areas – the keypad, for example – to exclude personal information.
- **Intelligent video analytics** can detect behaviours such as fighting, violent movements, loitering, objects left unattended or even the attempt to install a card scanner. System operators can capture events and notify security guards immediately. The auto-alarm function prevents crime and accelerates security responses.
- **Audio solutions** can improve security by enabling event-triggered announcements and direct callouts which can deter further unwanted behaviours or even resolve difficult situations.

Restricted zone and security room

Restricted zones, such as safe and data centre, require 24/7 monitoring as well as guaranteed data stability, while effectively managing multiple monitoring spots.

- Our cameras and storage devices were put through an extensive quality assurance process, and can transfer and store high-resolution image data without interruption. The failover and ARB (Auto Recovery Backup) function of our storage devices minimise data loss in case of any external disruption.
- Our software and hardware provide seamless interface with the existing IT infrastructure and our users can centrally manage all of the devices in different locations.
- Additionally, all of our products are put through diagnosis and analysis procedures under the guidance of Security-Computer Emergency Response Team (S-Cert) creating the cyber security our customers can trust.

Related offering

- Vandal-resistant and indoor cameras (X and Q series)
- Covert cameras
- Encoders
- NVRs

- Video analytics, including loitering detection, queue management, people counting, customer demographics, face mask detection etc
- SSM, Wisenet BI Solution
- Touchless network intercom

City Surveillance Solutions

Cover Every Angle. Keep Cities Safe.

Cities represent the very centres of economic vitality and public life. The right use of effective communication and information technology helps cities get smarter. By connecting various kinds of data collecting devices such as cameras and sensors, cities can manage infrastructure, resources and urban planning.

Video surveillance nowadays offers much more than just a simple way to monitor activity. Powerful analytical tools integrated into a video surveillance system provide valuable insights to help local authorities keep people safe and to plan for the future. To meet the new challenges of a changing world, Hanwha Vision presents optimised solutions for wide area surveillance and data analysis.

Highlights

City-dedicated product line-ups

- Multi-directional and super high resolution cameras for wide coverage capturing even the smallest details.
- Efficient operation with intelligent video and audio analytics.
- Optimised mobile and wireless solutions.

Public safety & traffic management

- Deter crimes with the presence of cameras and the recording of evidence grade video for post incident investigations.
- Detect traffic violations as well as identify and track vehicles used in crimes through an intelligent ANPR system.
- Remote monitoring from a central control centre.

Improved operational efficiency

- Intelligent video analytics increase the level of security and simplify day-to-day workloads.
- Smart Search can significantly reduce your time searching for crime scene or suspects.

Reliable solutions 24/7

Key elements for a safer city

- Cameras installed where large number of people congregate or pass through, will help deter pickpocketing and anti-social behaviour, as well as violent crimes and provide footage for later investigations.
- Full HD to 8K ultra high resolution cameras are able to capture crystal clear images. Large open spaces can be covered with sufficient pixel density to enable operators to digitally zoom in with unmatched clarity while continuing to record the entire image.
- For areas with poor or high contrasting levels of light, high resolution cameras with built-in IR illuminations and Wide Dynamic Range (WDR) should be used for round the clock monitoring.
- High performance 55x zoom Full HD IR outdoor PTZ cameras enable a person or object to be identified within 350 meters and in complete darkness. It can also help track any person entering high crime areas automatically any time of the day.
- Vandal and weather resistant housings will provide cameras with a high level of protection in a variety of environments.
- Built-in wipers remove rain, sleet or snow and then activate a heater on the lens to dry any residual water.

Face Mask Detection Analytics

Wearing a mask can provide a much needed protection against the spread of COVID-19, and has been adopted as a precautionary measure in many public places. Individuals flouting the rules can be detected using video analytics on-board the X Series cameras.

Efficient multi-directional coverage

- With the exception of PTZ models, most surveillance cameras are typically static. Even when a cameras has a wide viewing angle of up to 180°, there can still be blind spots for criminals to exploit.
- Hanwha Vision offer various types of multi-sensor, multi-directional and fisheye cameras with up to 360° coverage. Depending on the application, you can choose the best products that match your operational requirements.

Intelligence Magnified with AI Auto Tracking

- An AI auto-tracking feature allows control room operators to efficiently monitor the movement of objects whilst remaining hands-free to control other cameras. With a right-click of a mouse, operators can programme a camera to lock onto and auto-track a specific object. It does so with the help of deep learning video analytics which detects and classifies people and vehicles.

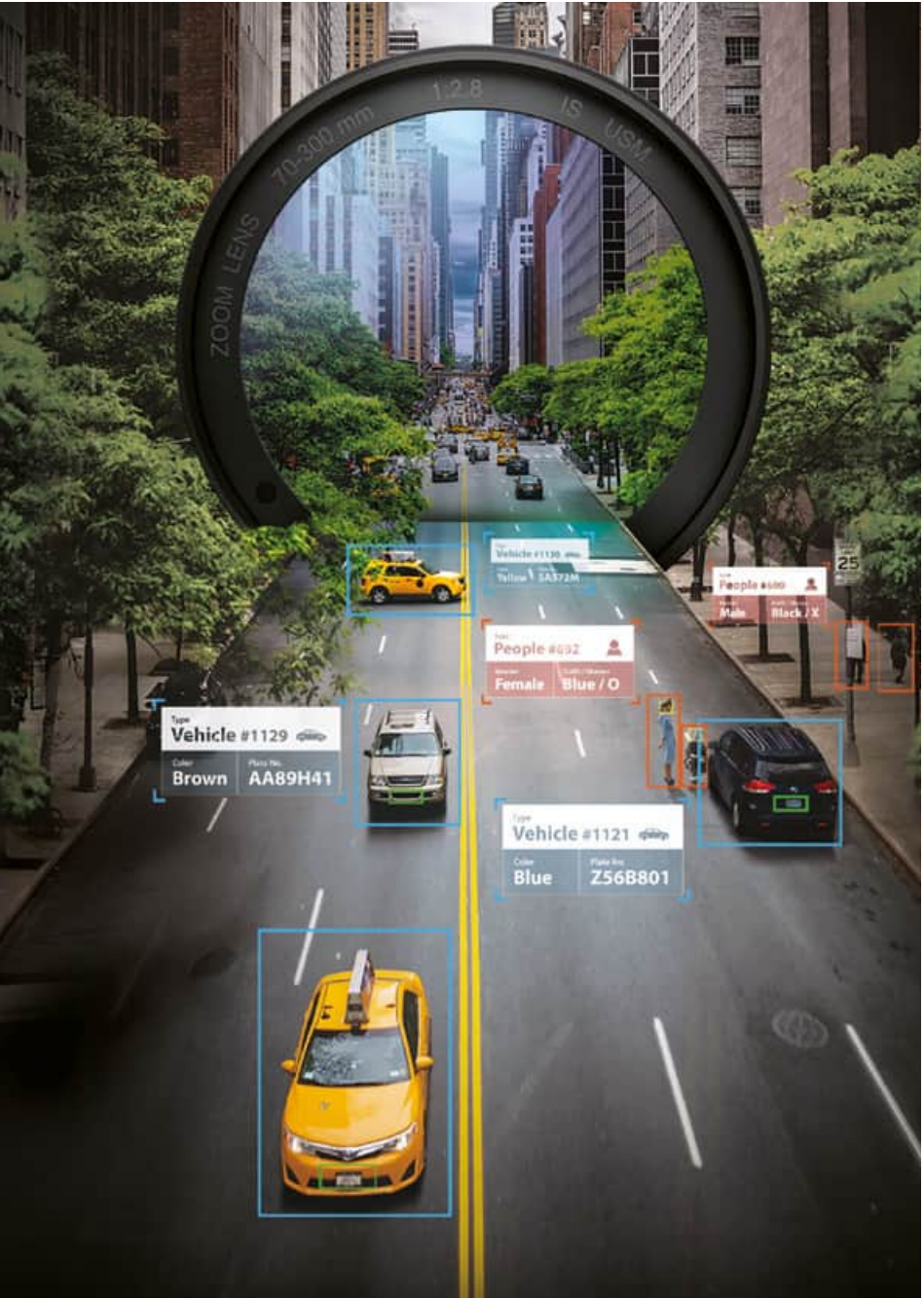## Reduce your infrastructure requirements with PoE Extender Cameras

- PoE extender cameras offer a cost-effective way to add a camera to an existing system or install a new two camera video surveillance solution. By utilising loop in and out Ethernet connectivity, network switch port allocation is reduced and network cabling requirements are minimised, overall benefiting faster installation time and reducing end-user disruption.
- CCTV Camera system: Pair up PoE Extender camera with another camera.
- CCTV Camera system with IoT device: Pair PoE Extender camera with another device such as Wi-Fi APs, speakers, input/output modules.

Identifying threats through edge-based AI deep learning analytics

- To secure cities, visual information is important but this alone is insufficient. Thus, there is a growing need for audio analytics that can target possible threats.
- AI cameras with deep learning based analytics offer a high level of detection accuracy whilst minimising false alarms.
- License-free deep learning video analytics simultaneously detect and classify various object types, including people, vehicles, faces and license plates.
- Operators can quickly search for attributes of objects or people, such as their age group, their gender or the colour of the clothing a person is wearing.
- Digital auto tracking function is used to automatically track the motion of detected objects. You can set AI cameras to detect and auto track only specified objects.
- AI cameras are equipped with the BestShot feature which ensures that only the most suitable images of classified objects are sent to the backend server. Full video image can be up to 4K resolution to see details of objects, along with tagged attributes metadata.
- Users have the option to set the image resolution to less than 4K for full video streaming or use BestShot to minimize bandwidth and storage requirements.

Related offering

- 4K/IR PTZ cameras
- Ultra-high resolution 8K cameras
- Multi-directional, multi-sensor, fisheye cameras
- Vandal proof dome & bullet cameras
- Scalable storage solutions
- AI cameras
- Face mask detection analytics
- Occupancy monitoring
- Coming soon! Face recognition cameras

Enhanced mobility in the City

Urban living is convenient for many with its easy access to shops, schools and facilities. However, a common disadvantage of living in a city is heavy traffic and the lack of parking spaces. Thus, many local authorities place high importance on increasing mobility by managing traffic, and in doing so strive to enhance the overall productivity of the city.

Traffic and parking area management

- Monitoring moving or parked vehicles in the city is one of the most important aspects of deterring traffic rule infringements. Intelligent Automatic Number Plate Recognition (ANPR) cameras with make, model and colour recognition help monitor traffic status and parking areas, while also identifying the location of specific vehicles.
- With cameras located at key city centre intersections and main roads, local authorities and police are not only provided with the licence plate numbers but also the make, model and colour of vehicles involved in traffic lane or parking infringements and have access to real-time traffic flow data, such as the average speed and the number of vehicles on the roads. More in-depth analysis for longer term planning comes from data that is recorded on everyday drivers who travel into specific areas.

Optimized for mobile & wireless environment

- The necessary infrastructure for city surveillance, such as data control centres, is readily available in urbanised areas. However, in suburbs, such infrastructure is rare, making it difficult to transfer data to the control centre. In addition, increased city mobility requires enhanced levels of security in on-board situations, such as in buses or trains.
- Hanwha Vision's answer to this is Hanwha WiseStreamII, which reduces the bandwidth requirements for streaming and recording as well as the network/GPS module-embedded cameras and recorders. Our mobile and wireless solutions enable data to be transferred to the required location. Cameras and recorders optimised for on-board situations also allow real-time monitoring while the vehicle is in operation by offering internal images as well as its location information.
- Reduce your network infrastructure - with our series of embedded Ethernet ports NVRs installation is less dependent on network switches, allows for decentralized deployment and yet centralized for remote monitoring in control room.

Related offering

- Mobile cameras & NVRs
- Vandal proof dome & bullet cameras
- PTZ & Zoom cameras
- Multi-directional and panoramic cameras
- AI cameras
- ANPR cameras with make, model and colour recognition
- High-speed ANPR camera
- Traffic light management
- Traffic statistics
- Automatic Incident Detection (AID)
- Bus lane control
- Parking violations
- Suspicious vehicle patterns
- Face mask detection analytics
- Occupancy monitoring

Car Park Management/ Access Control

For increased productivity and efficiency of any parking or access site

A suite of car park monitoring and vehicle access control solutions for small & medium applications to large multiple sites.

Day-to-day management, including barrier control, licence plate access management, and unauthorised parking, can effectively be achieved with Hanwha Vision's range of car park monitoring and vehicle access control solutions.

Fast vehicle identification and integrated barrier control means queues are minimised, and greater vehicle flow can be handled to increase the productivity and efficiency of any parking or access site.

The solutions also provide invaluable statistical and analytical parking lot information, helping operators maximise their profitability.

Highlights

- Server and Edge based solutions.
- Multiple countries license plate support.
- Monitor car parks, including time spent and occupancy rates, and manage entry/exits through barriers.
- Grant or restrict access to specific areas through black/white lists.
- Automatically control the movement of white listed cars through barriers.

- Monitor activity at petrol stations.
- Monitor free and occupied parking spaces using advanced video analytics.
- Parking indicator camera.
- Integration with Wisenet WAVE VMS
- AI Camera edge based ANPR & make, model and colour recognition

Parking Guidance Camera

Helping drivers quickly locate vacant parking spaces.

Highlights:

- A single camera can monitor up to 16 parking spaces and establish if they are occupied or vacant, providing a cost-effective, low maintenance solution.
- Choose from 7 different LED colours to indicate the availability of various categories of parking spaces (e.g. those reserved for electric cars or company's employees and visitors).
- The 360° parking guidance camera is also able to help deter and detect anti-social and criminal activity, helping car drivers feel safe.
- Can be configured to broadcast an alarm through connected speakers when it is integrated with emergency alerts technology.
- Serverless solution, quick and easy to install.

Insightful Statistics

Edge Based ANPR Solution

ROAD AI: Make, Model & Colour Recognition (MMCR)

Highlights:

- All in one solution with ANPR, MMCR and vehicle classification analytics, pre-installed and licenced
- Smart search (number plate, country, make, model, colour)
- Vehicle type recognition: car, van, SUV, LCV, truck, bus, motorcycle
- 70+ brands recognised, 600+ models
- Access control and licence plate list management for stop and go installations such as car parks
- Supports VMS integrations

MAKE
MODEL
COLOUR
TYPE
NBR PLATE

Server Based ANPR Solution

Advanced server based solution for larger scale management

Number Plate Server Solution

If you have a large site, such as a large shopping centre, municipal or commercial sites, the introduction of a server based management system makes it easier to scale your operation.

Additional features include:

- Online alerting
- Advanced Access Control Logic
- Live ANPR Reporting
- Traffic light violation
- Speed detection
- Database integration
- API
- Separate black and white list reports

Hotel Solutions

Combining customer safety & business intelligence

Many hotel brands now offer much more than just short-term accommodation. New services such as beauty and massage, hosted events, fine dining and meeting room facilities are constantly being added to their existing offering. Some hotels have also expanded into the resorts and long-term accommodation (aparthotel) markets. The hotel industry has evolved its business model, attracting different types of customers with new requirements which all need to be managed.

Hanwha Vision offer solutions that extend beyond just standard CCTV systems, intelligent audio and video analytics provide the industry with the business insights needed to increase customer satisfaction and boost productivity.

Highlights

- **Comprehensive camera range** - to suit any environment and project budget
- **Scalable recording platform** - utilizing multiple network video recorders (NVRs) or server based solutions from industry leading vendors
- **Control of your system with multiple viewing solutions** - from simple to use workstation interface, to large multi-display video wall as well as smartphone access

- **Intelligent analytics** - On-camera embedded data, video and audio analytics
- **Reduce your network infrastructure** - with our series of embedded ethernet ports NVRs and PoE extender cameras
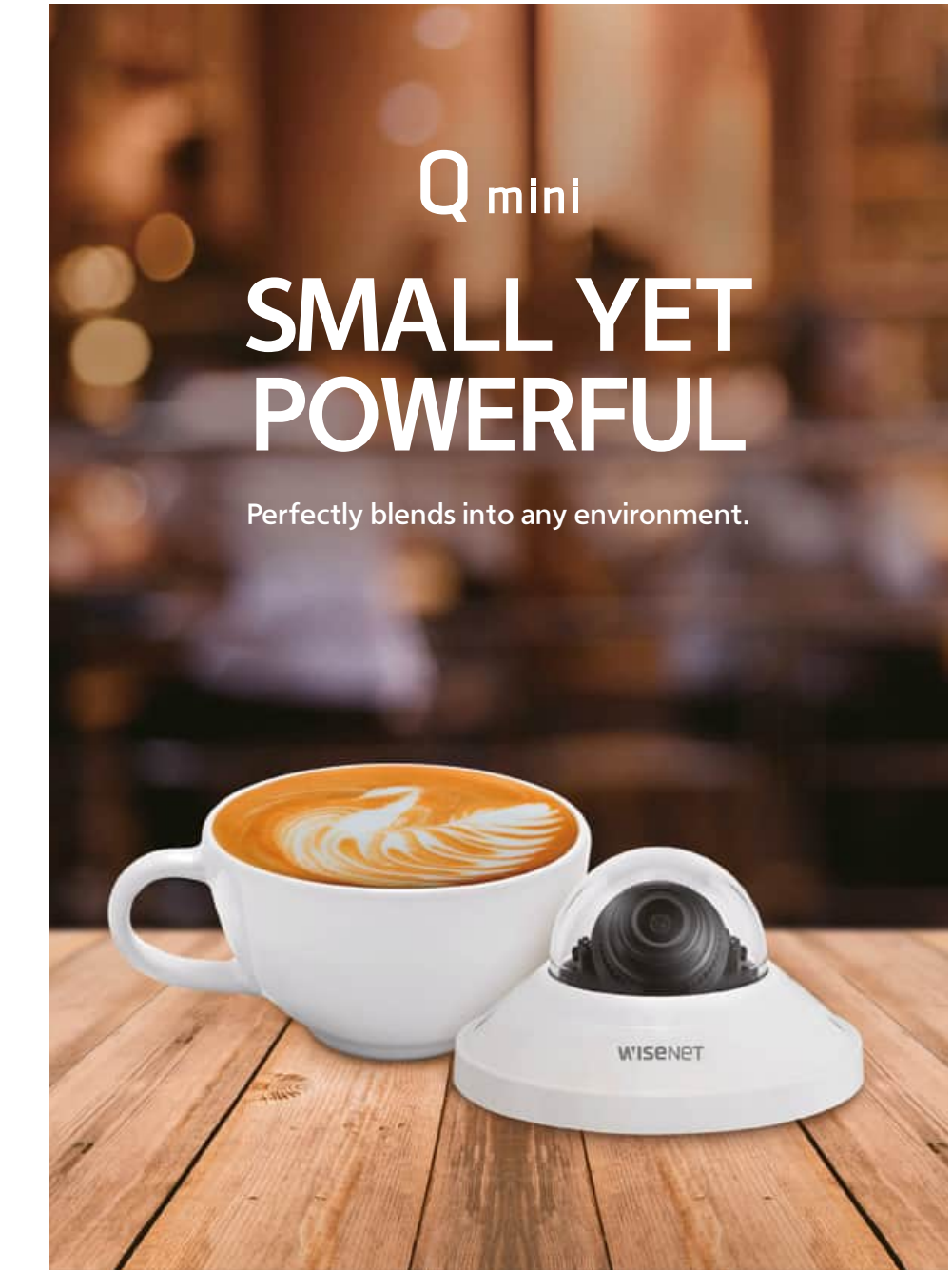- **We move with Trust** - Confidence in the brand with 5 year warranty

Surveillance and business intelligence combined with Hanwha Vision's dashboard
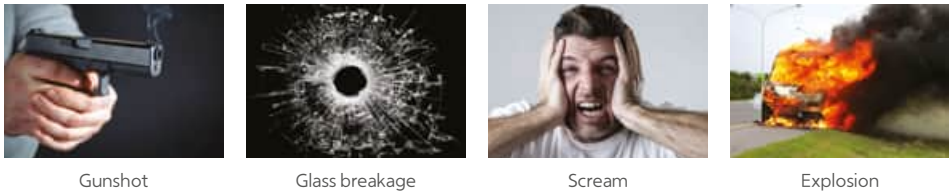
- **More than just CCTV** - On-camera embedded data analytics
- **Beyond security expertise** - separate from security system, central customisable web based dashboard with configurable access permissions for any stakeholders
- **Intelligent data analytics** - capture and review performance of a space within your premises using people counting, heatmap and queue management analytics
- **Export and collaborate** - Boost your reporting metrics with our customisable multi-format report function to suit any type of audiences and stakeholders
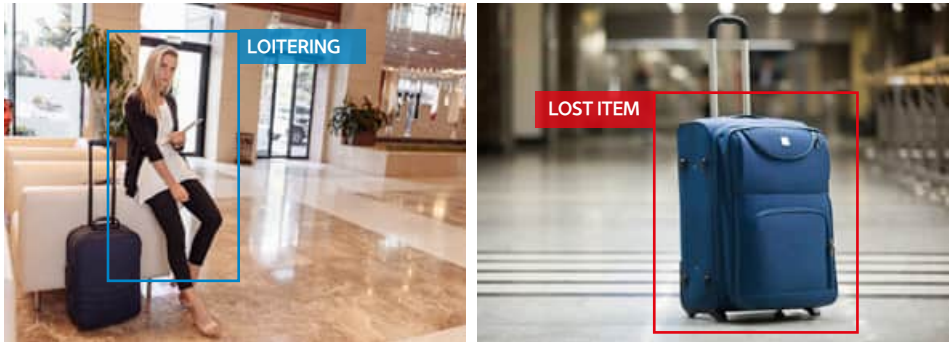
Elegant, discreet and yet powerful

- **See more with less cameras** - extended options of fisheye and multi-sensor
- **Clarity and detail** - From dark to bright scenes
- **Easy setup and maintenance** - remotely motorised lenses
- **Power options** - connect to conventional power source or use network PoE
- **Bespoke colour finish** - cameras can be professionally sprayed to colour blend with any surface
- **Intelligent analytics** - On-camera embedded data, video and audio analytics
- **Open Platform** - custom apps

WDR Off   WDR On

Q mini

SMALL YET POWERFUL

Perfectly blends into any environment.

WISENET

SOLUTIONS

Gunshot   Glass breakage   Scream   Explosion

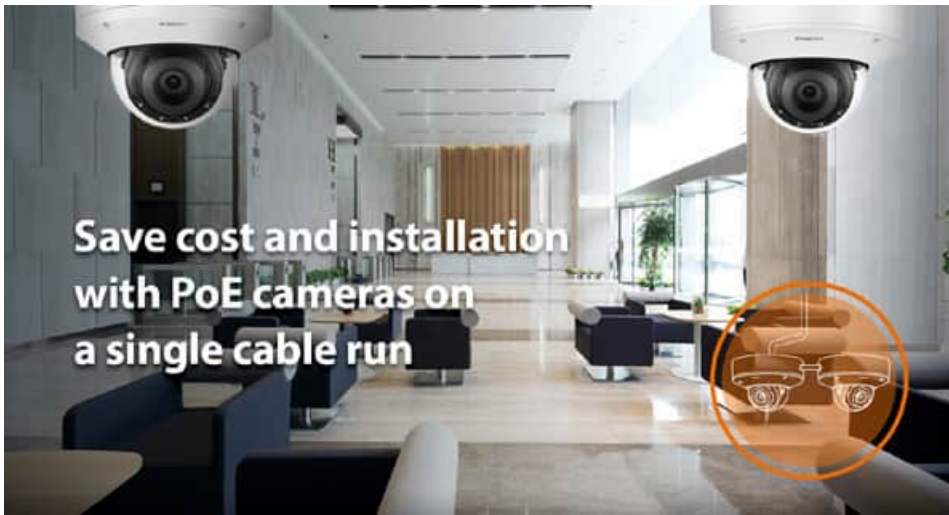## Intelligent audio and video analytics

- **Lost** - detect objects in public areas which appear to have been abandoned
- **Loitering** - detect suspicious behaviour of people remaining for longer than a pre-configured period of time
- **Intrusion detection** in forbidden areas and crossing virtual lines detection
- **Smoke & fire detection** - increase your chance of early detection
- **Audio analytics** for better situational awareness

Reduce your infrastructure requirements with PoE Extender Cameras

PoE extender cameras offer a cost-effective way to add a camera to an existing system or install a new two camera video surveillance solution. By utilising loop in and out Ethernet connectivity, network switch port allocation is reduced and network cabling requirements are minimised, overall benefiting faster installation time and reducing end-user disruption.

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- CCTV Camera system with IoT device: Pair PoE Extender camera with another device such as Wi-Fi APs, speakers, input/output modules.

Control Room Solution

- **Easy to use** Video Management System
- **Designed for 24/7 Operation**
- **Multi-tenancy** - single platform shared by all and customizable
- **Built-in failover** - Keep your system going
- **Multiplatform** Viewing System
- **Intercom system** for audio and video two way communication
- **Compatible clients** Windows, macOS, Linux, iOS, Android, Web
- **Coming soon**: Audio Management System

Touchless Network intercom

Multiple applications, from acting as a help point for queries and emergencies, to access control or seamless communication with a control room or a front desk reception.

- Touchless call system, allowing individuals to simply raise their hand towards the device to initiate a call.
- Intelligent analytics including line crossing, loitering, tampering and audio detection.
- Built-in speaker and microphone with excellent call clarity.
- Handover events to other cameras to boost security and safety.

Smart and Convenient

Network Intercom Station

TID-600R

- Small and slim form factor
- Full duplex two-way communication
- Best-in-class images with 2MP sensor and WDR
- 16.4ft (5m) IR viewable length
- Wide FoV - HFoV 180°, VFoV 114°
- Touchless call
- SIP 2.0 support

Logistics Solutions

Keeping colleagues safe & improving customer satisfaction

Whilst the number of people employed in the logistics sector may be considerably lower than in the past, warehouses and distribution facilities still need to ensure there is strict compliance with Health & Safety procedures. They also need to detect any criminal activity, as well as monitor the movement of goods from the moment they enter the facility to when they leave, so that they are able to verify why a package may be lost or damaged.

High definition megapixel cameras, many of which are equipped with intelligent video analytics and a long list of other innovative features, offer a highly effective and affordable solution for security personnel and operations managers working within the logistics sector, who are looking to create a safe working environment for their colleagues, minimise theft and fraud, identify opportunities to increase productivity and quickly resolve any customer disputes.

Highlights

Feature rich cameras for keeping colleagues safe

- Multi-directional and super high resolution cameras provide wide coverage.
- Directional, virtual line and enter/exit detection video analytics generate alerts if colleagues walk into restricted, unsafe areas.
- Audio analytics recognise critical sounds such as explosions, screams and broken glass, allowing security personnel to react quickly and effectively to any emergency.

24/7 monitoring to detect and deter theft

- 4K cameras capture 'need to be seen to be believed' quality images.
- 55x optical zoom cameras enable operators to view close up detail of any suspicious activity.
- Loitering and enter/exit video analytics detect if potential thieves are in areas they should not be, such as loading bays.
- Wisenet WAVE video management software makes it ultra easy to retrieve and review recorded video evidence, enabling control room operators to carry out forensic analysis of what may have occurred.

Customer satisfaction

Logistics centres will wish to ensure all parcels pass through their facilities undamaged in order ensure customer satisfaction, as well as minimising the cost of investigating claims and paying out compensation.

With a video surveillance system interacting with a logistics centre's barcoding process, packages can be tracked through every stage of its journey though the facility. If a customer makes a claim, or if repeated irregularities are discovered, managers will not just be able to find out what happened, they will also be able to fix the cause of the problem and improve processes.

Protecting people, property and profits

- The quality of the images captured by the very latest generation of multi-megapixel video surveillance cameras enable control room operators to closely monitor activity both inside and outside a warehouse or distribution centre.
- 4-channel multi-sensor, panorama and fisheye cameras provide efficient options for detecting and tracking objects over wide open spaces, as they are able to cost effectively provide coverage of an area where a much larger number of standard cameras might normally be required.
- Technically advanced Wide Dynamic Range (WDR) built into cameras ensures that clear, sharp images are captured in areas where there may be varying light levels.

Video surveillance technology offer real-life practical benefits to logistics centres

Controlling site traffic

Easy to configure camera-to-camera IP communication technology enables ANPR cameras to simultaneously capture and transmit data to a convenient user interface of vehicles entering and leaving a site. The affordable ANPR camera solution provides the opportunity to automatically control the movement of white listed cars or delivery vehicles through barriers via camera relay outputs as well as alert operators of any unauthorised vehicles parked in loading bays.

Extending the life of existing CCTV systems

Many warehouses and distribution centres may have an existing analogue CCTV system, but for a variety of reasons they are not yet ready to migrate from analogue to an IP network-based video surveillance solution. They may not, for example, have a network infrastructure that can support a video surveillance system or provide the necessary bandwidth.

HD+ cameras help extend the life of legacy systems by delivering high definition images over existing coax cabling. These cameras are able to deliver Full HD 1080p images over coaxial cables and support the transmission of HD images and audio without any latency or image loss, at distances up to 500m using standard coax.

Related offering

- Vandal proof, PTZ dome and bullet cameras with built in IR illumination
- 4K/IR PTZ cameras
- VGA and QVGA thermal cameras
- PNM cameras
- AI cameras
- NVRs
- Wisenet WAVE
- Fall detection
- Face Mask Detection
- Social Distancing Measuring
- Abandoned/removed objects detection
- Suspicious Vehicle Patterns
- Intrusion detection
- Touchless network intercom
- **Coming soon**: Audio Management System

Prisons & Courthouses Solutions

Improving safety and maintaining high professional standards

Surveillance in the correctional system, including prisons, custody suites and courthouses, is not only about protecting inmates and staff. It's also about improving daily work processes and behaviour.

Recorded footage can help assure that the highest professional standards are being maintained by staff and provides evidence useful in the investigation of complaints, criminal cases or procedures. Live views from cameras to authorized staff and authorities provide optimal situational awareness, and the recorded high-definition video gives undisputable answers to the cause of incidents from vandalism, to drug use, violence and possible misconduct of officers.

Highlights

- Immediate access to live and recorded video - from any authorized computer or mobile device.
- Reduction in the number of false liability claims.
- Efficient investigations through quick access to relevant video, and video quality that's valid in court.
- AI cameras with object classification - for accurate perimeter fence detection and reduction in false alarms.
- Face mask detection analytics.
- PoE extender cameras offer a cost-effective way to add a camera to an existing system or install a new two camera video surveillance solution. By sharing loop in and out Ethernet connectivity, cabling requirements and installation time are reduced and end-user disruption is minimised.

- Server based recording solutions form industry leading vendors.
- Centrally managed video surveillance with automatic failover and server health monitoring.
- Support for legacy cameras with high performance encoders and hybrid NVRs.
- Privacy matters - area masking and video export with face blurring.
- Reduce your network switch infrastructure - with our series of embedded ethernet ports NVRs.

Solutions for tough environments

- **Anti-ligature cameras and accessories** are designed to meet the requirements of police, prisons and mental health institutions where there is a duty of care to prevent inmates and patients from self-harming.
- **Vandal resistant cameras** outfitted with metal housings or vandal-proof dome covers, so as to prevent the lens from becoming damaged or destroyed when there's maltreatment or physical abuse. IK10+ housing and ingress protection rated at IP66 and IP6K9K.
- **Cameras with IK10+ vandal resistant robust housing** and ingress protection rated at **IP66 and IP6K9K**.
- **Shock detection and automatic tampering alarm** to alert control room operators if anyone is trying to damage it and ensure continuous operation.
- **Coming soon**: Audio Management System

Cover every angle. Even in darkness

- **Multi-sensor, multi-directional and fisheye cameras** for 360° coverage. Correctional facilities have many high-risk areas which all have their own challenges and require close monitoring, from entrances and exits, to cafeterias, prison yards, recreational areas, cell blocks and perimeter protection. Installing the right camera in each location is key to maintaining a secure environment.
- **An AI auto-tracking** feature allows control room operators to efficiently monitor the movement of people or vehicles whilst remaining hands-free to control other cameras. With a right-click of a mouse, operators can programme a camera to lock onto and auto-track a specific object.
- High performance **55x zoom Full HD IR** outdoor PTZ cameras enable a person or object to be identified within 350 meters and in complete darkness.
- **Built-in wipers** remove rain, sleet or snow and then activate a heater on the lens to dry any residual water.
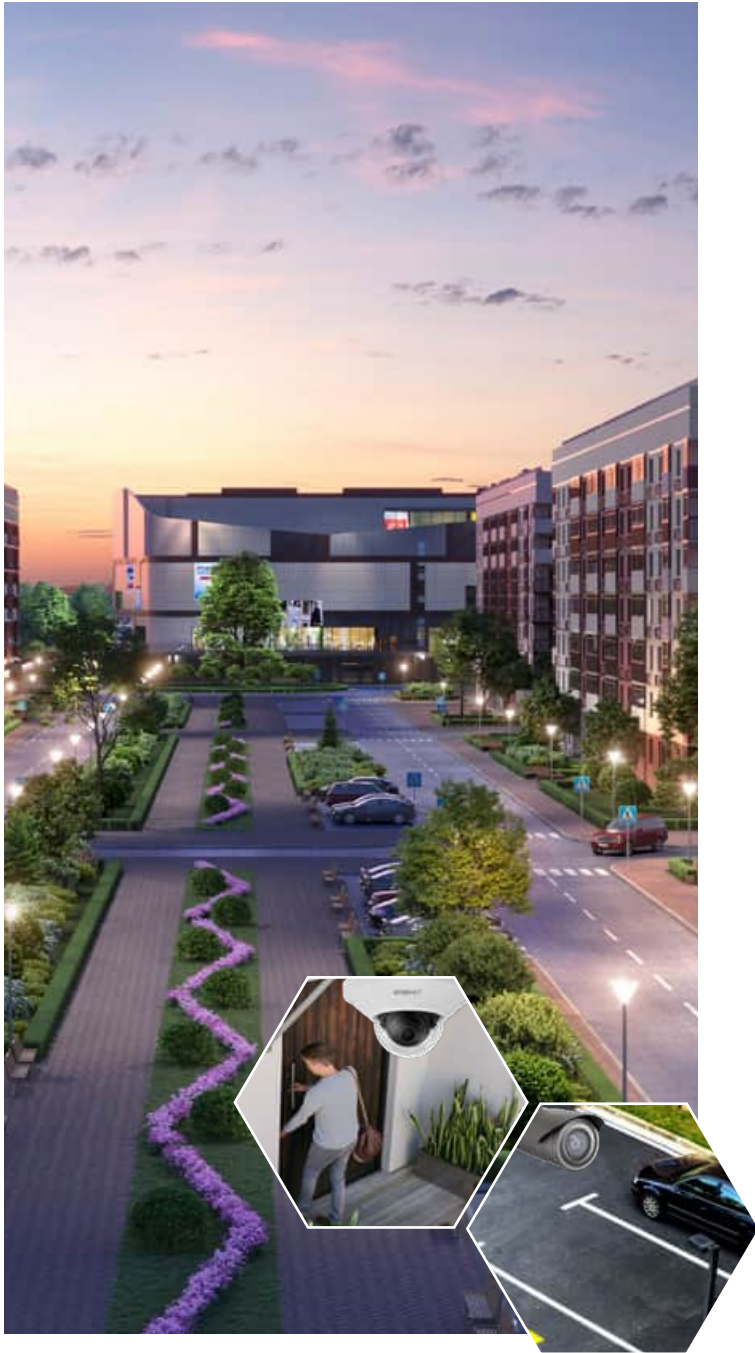
- **'Hallway View'** provide a highly effective way to monitor narrow vertical areas such as corridors as it enables cameras, which can generate images in the 9:16 x 3:4 aspect ratio, to work effectively in tall and narrow spaces.
- **World's best 150dB Wide Dynamic Range (WDR)** to accurately produce images in difficult lighting conditions, such as scenes that simultaneously contain contrasting bright and dark areas.
- **IR technology** which projects infrared light up to 10 metres at a higher wavelength than traditional red glowing IR lighting. This is invisible to the human eye and avoids the risk of disturbing those sleeping in secure rooms.
- **Bi-spectrum AI cameras** are ideal day & night providing rapid thermal detection – even in total darkness– combined with visual identification.
- **Touchless network intercom** with multiple applications from help point to access control.

Analytics for early detection of potential and real incidents

- **Audio detection** may be used as an alarm in order to identify urgent situation, such as the sound of fighting, screaming, slamming doors or gunshots. The audio does not need to be recorded, but it is intended to trigger an alarm. The audio feature can also be disabled.
- **Built-in suite of analytics** for early detection of potential and real incidents. These include tampering, loitering, directional detection, defocus detection, fog detection, virtual line, enter/exit, appear / disappear, audio detection, face detection, motion detection, and sound classification.
- **Built-in microphone and audio support** to facilitate two-way communication.
- **Coming soon**: Face blurring in real time.

Residential Solutions

Solutions for increasingly complex developments

The modern residential market has evolved to include mixed use developments combining residential and commercial premises to maximise value and optimise use of space.

Mixed-use projects attract a diverse community with users such as residents, but also customers, and visitors who all have different expectations that require to be managed and prioritised.

At Hanwha Vision we understand that there is no one size fits all and can offer solutions and products that are scalable for small to large scale Multi Dwelling Unit projects, from cameras to network video recorders, ANPR, intelligent analytics, intercom, multiple viewing platforms and recording solutions.

Highlights

- **Extensive camera range** – to suit residential and commercial tenants' needs and budget.
- **Reduce your infrastructure** – with our series of embedded ethernet ports NVRs and PoE extender cameras.
- **Control of your system with multiple viewing solutions** – simple-to-use workstation interfaces as well as smartphone access.
- **Intelligent analytics** – On-camera embedded data, video and audio analytics.
- **Privacy matters** – area masking and video export with face blurring.
- **We move with Trust** – Confidence in the brand with 5 year warranty.

Versatile cameras

Our camera series are designed to meet all size projects and budgets, offering essential features such as vandal and weather proof housings, varifocal lenses, various megapixel resolutions delivering sharp and clear image quality, as well all as advanced features such as video and audio analytics.

- **Optimise your coverage** – from fisheye to multi-sensor cameras reducing the number of conventional cameras required
- **Clarity and detail** – From dark to bright scenes
- **Power options** – connect to conventional power source or use network PoE
- **Bespoke colour finish** – cameras can be professionally sprayed to colour blend with any surface
- **Intelligent analytics** – On-camera embedded video and audio analytics
- **Improved bandwidth and storage** – WiseStream II combined with H.265 compression optimises remote streaming over broadband and reduces storage file size saving on hard disk drives
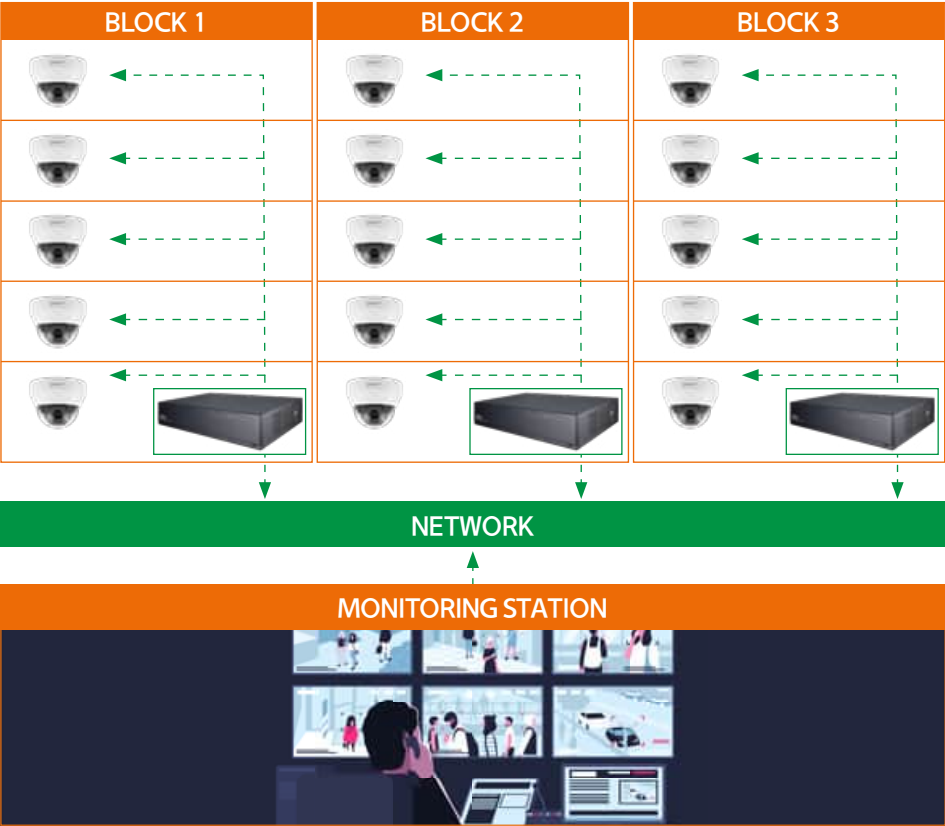
Video recording

Hanhwa Vision can offer multiple storage solutions whether it's for decentralised installations using multiple NVRs strategically placed in a secure space of each building block or centralised using high density storage servers in a single location.

NVRs key features:

- **Plug & play PoE ports** - no need for dedicated network switch
- **Multiple channel configuration** - available in 8/16/32/64
- **Flexible hard drive storage** - with multi-bay configuration
- **Local monitoring** - over HDMI / VGA ports
- **Secure access** - encrypted IP connection and multiple user and permission configuration
- **Smart viewing** - Mobile and PC

Super Compact Mini Domes	Standard Domes	Fisheye Cameras
Discreet surveillance and lifts	For general internal and external installations	Ideal for large area 360 degree coverage with a single camera

Vandal Domes	PTZ Cameras	Bullet Cameras
For general internal and external installations	For perimeter monitoring	For external and directional installations

BLOCK 1	BLOCK 2	BLOCK 3

NETWORK

MONITORING STATION

SOLUTIONS

Existing installation?

Moving away from legacy analogue cameras can be a headache due to budget or other complex issues. Pentabrid recorders are designed to enable a quick, seamless and cost-effective migration to an IP network based video surveillance solution.

POWERFUL TOGETHER

Our PoE Extender Cameras power each other, so there's no need for multiple power sources.

Reduce your infrastructure requirements with PoE Extender Cameras

PoE extender cameras offer a cost-effective way to add a camera to an existing system or install a new two camera video surveillance solution. By utilising loop in and out Ethernet connectivity, network switch port allocation is reduced and network cabling requirements are minimised, overall benefiting faster installation time and reducing end-user disruption.

- CCTV Camera system: Pair up PoE Extender camera with another camera.
- CCTV Camera system with IoT device: Pair PoE Extender camera with another device such as Wi-Fi APs, speakers, input/output modules.

Smart Video Management System

Wisenet WAVE VMS is most powerful yet light and simple with an emphasis on simplified user experience. It uses unique adaptive scaling technology which dynamically switches between the high resolution and low resolution images depending on the CPU usage of the client PC. It is an endlessly customizable IP Video Management platform that gives users the ability to create tailored networked video solutions for any type of project, for use by anyone, on any device.

- **Intuitive and User Friendly** -drag and drop, unlimited number of layouts and resizing
- **Smart search** - based on video motion and analytics
- **Multi platform support** - desktops, mobile devices, servers, and low-powered embedded devices
- **Support for wide range of operating systems** - Windows, Linux, Apple macOS, Apple iOS and Google Android
- **WAVE Sync** - A cloud-based service which can be remotely accessed
- **Resilient** - Automatic failover & scheduled or real-time archive backup
- **Server Health Monitoring** - real-time dashboard and alerts
- **Open platform & Integrations** - Access to all of our API's and supporting documents

Intelligent audio and video analytics

Our analytics, included on board many cameras, help users to respond immediately in dangerous situations, by classifying sounds such as gunshots, breaking glass, screams and explosions.

- **Lost** detect objects which appear to have been abandoned in public areas
- **Loitering** detect suspicious behaviour of people remaining for longer than a pre-configured period of time
- **Intrusion detection** in forbidden areas and crossing virtual lines detection
- **Smoke & fire detection** - increase your chance of early detection

Gunshot   Glass breakage   Scream   Explosion

Retail Solutions

Business intelligence for retail efficiency

In traditional retail businesses, the most important objective has always been to provide goods and services which match consumers' demands and at a reasonable price. The main role of security cameras has been to combat the activities of shoplifters and to detect fraud.

In a tough economic environment, retailers are now looking to achieve much more from their video surveillance systems, including the ability to gain a greater understanding of customer buying behaviour, the effectiveness of marketing campaigns and product positioning, and to ensure customer satisfaction.

Hanwha Vision's retail solutions not only meet the basic requirements of safety and security, but also provide the necessary intelligence data for businesses to thrive, such as consumers' store traffic through heatmap and footfall counting.

Highlights

Specialised for retail and integrated surveillance

- Effective options include 360° fisheye models which can reduce the number of cameras required and the choice of a wide range of feature-rich but affordable fixed and PTZ cameras.
- Cameras with high-resolution and WDR for loss prevention and real-time evidence.
- Efficient centralized management and mobile monitoring.
- Height strip cameras to covertly capture people, whilst establishing their approximate height
- Public View Monitors with built-in camera to deter fraudsters and shoplifters

Analytics for business intelligence

- Store management using built-in analytics: people counting and heatmap.
- Age & gender analytics, to help retailers understand who their customers really are.
- Better customer service with checkout queue management.
- Deep insight gathering and dashboards from BI Solution.
- Occupancy monitoring application, to help control the number of people on premises.
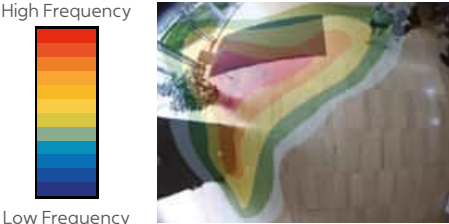
Licence-free Analytics

Gain deeper insights into your store's performance by creating customised analytics zones and event-based alarms. Hanwha Vision includes licence-free business, video, and audio analytics on many of its IP camera products.
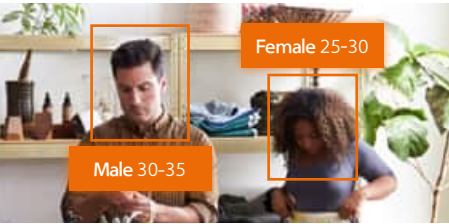
Edge Based Retail Analytics

People counting & occupancy monitoring - Provides statistical information based on individuals detected entering or exiting pre-defined areas.

Heat Map - Evaluates retail traffic based on visitor density and length of stay.

High Frequency

Low Frequency

Queue Management - Alleviates long check-out lines by alerting staff when customers are waiting for longer than user-defined amounts of time.

Age/Gender Analytics - Compare gender and age statistics across locations/times of day. Retailers can target marketing efforts at the demographic segments likely to visit in certain areas and at certain times.

Female 25-30
Male 30-35

Face Mask detection - Control adherence to health & safety measures.

Social distancing monitoring - Helping ensure a safe distance between people is being respected.

Intelligent Video Analytics

Face detection - Identifies key facial features and issues alerts when a face is present.

Intrusion detection - Triggers an event when movement is detected in a designated virtual zone.

Virtual line crossing detection - Triggers an alarm when objects are detected crossing a pre-defined virtual line or perimeter.

Appear/disappear detection - Detects the appearance or disappearance of an item in a designated virtual zone.

Loitering detection - Triggers an event when an object enters and rests in a designated virtual zone.

Enter/exit detection - Detection of objects entering or exiting a designated area.

Intelligent Audio Analytics

Audio analytics - Detects and identifies the sound of explosions, gunshots, screams, and breaking glass.

Camera features and analytics vary by model

SOLUTIONS

Store floor and warehouse area

A safe store for customers and staff, and a secure store for in-store property

- Hanwha Vision's retail solution provides cost-effective monitoring using 360° fish-eye camera and low-cost cameras.
- A more sophisticated surveillance solution is possible, thanks to video analytics, sound classification and 4K high-res cameras.
- It also comes with the option of Wisenet WAVE video management software (VMS) which centrally controls and monitors multiple cameras and devices installed within a store. WAVE is supported by a mobile App which allows loss prevention managers to remotely monitor activity or retrieve recorded footage of any criminal activity.
- ANPR cameras can alert operators of any unauthorised vehicles parked in loading bays.

Entrance, service counter and display stand

Helping retailers to be more effective and profitable by analysing data experience from the customers' perspective

- **Using people counting**, retailers are able to take advantage of the captured data to measure the impact of advertising, on-line promotions and other marketing activities on the number of people who enter their stores, and compare the sales performance of one store to one or more of their other stores.
- **Queue management** monitors the time customers have to wait in line and helps store managers improve customer experience, whilst making best use of human resources.
- **Heatmap analytics** provides visual data to identify which parts of a store are busiest, and help store managers and merchandisers to make profitable decisions on product placements.
- As well as helping to deter and detect shoplifters, **public view monitor cameras** are able to produce an analysis of the age and gender of store visitors.
- **Pinhole height strip cameras** offer users the opportunity to covertly capture an image of a person's face, and when used in conjunction with another camera, establish the approximate height of the person.
- In all of these functions, you can search for specific data and download reports, and using the BI Solution as a separate software application, you can also collect data from multiple stores as well as combine with other retail solutions.
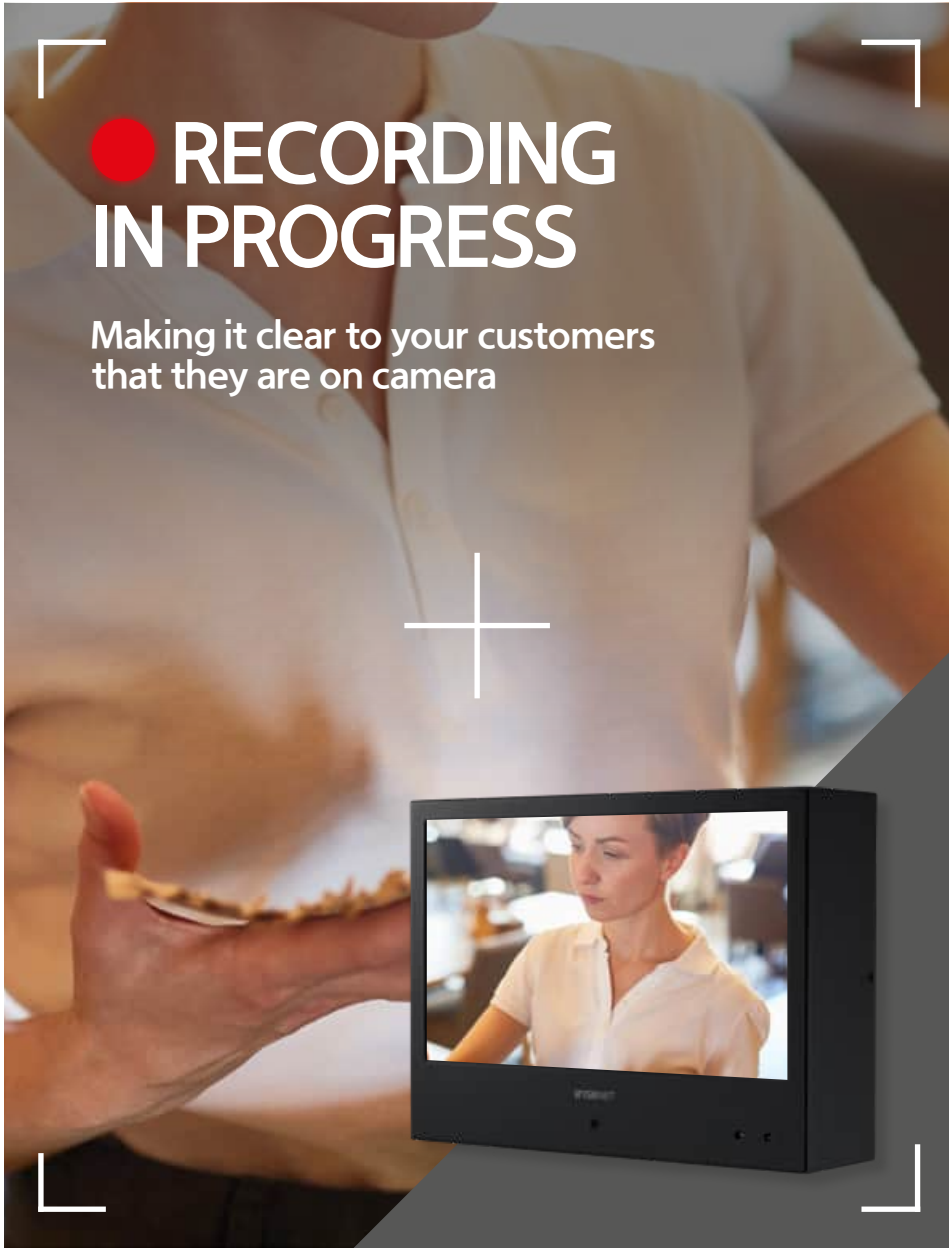
Related offerings

- Fisheye, Q mini cameras
- Height strip cameras
- VGA and QVGA cameras
- NVRs
- Touchless network intercom
- Wisenet WAVE
- People Counting
- Queue management

- Heatmap
- Occupancy evaluation
- Gender & age estimation
- Sound analytics
- Retail intelligence dashboards
- POS integration
- Parking solutions

Coming soon!

- Face recognition cameras
- Audio Management System

Public View Monitors

●RECORDING IN PROGRESS

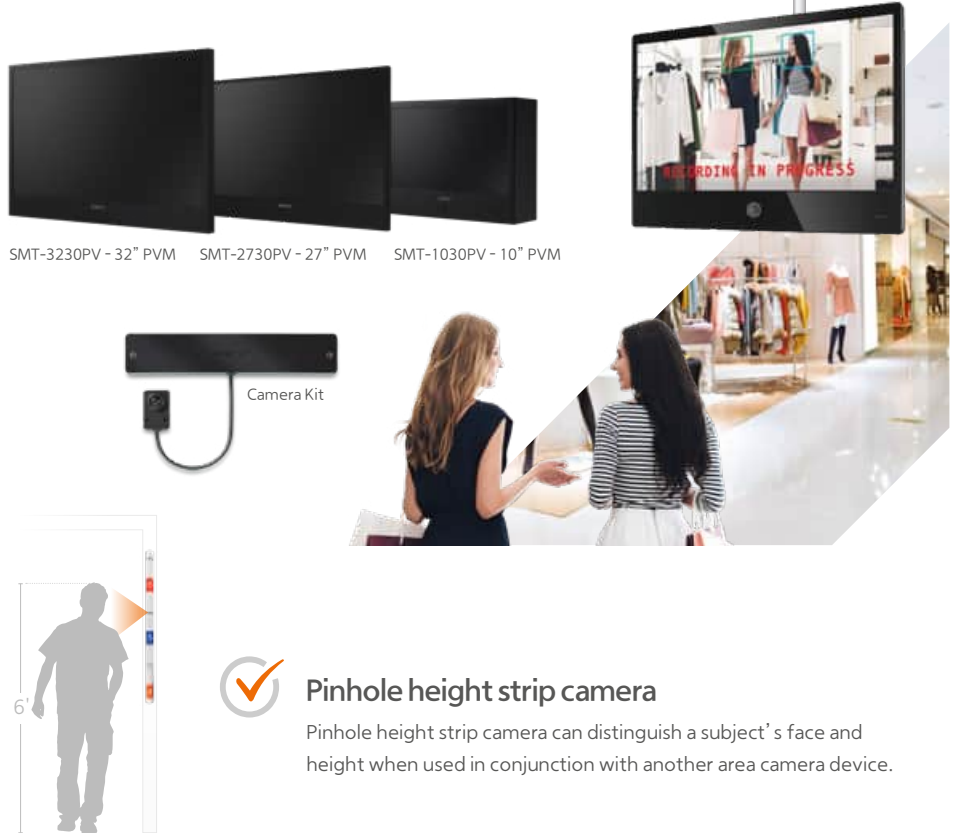**Making it clear to your customers that they are on camera**

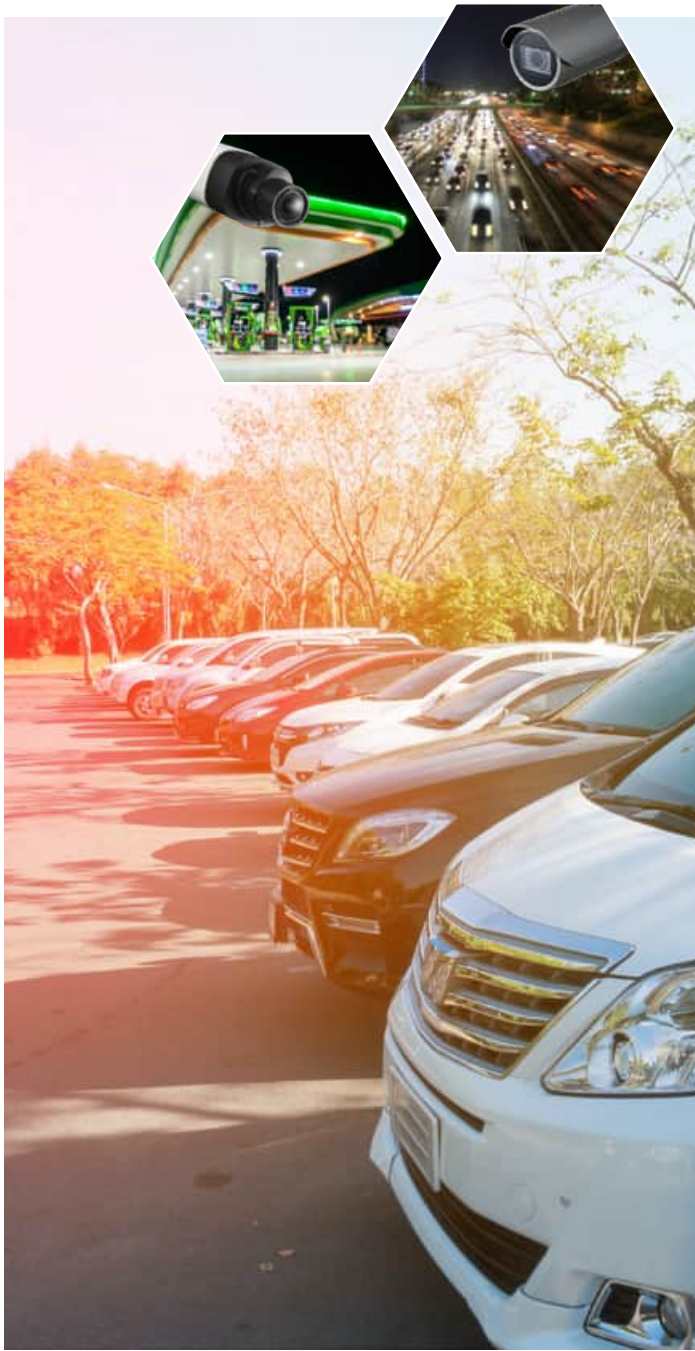## Specialty Devices and Camera Kits for Retail Environments

Hanwha Vision's specialty devices include discreet camera housings and kits that fit any retail environment. They integrate easily with our public view monitors to provide an active crime deterrent and generate real-time visual evidence of theft or fraud.

Public View Monitors and Camera Kits

Hanwha Vision public view monitors and camera kits assist in actively deterring retail crime while providing business data and intelligence. Overt on-screen analytics such as face and motion detection are overlaid on top of surveillance video from a discreetly mounted 2MP IP camera. Other options include customised on-screen messaging to indicate a recording is in progress or to display advertising banners.

- ☑ Face detection display for visual deterrent
- ☑ Customisable text overlays (PVM monitors only)

SMT-3230PV - 32" PVM   SMT-2730PV - 27" PVM   SMT-1030PV - 10" PVM

Camera Kit

☑ Pinhole height strip camera

Pinhole height strip camera can distinguish a subject's face and height when used in conjunction with another area camera device.

Traffic Management Solutions

Video surveillance and analytics technology combine to keep traffic on the move

With ever increasing numbers of vehicles causing congestion within city centres and on motorways, authorities are under increasing pressure to keep traffic on the move, by reacting quickly and effectively to any traffic incidents as well as anticipating when traffic jams might occur. Intelligent video analytics are key in delivering this vision of the Smart City.

Highlights

- Monitor roadways, including traffic density, traffic speed and average travel time.
- Early detection of incidents to keep people safe as well as keep traffic on the move.
- Detect events simultaneously on independent zones, from traffic slowing down, to vehicles broken down or illegally stopped, wrong way drivers and a multitude of other possible scenarios.
- Collect statistical data to assist infrastructure planning, and road safety.

Automatic Incident Detection (AID)

The a2-VCA Automatic Incident Detection system is a server-based video analytics safety transportation solution that can reliably and instantly detect incidents and events in traffic flow on critical infrastructure such as roads, highways, tunnels by processing live images taken from cameras in real time, and warn operators through audible and visual alarms.

The solution provides a clear event list, video wall live streams as well as statistics offering additional insights into event patterns, types of vehicle and counting.

The a2-VCA Automatic Incident Detection system integrates with 3rd party systems such as building management systems using a SCADA control system architecture.

The a2-VCA Automatic Incident Detection system has the ability to detect events simultaneously on independent zones, including:

- Traffic slowing down or congestion
- A wrong way driver
- A pedestrian in danger
- Illegally stopped or broken down vehicle
- Lane violation
- Smoke or low visibility
- Lost Cargo

and to collect statistical data such as:

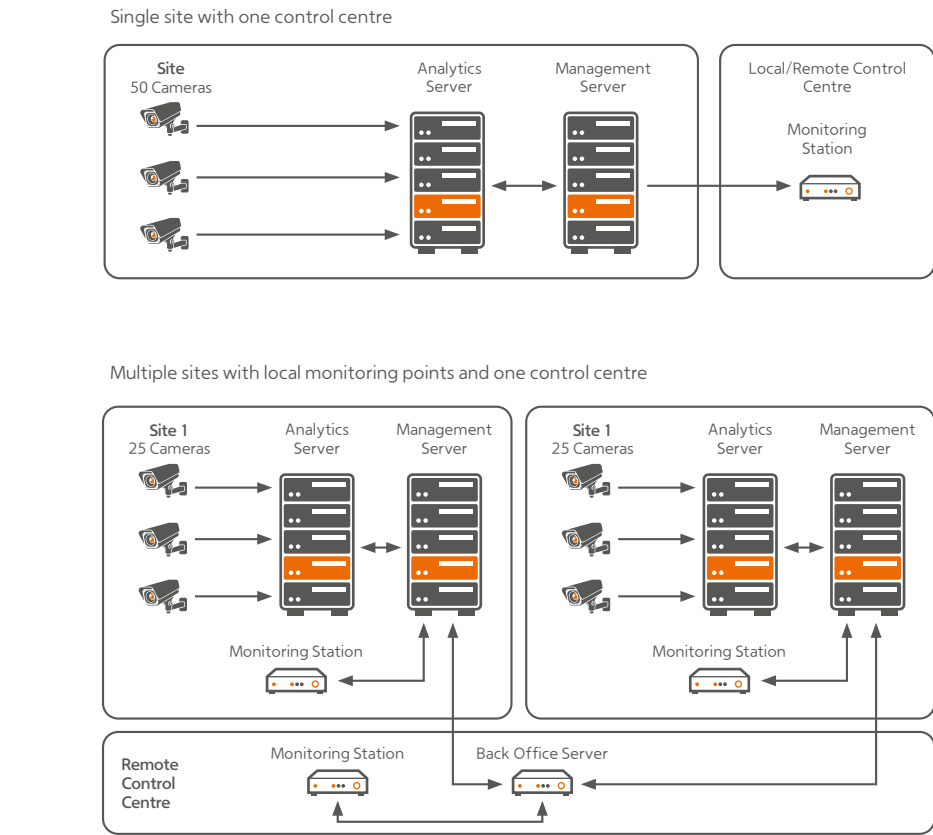- Counting and classification
- Average speed
- Traffic density
- Travel time

Central Management System

a2-Backoffice is a server-based solution that allows local monitoring and provides a centralised view of all remotely connected live systems.

Single site with one control centre

Multiple sites with local monitoring points and one control centre

Accurate Solution

With advanced Artificial Intelligence and Deep Learning–based analytics, the detection and classification features offer a high level of accuracy.

All detection and analysis models are trained with original datasets collected from real application points.
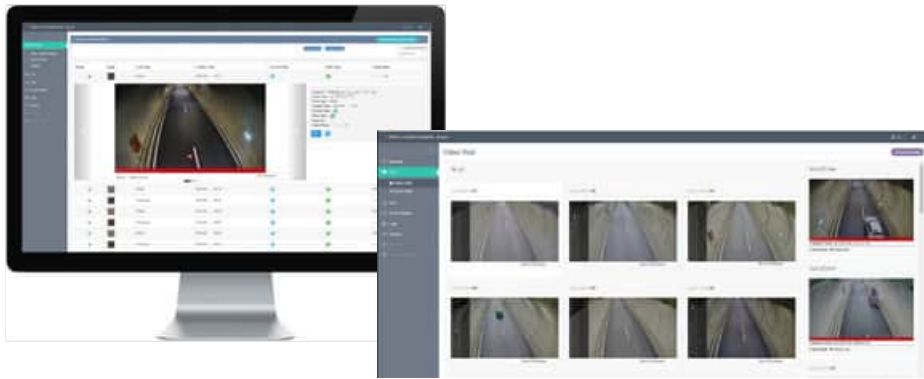
Analytics	Detection Accuracy (%)	Detection Time (sn)
Stopped Vehicle	>95	<10
Wrong Way	>95	<10
Pedestrian	>95	<10
Debris	>95	<20
Smoke	>95	<20
Lane Violation	>95	<10
Sudden Speed Drop	>95	<10
Slow Vehicle	>95	<10

Web Dashboard Interface

A light dashboard that can be used locally and remotely to access the AID system.

- Live cameras and alarms
- Search and filter alarms
- Graphical representation of statistics
- Download reports
- Control user access permissions
- Camera health

Congestion   Wrong Way

Pedestrian   Stopped Vehicle

Integration with WAVE

Alarm events into Wisenet WAVE VMS

Road AI

Intelligent edge-based ANPR with Make, Model & Colour Recognition (MMCR)

Highlights:

- All in one solution with ANPR, MMCR and vehicle classification analytics, pre-installed and licenced
- Smart search (number plate, country, make, model, colour)
- Vehicle type recognition: car, van, SUV, LCV, truck, bus, motorcycle
- 70+ brands recognised, 600+ models
- Access control and licence plate list management for stop and go installations such as car parks
- Supports VMS integrations
- IR Illuminators, ideal when used in combination with ROAD AI box type cameras to illuminate the scene and enable a number plate to be read

MAKE
MODEL
COLOUR
TYPE
NBR PLATE

Transport Solutions

A new level of passenger and staff security

Public transport operators constantly face challenges as they strive to create positive passenger experience through safe and clean stations/vehicles, and as they ensure the systems continue to run safely, efficiently, and on-time during the usual commute or in extreme conditions.

Most often, these challenges arise from "blind spots" with limited or inadequate visibility. For proactive, budget-conscious transport operators and security leaders, visibility is critical to identify what is working, and what is not. To secure a sound level of visibility, they look to the world-class features of Hanwha Vision's video surveillance solutions: cost-effective, high performance, and efficient infrastructure that provides the necessary visibility for any operations or areas including passengers and even trackside.

To deliver satisfactory user experience, all equipment must be built to last - and so must the company that provides them. Hanwha Vision, a manufacturer of lifecycle-ready solutions, stands behind a full lifecycle of the equipment, and promises to serve in all future phases.

Highlights

- Transportation-specific standards acquired.
- EN 50155 and EN 50121-x compliant.
- i-STORE Certificate of Acceptance issued by Network Rail.
- Face Mask Detection solution, to help you comply with COVID-19 related safety measures.

- End-to-end solution of cameras, storage devices, and VMS.
- Object detection and classification with AI cameras for suspicious activity on rail tracks and to alert authorities.

Onboard Solutions

- Many of our network cameras and video recorders are EN 50155 and EN 50121-x compliant, and with the ability to withstand vibrations and meet EMC requirements, are specially designed for onboard security.
- PoE switches are embedded in our network video recorders make your onboard security system installations simpler, whilst a M12 camera connector will make the system more stable against vibrations.

High visibility of passengers inside the carriage under various lighting conditions

- High performance WDR and multi-megapixel image resolution ensure clear images will be captured inside trains, even when there is intense sunlight or artificial light backlighting.
- High resolution fisheye cameras eliminate blind spots and normally reduce the number of cameras required for each train carriage.

Face Mask Detection

Wearing a face covering has become compulsory in many public places to help prevent the spread of COVID-19. Our Face Mask Detection Applications uses innovative video analytics to detect if a person entering an area is not wearing a mask. This will trigger the playing of a customisable audio message such as 'please wear a face mask'.

Social Distancing

Our Social Distance Measuring Application is able to accurately measure the distance between people in a camera's field of view and will generate an alarm if social distancing rules are not being complied with. Compatible with all cameras, the application offers a highly effective social distancing implementation tool for public transport environments where crowds need to be monitored and managed.

Station areas and platforms: monitor passenger safety

The ability to monitor passengers and identify abnormal behaviour is enhanced by capturing the faces of offenders which can be used as evidence in cases of violence, gate jumping and theft at ticketing areas and barriers.

- With up to 150dB outstanding WDR performance and true day/night capabilities, our cameras are able to capture images of suspicious activity in great detail even under the most challenging light conditions.
- High resolution cameras provide stream clear images of station platforms under various light conditions.
- Gain important situational awareness even in low light with fewer cameras by using the 5MP 360° camera.

Monitoring passenger safety at all hours and detecting unauthorised access to restricted areas.

- Camera view for operator to monitor platform area for safety when loading and unloading passengers.
- Call boxes, help points, or sensors trigger live alert for a timely response.
- Embedded video analytics can detect when a person enters a restricted zone within a station and generate an alert to a central control room, as well as trigger a PTZ camera to move to a pre-defined position.
- AI auto-tracking allows control room operators to efficiently monitor the movement of objects whilst remaining hands-free to control other cameras. With a right-click of a mouse, operators can programme a camera to lock onto and auto-track a specific object.
- Virtual Line analytics offer the potential to save lives by detecting people crossing train tracks
- Embedded video analytics can be used for detecting unexpected and dangerous situations such as overcrowding or objects left behind.
- Cameras can be positioned at level crossings to improve safety and catch motorists jumping the red light.
- Intelligent video analytics can help monitor public spaces in a COVID-19 affected world, ensuring safety measures are being followed from social distancing to the requirement to wear a mask.
- Touchless network intercom with multiple applications from help point for queries and emergencies to access control or seamless communication with a control room.

Depots: property protection and management

Vandalism and theft of plant, machinery and tools are unfortunately a regular costly occurrence. All assets and areas can be secured with the help of 24/7 remote monitoring, with long-range IR PTZs used to efficiently cover large areas.

- 55x zoom IR outdoor PTZ cameras will help you to clearly identify a suspicious person from 350m away even at night, tracking the person automatically.
- IR correction technology provides clear images even when both IR and visible light are present.
- 5 megapixel IR vandal dome and IR bullet cameras will help provide 24/7 security by capturing superb quality of monitored areas.
- In addition to embedded IR illumination on cameras, a high performing WDR function enables you to observe your depot and yards under the most challenging and changing lighting conditions.
- The cutting edge H.265 codec reduces video bandwidth significantly compared to traditional technology used to minimise bandwidth and storage requirements.

Related offerings

- Multi-directional cameras
- IR Bullet cameras
- Thermal cameras
- Video wall decoder for control rooms
- Industrial–grade PoE injectors for harsh environments, including rail
- Occupancy monitoring
- Fall detection
- Abandoned/removed objects detection
- Pedestrian Detection
- Loitering Detection
- **Coming soon**: Audio Management System

Health Solutions

Keeping healthcare professionals, patients and visitors safe

Hospitals are regarded amongst the most dangerous places to work, with doctors, nurses and administration staff being verbally abused and physically intimidated on a regular basis.

Whilst providing a highly valuable and cost-effective tool to help reduce violence, theft and vandalism, video surveillance solutions can also be used for many other purposes such as finding a confused elderly patient or to investigate a health & safety issue.

In a COVID-19 affected world, Face Mask Detection and licence-free Occupancy Monitoring applications, which run onboard selected cameras, will help hospitals, surgeries, care homes and other healthcare environments to implement the required safety measures.

Highlights

- A single 360 degree camera is all that is required to efficiently cover a large area such as an A&E department, where a much larger number of standard cameras might normally be required.
- Intelligent video analytics suites incorporated into cameras include object appear/disappear detection to help protect valuable equipment.
- Anti-ligature cameras and accessories
- Multi-directional and super high-resolution cameras provide wide area coverage of visitor car parks.
- Privacy masking functionality of cameras allow all areas of a hospital to be monitored whilst respecting patients' privacy.

- Licence-free Occupancy Monitoring application supported by selected P AI cameras provide highly accurate data on the number of patients, staff and visitors who are in an area at the same time. 'Wait' or 'enter' messages are displayed on a monitor to control the number of people on premises, and to help comply with social distancing rules.
- Face Mask Detection application running onboard X Series cameras trigger the playing of customisable audio messages when a person not wearing a face mask enters an area.
- Touchless network intercom with multiple applications from help point to access control.

Infection Control Solutions

AI-based intelligent solutions

While vaccines have been successful in decreasing the pressures on health services caused by COVID–19, body temperature detection, social distancing and other safety requirements remain effective ways of controlling and preventing infections.

Unfortunately, the cost of employing additional staff to control the number of people on-premises or check that masks are being worn can be prohibitive. The good news is that there are simple solutions readily available which can be quickly deployed and will prove to be far more cost-effective and accurate than employing someone to do the same job.

Face Mask Detection Application

Helping to enforce health & safety measures

Benefits

- Detect individuals not wearing or incorrectly wearing a face mask on premises
- Control adherence to health and safety requirements
- Audio messages can be delivered automatically to staff/ visitors requesting them to wear a mask
- Highly accurate mask detection solution, not affected by hat, glasses or head scarf
- Simple to set up and use
- Cost-effective solution, no server required, flexible and scalable-Detect individuals not wearing or incorrectly wearing a face mask on premises
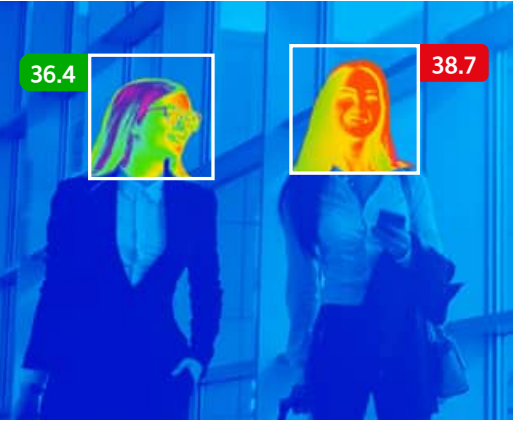

Thermal Body Temperature Detection

Discreetly check body temperatures to prevent potential exposure risks

Benefits

- Measures body temperature with a very high degree of accuracy whilst providing visual verification of people within its field of view
- When an above-normal temperature is detected, an alarm notifies operators so the identified person can be discreetly managed
- Measures the temperatures of up to 10 people in real time at a distance of up to 3m
- The cameras' edge-based AI algorithm ignores non-human heat sources to reduce the frequency of false alarms
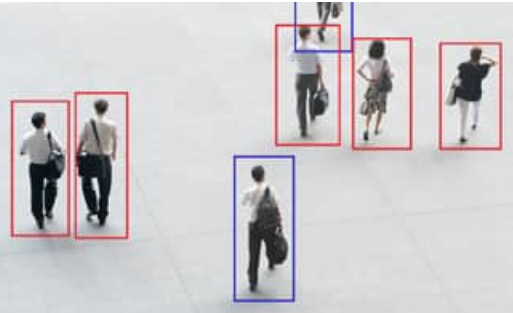

Social Distance Measuring Application

Helping ensure a safe distance between people is being respected

Benefits

- Measure the distance between people in a camera's field of view
- Raise an alert when social distancing rules are not being followed
- Highly accurate, based on AI Deep Learning
- Raise an alarm when the number of people in a specified area exceeds the pre-set limit
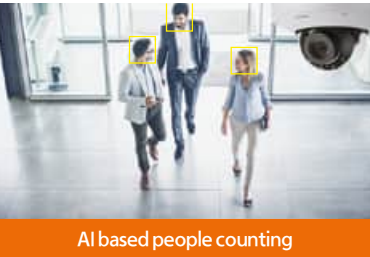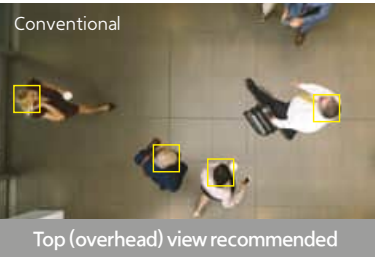- Works with any camera

Occupancy Monitoring Application

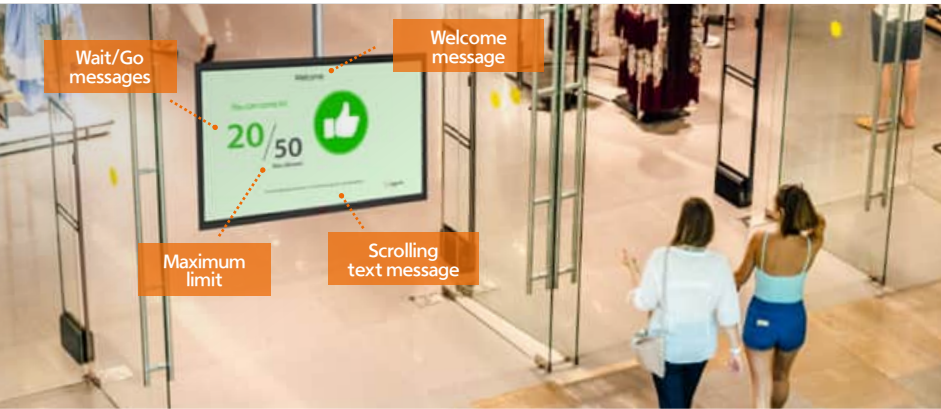### Helping businesses to comply with social distancing rules

Benefits

- Control the number of people on premises, from stores to buildings and waiting rooms
- Help comply with social distancing rules
- Give customers a clear message instructing them to enter or wait
- Supports multiple entrances and exits
- Highly accurate people counting solution
- Easy to set up, serverless yet scalable

No need for "top-view" mounting

Conventional

Top (overhead) view recommended

AI based people counting

Customisable interface

Wait/Go messages

Welcome message

20/50

Maximum limit

Scrolling text message

Education Solutions

Creating a safe and secure learning environment

Burglary, vandalism, bullying, drug dealing, damage to cars, theft of PCs, scientific equipment and other valuable capital equipment. Sadly, the list of crimes which can, and do, occur regularly in educational establishments seems to be almost endless.

Feature rich cameras equipped with the very latest advances in technology such as intelligent video analytics provide a valuable tool to help create a safe and secure environment for staff and students, identify suspects and protect staff against any false accusations. At night and during the school holidays, live or recorded images can be remotely viewed by head teachers, facilities managers or other authorised staff members, via a PC, smart phone or tablet device.

Highlights

- Products and solutions for every project size and budget
- Reduce your network switch infrastructure - with our series of embedded ethernet ports NVRs
- PoE extender cameras offer a cost-effective way to add a camera to an existing system or install a new two camera video surveillance solution. By sharing loop in and out Ethernet connectivity, cabling requirements and installation time are reduced and end-user disruption is minimised.
- 55x optical zoom cameras enable operators to view close up detail of any bullying incidents or anti-social behaviour.
- Multi-directional and super high-resolution cameras provide wide area coverage of playgrounds, sports fields and car parks.
- Specialist video analytics running onboard high definition cameras detect intruders.
- Loitering video analytics can help detect suspicious activity.

- Wisenet WAVE video management software makes it extremely easy to retrieve recorded video evidence and, if necessary, pass onto police.
- Licence-free Occupancy Monitoring application supported by selected P Series AI cameras provide highly accurate data on the number of students, staff and visitors who are in an area at the same time. 'Wait' or 'enter' messages are displayed on a monitor to control the number of people on premises, and to help comply with social distancing rules.
- Face Mask Detection application running onboard X Series cameras trigger the playing of customisable audio messages when a person not wearing a face mask enters an area.
- Touchless network intercom with multiple applications from help point to access control.

Wisenet WAVE v5
Open video platform

Intuitive and easy to use

- An intuitive 'drag & drop' tool makes it extremely easy for operators to set up a display of live and recorded images on a single screen or video wall, with customisable layouts and sizes.
- A virtual PTZ which, with just simple clicks of a mouse, enables operators to zoom in to see close up detail of any suspicious activity.

- Motion detection and video analytics support can be configured to generate alerts when user defined incidents occur.
- A wide range of smart, keyword, calendar and time-slice search options facilitate rapid retrieval of recorded video.
- Perpetual licence, no recurring fees.

Hanwha Vision offers an entry level VMS called SSM and for sophisticated Enterprise level VMS projects, the company integrates with leading technology partners. Wisenet WAVE has been launched to answer the needs of projects in the middle ground with an emphasis on simplified user experience.

SUNAPI INTEGRATION

Hanwha Vision has launched Wisenet WAVE with full SUNAPI integration for cameras and recorders.

Full SUNAPI driver has been rigorously tested with P, X, and Q series cameras resulting in:

- Video / Audio Streaming
- PTZ / AI cameras/ Network Intercom (TID-600)/ Parking Guidance Camera (TNF-9010)

- Event - MD, Alarm
- Edge recording

Hanwha Vision specific features NVR monitoring, search & playback; and deep camera integration with:

- Advanced Object Search
- Web Page Proxy via Servers
- Two-Factor Authentication (2FA)
- Resource Grouping
- Audio Mapping
- Desktop Client Automatic Updates

- Encrypted Archives
- Server Web Admin Interface Redesign
- More Secured Connections

An operating system to suit your needs.

Wisenet WAVE has applications for all major operating systems so our users are not limited by what device or operating system they choose to use on their desktops, mobile devices, rack mount servers, or even low-powered embedded devices.

Cloud	Desktop	Mobile	Server
A cloud-based service that enables simple, centralised remote access and insight into any Wisenet WAVE system.	A rich media player designed to view and manage a single Wisenet WAVE system from a desktop or laptop PC.	A mobile app designed for viewing Wisenet WAVE system video and events while on-the-go.	A media server responsible for discovering, connecting to, and managing system devices and data.

Supported Browsers	Desktop OS Support	Mobile OS Support	Server OS Support
Google Chrome	Microsoft Windows	Google Android	Microsoft Windows
Mozilla Firefox	Ubuntu Linux	Apple iOS	Ubuntu Linux
Opera/Opera Neon	Apple / Mac OSX		
Microsoft Edge			
Apple Safari			

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