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 the smart city vision.

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)

Our Automatic Incident Detection solution is an edge-based application available in Hanwha Vision high-definition Bi-Spectrum Thermal cameras.
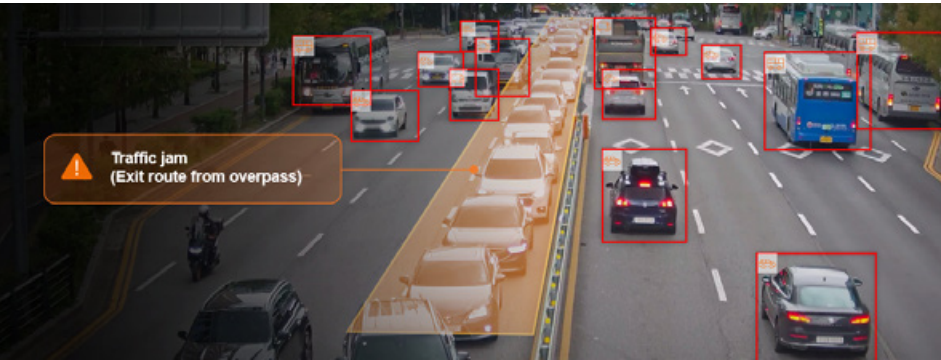
The AID solution can reliably detect incidents and events in traffic flow on critical transport infrastructure such as roads, highways, tunnels and intersections.

Edge-based AID generates an alert when traffic incidents occur, as well as providing reliable traffic flow data. All information is then delivered via an intuitive web user interface for easy accessibility.

Accurate AI-based object detection

The Bi-Spectrum AI cameras are ideal for traffic monitoring with accurate object detection and classification including person, vehicle (car/truck/bus/bicycle/motorcycle) and licence plate.

Intelligent Analytics

Intelligent traffic video analytics on-board the cameras include:

- Stopped vehicle.
- Wrong direction.
- Traffic jam detection.
- Vehicle counting.

VMS Integration:

- WAVE
- Genetec*
- Milestone*

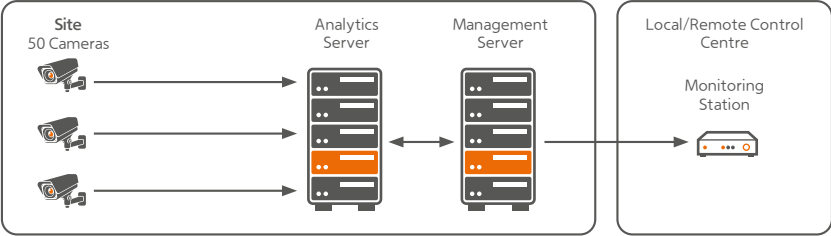*Metadata available with licence-free Hanwha Vision AI Plug-in
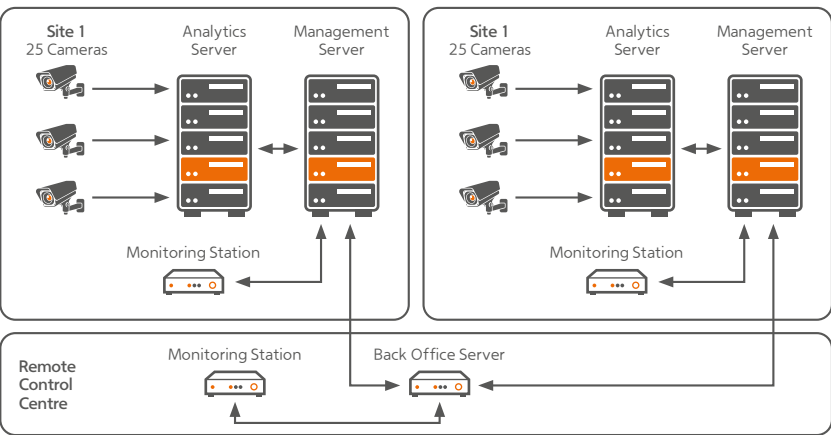
Server based AID with central management (a2)

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

In addition, a2–Backoffice Central Management System monitors and manages multiple tunnels. Users are able to reach different tunnels from a single interface.

Single site with one control centre

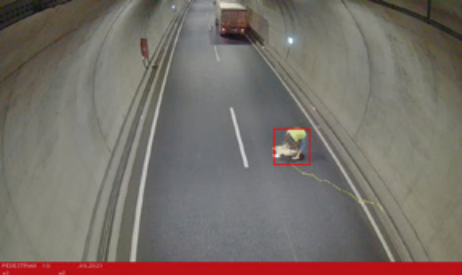Multiple sites with local monitoring points and one control centre

Congestion

Wrong Way
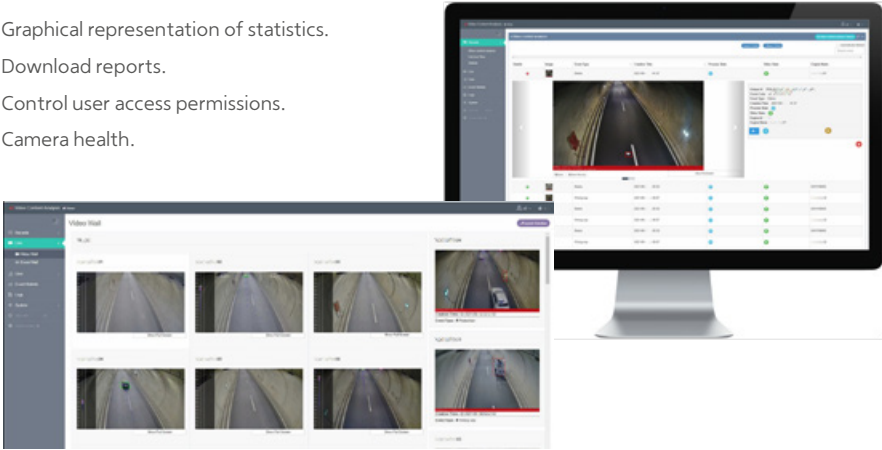

Pedestrian

Stopped Vehicle

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.

RoadWatch

Edge based ANPR solution ideal for urban traffic

RoadWatch is pre–loaded on six specially selected X series cameras, allowing for a quick and easy deployment with the licence already activated. Roadwatch is also available as a separate application offering compatibility with a wider range of X series cameras.

The solution has been developed in partnership with FF Group and is a further extension of Hanwha Vision's edge based ANPR solutions.

- Covers one lane of traffic travelling up to 55 mph and 30m IR.
- Configurable direction detection that comes with two recognition zones.
- List management triggers specific reactions for vehicles identified on each list.

Road AI

Intelligent edge based ANPR with Make, Model and 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.