



**THE WORLD OF
TRAFFIC VIDEO DETECTION**

DIRECTED BY TRAFICON

THE WORLD OF TRAFFIC VIDEO DETECTION

A TRAFICON FILM

MAIN MENU

EPISODE I: SMOOTH DRIVER

EPISODE II: HIGH GEAR

EPISODE III: CRUISE CITY

SPECIAL FEATURES



TUNNEL

ROAD

URBAN

A TRAFICON FILM

SMOOTH DRIVER

OUT ON THE STREETS, EVERY SECOND COUNTS.

NO STUNTS HERE

Tunnels are probably one of the most dangerous motoring environments. In a tunnel, a seemingly small event—smoke, spilled cargo, a pedestrian—can cause a traffic incident that quickly escalates into a major tragedy. Trapped in a tunnel with no chance to escape!

More and more traffic managers are convinced that investments in incident management are absolutely necessary. As they know, effective incident management can save lives!

EVERY MINUTE COUNTS

Effective incident management depends entirely on fast incident detection and fast incident verification. With each passing minute, the risk of another accident compounding the first one rises dramatically. The time to clear the original incident is critical.

OUT INTO THE SUNSHINE

Stopped vehicles, wrong-way drivers, queues, slow-moving vehicles, fallen objects... Traficon's tunnel incident detection module analyses camera images in real-time and detects all major incidents within seconds. Result: the danger of the incident is substantially reduced and secondary impacts are prevented.

FRANCE FREJUS TUNNEL U.A.E. BEIRUT AIRPORT TUNNEL SLOVENIA PODMILJ & TROJANE TUNNEL TURKEY BOLEMAN PERSEMBLE TUNNEL
SOUTH AFRICA HUGUENOT TUNNEL THE NETHERLANDS BENELUX TUNNEL HONG KONG LION ROCK TUNNEL GERMANY SCHWARZERBERG TUNNEL

TUNNEL

ROAD

URBAN

HIGH GEAR

A TRAFICON FILM

KEEP ON TRUCKIN'

Throughout the day, Traficon detectors provide standard traffic data—volume, speed, occupancy, gap time, etc.—to be used for traffic analysis.

SLOW BUT MOVING

Traffic is becoming more and more congested in large metropolitan areas in all parts of the world. Traficon accurately monitors traffic flow speed to help keep highways safe by differentiating levels of service: fluid, dense, congested or stop & go. Traficon applications also monitor queues during road-works and calculate travel time based on flow information from Video Image Processors (VIPs).

AUTOMATIC INCIDENT DETECTION

But what happens when – suddenly – there's a stopped vehicle, a wrong-way driver, or cargo spilled on the road? A queue can form in seconds. Thanks to Traficon's fast detection of dangerous incidents, intervention is rapid and lives are saved.

WHERE EVER THE ROAD TAKES YOU...

BELGIUM ANTWERP FRANCE A28 MALAYSIA KUALA LUMPUR U.S.A. ATLANTA CHINA BEIJING RUSSIA MOSCOW IRELAND M50 DUBLIN
ITALY BRESCIA (A4) VERONA (A31) GREECE ATHENS SWITZERLAND A12 FRIBOURG NORWAY E39 GERMANY STRELASUND

PREVIOUS

NEXT

MAIN MENU

TUNNEL

ROAD

URBAN

A TRAFICON FILM

CRUISE CITY

NO JAMS. JUST DRIVING.

URBAN CRUISE CONTROL

When it comes to monitoring and managing intersections, Traficon's video detection technology has proven to be a highly reliable and accurate alternative to loops and other detection technologies. The Video Image Processor (VIP) provides all standard traffic data (queue length, vehicle speed, etc.) as well as information on the presence of vehicles approaching or waiting at the intersection.

WATCH YOUR PEDESTRIANS

Using video detection to monitor heavily travelled intersections enables the use of remote control. With a standard web browser (Ethernet) or Traficon's PC client software, traffic managers can monitor traffic data and alarm events, execute a complete set-up or modify detection zones—right from their desks.

U.S.A. CITY OF COLORADO SPRINGS BELGIUM CITY OF BRUSSELS U.A.E. FALCON (DUBAI) U.S.A. CITY OF LYNNWOOD (WA) IRELAND CITY OF DUBLIN GERMANY CITY OF MÜNSTER
U.S.A. BALTIMORE COUNTY (MD) CANADA CITY OF BRAMPTON FRANCE CITY OF DIJON MEXICO CITY OF MONTERREY POLAND CITY OF WARSAW CHINA CITY OF DAQING

SPECIAL FEATURES

TRAFICON: RISE TO GLORY

CREW: PUTTING PEOPLE FIRST

VIDEO DETECTION TECHNOLOGY IN DEPTH

VIDEO DETECTION UNLEASHED

VIDEO IMAGE PROCESSOR: THE CORE

INTRODUCING TMS

TRAFICAM®: A CLEVER COMBINATION

BEHIND THE SCENES

ADDITIONAL RESOURCES



MAIN MENU





TRAFICON

RISE TO GLORY

**“OUR MISSION:
CREATING SAFER AND SMOOTHER TRAFFIC WORLDWIDE.”**

If I look back at the road Traficon has taken so far, I only see a fascinating story which has led to a first-class company today. I'm sure – by now – I could write a book thicker than the Bible full of incredible Traficon adventures! However, that would lead me too far. Instead, let me take you on a short journey highlighting some important dates in "The Life of Traficon":

JO VERSAVEL
MANAGING DIRECTOR

- **1992**
Foundation of Traficon. My mission is clear: to become the market leader in the field of video detection for traffic applications.
- **1993**
The first Video Image Processing (VIP) module comes into the world. This modular single processor board has to perform the basic tasks for handling the video, digitizing the video, analyzing the image and extracting the most important traffic data. The basic idea of the VIP is to keep video detection for traffic as simple as possible. Therefore it is designed to perform only the real needed tasks in stand alone form. It can be programmed using only a simple keyboard and monitor.
- **1994**
At the East Coast of the U.S.A., our partner *Control Technologies* starts promoting Traficon products. Together with our West Coast distributor Kar-Gor, serious efforts are made to introduce the VIP detectors in the U.S. intersection market. My friend Gordon Dale develops the first interface unit that permits VIP3 to be plugged into a 170 controller. As of then, Traficon is ready to conquer the U.S. market.
- **2000**
New Traficon VIP range: VIP/I, VIP/D, VIP/P. The new boards include brand-new hardware with faster processors and more memory on board. This new VIP range focuses on function and functionality with a more consistent grouping of functions within an application domain. This makes it clear and understandable for our customers.
- **2003**
Launching TrafiCam®. This is really one of my favorites! The TrafiCam® philosophy—combining camera and video detection in one compact box—was really unique at that time. Now, we have a second generation TrafiCam® and plans are already at the table for generation three. Mark my words, the best is yet to come!
- **2004**
Traficon wins 'Olympic Games 2004' contract. The Flemish Ministry hands out the prestigious award "Lion of Export 2003" to Traficon as best performer. After this, we can see things going even better and faster for Traficon.
- **2008**
Traficon always provides video detection technology with respect to Mother Earth. It extends its TrafiCam® sensor range with a solar powered environmental-friendly version.



Today, my major task is to make sure that future prospects for Traficon remain bright and successful. Therefore, I see it as my personal objective to make sure that customer service and quality products remain—more than ever—the standard for our way of working. From the start, customer service has been the foundation of all our operations. At the end of the day, we are all paid by our customers—they are the real employers—and by serving them well, we build our future.

ONCE UPON A TIME

Building on development started in 1979 by the University of Leuven, Traficon research has since delivered a range of powerful products. We have been an ISO9001:2000 certified company since 1998, and our products are marketed by an international group of carefully selected partners. A full 20% of our sales revenue is invested into R&D.

Powered by our mission and market position, we aim to:

- contribute to *fluid, safer traffic*;
- improve *quality of life* through precise and creative application of new technologies;
- enhance both *society and economy* with the cooperative, creative and confident efforts of all Traficon team members.

Carrying our mission forward, we are conducting a policy of continuous quality improvement in all areas: organisation, methods, products and services.

WHY IS TRAFICON THE REFERENCE?

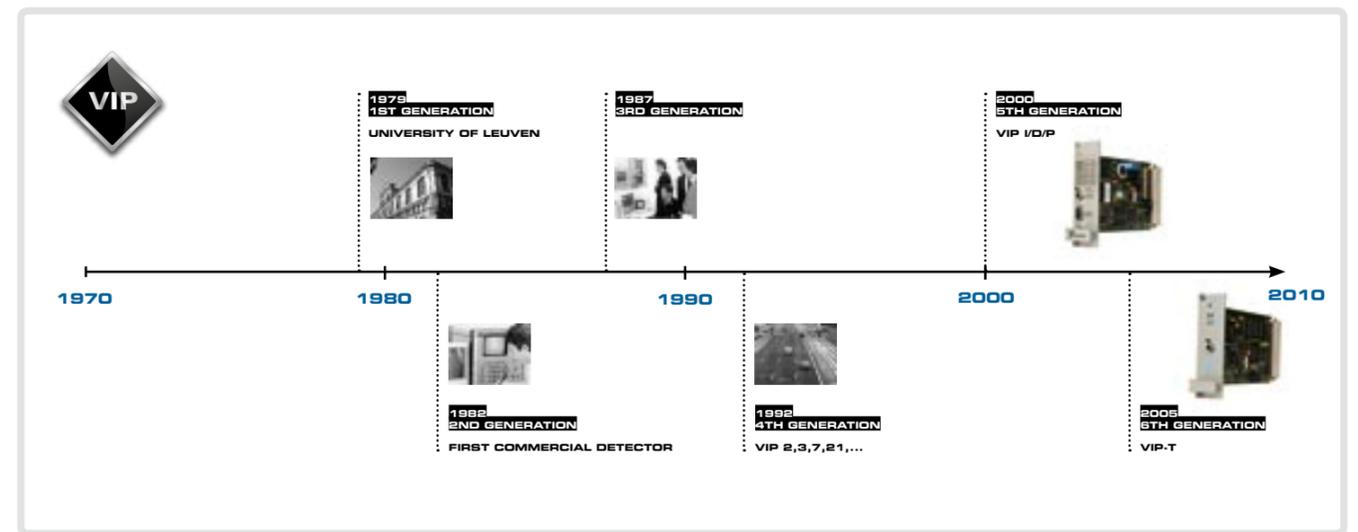
There are a number of good reasons:

- we have over *25 years of experience* in the field of traffic video detection.
- we have more than *50,000 detectors* operational worldwide.
- we have installations in more than *250 tunnels* around the world.
- more than *500 km of tunnels* are equipped with a Traficon system.

Our 65 highly qualified, dynamic employees lead the way forward and set us apart from the competition by delivering:

- products that are *reliable* and *easy to use*;
- products that perform better than alternative products;
- *superior service* – Traficon guarantees tailor-made solutions and experienced project support.

VIP PRODUCT HISTORY





CREW

PUTTING PEOPLE FIRST!

THE PEOPLE BEHIND THE CAMERAS
 Just like *your safety in traffic* is our first priority, our employees come first at Traficon. Our crew of 60 dedicated employees serves our customers with unflagging enthusiasm. Every day they continue their search for high-quality, effective and innovative solutions.

CRUISIN' WITH THE CREW
 Some of the people who came on board back in 1992, when Traficon was born, are still with the company today. They're really the strong backbone of the company. Our newer crew members, along with the long-standing members make a perfect mix of young and old—keeping the company dynamic.

Our backbone members prove today's adage that *"the people are a company's most valuable asset"* – they provide Traficon with vast technological knowledge and a wealth of

experience that helps us build solutions for the future.

ROOM FOR INITIATIVE
 Combine these high-powered ingredients:

- A strong, future-minded company with international dimensions.
- A people-oriented culture that promotes positive relationships amongst colleagues.
- Continuous stimulation to follow courses and training to enhance personal and professional development.
- Lots of *"team spirit"* activities.

And what do you get?

- Plenty of room for creativity and initiative – which naturally lead to new and innovative solutions. Because new ideas are needed to improve performance and quality and to introduce new products

and services for our customers, Traficon awards an in-house prize for innovative thinking.

- An award-winning company. Traficon won the prestigious *"Lion of Export"* award, presented by Belgium's Flemish Minister for Economy. This honour goes to the *Best Performer* in the field of Flemish export. Traficon won based on the fact that the company is regarded internationally as a market leader with an innovative product and is successful even in difficult markets.
- A strong team working closely together to build high-quality products. Our definition of *"teamwork"*? Helping each other to find better solutions for our customers.

VIDEO DETECTION TECHNOLOGY IN DEPTH

This above-ground detection technology is an intelligent and flexible solution to enhance mobility and optimize traffic flow. The combination of both numerical data and visual image control sets video detection apart from all other detection systems. The immediate visual feedback received from video detection systems allows efficiently monitoring traffic and quickly responding to incidents.

“REAL-TIME VISUAL FEEDBACK COMBINED WITH NUMERICAL DATA SETS VIDEO DETECTION APART FROM OTHER DETECTION SYSTEMS.”

SETTING THE SCENE

We monitor traffic, detect hazardous incidents, and provide data and information that improve traffic safety and flow.

INSTALLING THE PROPS

First, we install a video camera at a certain height to monitor traffic. The camera sends an input signal to a detection unit—this is typically a number of Video Image Processor (VIP) modules integrated into a standard 19-inch rack.

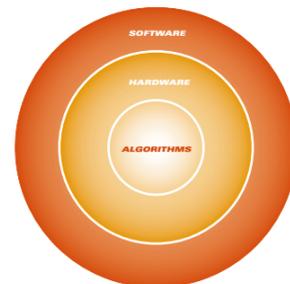
When the VIP is set-up, detection zones are superimposed onto the video image. When a vehicle enters the detection zones, it is detected by the system. Special algorithms calculate various types of traffic information: presence and incident-related data, data for statistical processing, and data for pre- and post-incident analysis.

Traffic data, compressed images and alarms are transmitted to the technical control room. Now, the Traficon PC Software (TMS) monitors the video detection system in the traffic control centre.

WRITING THE STORYBOARD

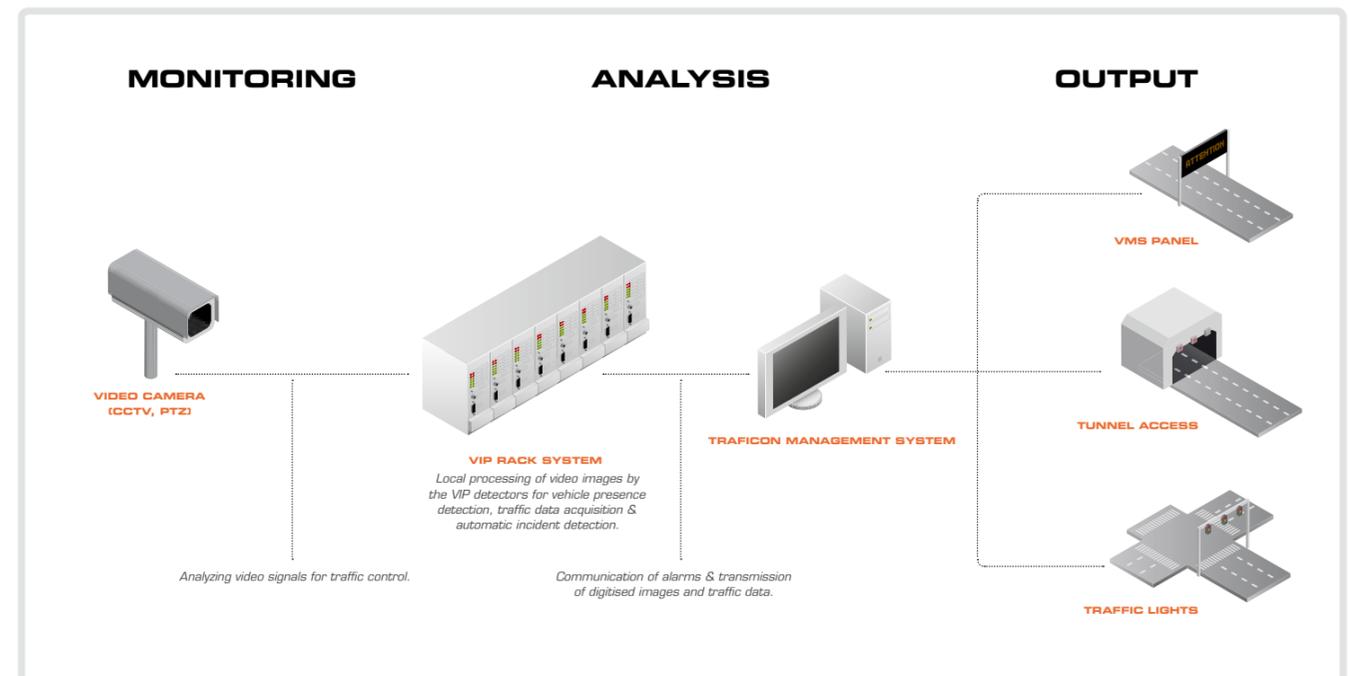
Traficon is emphasizing whole solutions for customers rather than simply products. Based on our experience we truly believe we can make the difference by offering A-Z project support to make each “Intelligent Transportation System” project a success.

Going a step further in bringing video detection technology closer to customers, Traficon is also promoting integrated solutions bringing camera and detection algorithm together in one esthetical housing. Simple and smart solutions are the future we believe in!



Traffic-proof algorithms and robust hardware are the core of a Traficon system. Easy-to-use software simply completes the picture.

SYSTEM ARCHITECTURE



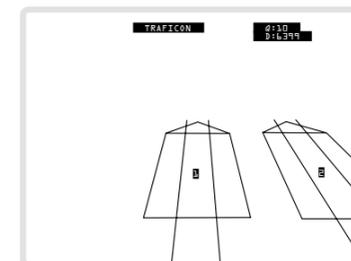
KEY BENEFITS OF VIDEO DETECTION

- Above-ground detection
- Combination of data, alarms and video images
- High reliability
- Flexible configurations
- Wide-area detection
- No road closure needed for installation and configuration
- Low maintenance cost

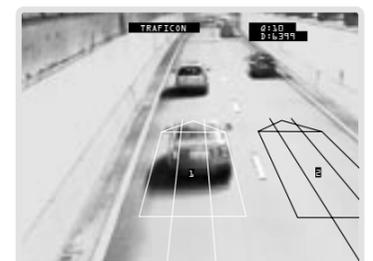
VIDEO DETECTION OVERLAY EXPLAINED



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A video camera is monitoring traffic. Its video signal is used as input for the detection unit.

During set-up of a VIP detection zones are superimposed onto the video image.

Vehicles crossing the detection zones are detected.

VIDEO DETECTION UNLEASHED

Traffic managers all over the world use video detection technology for traffic data acquisition, automatic incident detection and intersection management in highway, tunnel, bridge and urban applications. Why? Simple: it is fast, flexible and reliable. Its multi-functionality makes it the perfect traffic measurement system for a wide range of traffic applications, including ramp metering, travel time calculation, dynamic speed indication, queue tail monitoring, congestion monitoring, tunnel access control, ventilation control, rerouting, VMS-control, dynamic queue indication during road works, dynamic lane opening or closing, etc.

“FAST INCIDENT DETECTION RESULTS IN SAFER AND ENHANCED TRAFFIC FLOW, LEADING TO IMPROVED AIR QUALITY.”



AUTOMATIC INCIDENT DETECTION

More and more traffic managers are convinced that investments in incident management are absolutely necessary. As they know, effective incident management can save lives! Effective incident management depends entirely on fast incident detection and fast incident verification. With each passing minute, the risk of another accident compounding the first one rises dramatically. Time to clear the primary incident is critical.

Stopped vehicles, wrong-way drivers, queues, slow moving vehicles, fallen objects... Traficon's incident detection module analyses camera images in real-time and detects all major incidents within seconds. Result: the danger of the incident is substantially reduced and secondary impacts are prevented.

TRAFFIC DATA COLLECTION & MONITORING

Traffic is becoming more and more congested in large metropolitan areas around the world. Traficon accurately monitors traffic flow speeds to help keep highways safe by differentiating levels of service: fluid, dense, congested or queue.

Traficon applications also monitor queues during road-works and calculate travel time based on flow information from Video Image Processors (VIP). Last but not least, Traficon detectors provide a wide range of individual traffic data—volume, speed, classification, etc.—to be used for traffic analysis.

INTERSECTION CONTROL

When it comes to monitoring and managing intersections, Traficon's video detection technology has proven to be a highly reliable and accurate alternative to loops and other detection technologies.

The Video Image Processor (VIP) provides traffic data such as queue length and vehicle speed as well as information on the presence of vehicles approaching or waiting at the intersection. Using video detection to monitor heavily travelled intersections enables the use of remote control. With a standard web browser (Ethernet) or Traficon's PC client software, traffic managers can monitor traffic data and alarm events, execute a complete set-up or modify detection zones—right from their desks.

		TUNNEL	ROAD	URBAN
AUTOMATIC INCIDENT DETECTION	STOPPED VEHICLES	•	•	
	WRONG-WAY DRIVERS	•	•	
	PEDESTRIANS	•		
	LOST CARGO	•	•	
	SMOKE	•		
	QUEUE	•	•	
TRAFFIC DATA COLLECTION & MONITORING	SPEED DROP	•	•	
	VOLUME		•	
	SPEED		•	
	OCCUPANCY		•	
	CLASSIFICATION		•	
	GAP TIME		•	
	HEADWAY		•	
	TRAFFIC FLOW SPEED*	•	•	
	ZONE OCCUPANCY*	•	•	
LEVELS OF SERVICE (5)*	•	•		
INTERSECTION CONTROL	PRESENCE DETECTION	•	•	•
	QUEUE LENGTH MEASUREMENT			•
	COUNTING			•
	SPEED MEASUREMENT			•

* The VIP board can distinguish between 5 types of traffic flow (or levels of service) by combining flow speed and zone occupancy. The flow speed is calculated as follows: each time the flow lines are occupied, the speed of the vehicle that occupies the lines is stored in a buffer memory. The flow speed is the average of the buffer memory. Zone occupancy is defined as the percentage of time that the flow lines are occupied.



VIDEO IMAGE PROCESSOR

THE CORE OF VIDEO DETECTION TECHNOLOGY

**“A VIP DETECTION SYSTEM LASTS LONGER THAN 20 YEARS.
THAT IS 5 TIMES THE LIFESPAN OF A PC-BASED DETECTION SYSTEM”**

At the heart of Traficon's video detection technology is the VIP: Video Image Processor. Unlike PC-based detection systems, VIP modules are characterised by extreme robust hardware. After all, this product is designed to work in harsh environments and all types of weather conditions. Additionally, its modularity and open communication protocol makes the VIP module very user-friendly when integrating the VIP system into any existing or new management system.



KEY BENEFITS

- High detection rate and low false alarm frequency.
- Faster detection means faster reaction and a better chance of preventing secondary incidents.
- Compatible with both centralized and decentralized detection systems.
- State-of-the-art: Traficon video detection algorithms perform under all weather and lighting conditions.
- Open architecture makes it possible to integrate Traficon systems into existing traffic management systems without high costs.
- Easy maintenance and low lifetime cost.
- Mean Time Between Failures (MTBF) is more than 20 years for all Traficon equipment.
- Easy to install, easy to adjust to changing traffic situations, easy to extend and easy to update to additional traffic requirements.
- Can be fine-tuned to meet customized application requirements.



VIP DETECTION MODULE

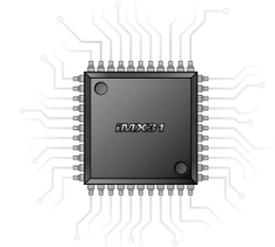
THE INDOOR - OUTDOOR MODULE FOR TRAFFIC CONTROL

The VIP combines indoor/outdoor traffic flow monitoring and automatic incident detection functionality all in one single board. The VIP automatically generates alarms for a wide range of events, going from wrong-way drivers, over speed drop to stopped vehicles or even deteriorating image quality.

In a typical Traficon installation, a detection unit consists of a number of VIP boards integrated into a standard 1.9" rack. This standard, industrial set-up is compatible with both centralized and decentralized detection systems.

STANDARD FEATURES

- Field-proven detection algorithms
- Quick installation
- User-friendly configuration
- Modular & industrial design
- Hot swappable



THE LATEST GREATEST

Our R&D engineers make sure the VIP module stays on top of the innovation ladder always using the latest innovative and advanced detection effects:

- Remote and modular set-up
- Web browser communication
- MPEG-4 streaming video
- Video over IP
- IP-addressability
- High-quality visual feedback with pre- and post-incident analysis
- Digital recording



TRAFICON MANAGEMENT SOFTWARE

MANAGEMENT, CONTROL AND VISUALISATION OF TRAFFIC DATA AND EVENTS

Traficon Management Software (TMS) is a stand-alone software platform for use with the VIP video detection system. It collects traffic data, events, alarms and video images generated by the VIP system. Communication with the VIP system goes over Ethernet. TMS stores all traffic data, events and alarms in a relational database.

INTUITIVE USER INTERFACE

TMS provides a user-friendly interface composed of a monitoring and a reporting application. TMS enables real-time monitoring of events and alarms.

Traffic events are automatically visualized and documented with their status, a camera image, all event info and an incident movie. TMS allows launching an external application upon an event or alarm.

TMS visualizes the layout of the VIP video detection system via the network tree. The customized graphical user interface includes a map tree, a map zoom tool and a central map image where the status of each camera can be verified.

Event alerting includes a visual indication on the central map image of the camera where the event or alarm occurred.

Via the reporter application the database is queried to generate data or event reports as exportable graphs or tables.

INTELLIGENT EVENT FILTERING

TMS has different filtering functions (time, event, camera- or zone-related) for inhibition management in order to ensure relevant data collection and event alerting to the operator during situations such as maintenance or road-works. Inhibitions can be managed from a larger traffic management system.

KEY FEATURES

- Fast, reliable, redundant and stable system.
- Easy to install, user-friendly configuration and operation.
- Customizable and multi-user set-up with levels of authorization.
- Separate mode allows system maintenance without interrupting its operation.
- Open architecture enables third-party applications to communicate with the Traficon VIP detection system. Easy integration in SCADA systems.



TrafiCam®

A CLEVER COMBINATION

THE FIRST INTEGRATED TRAFFIC VIDEO DETECTOR

TrafiCam® is Traficon's integrated all-in-one solution: camera + detection technology.

Integrating a CMOS sensor and detection algorithm in a compact, stylish housing, TrafiCam® detects vehicles waiting at or approaching an intersection. And it detects vehicles at traffic lights better, more discretely and more economically than other presence detectors like radar, infrared or loops.

ACTIVE INTERSECTION MANAGEMENT

TrafiCam® sensors make the operations of traffic light controllers more dynamic (more traffic dependent). TrafiCam® detection zones on the road surface detect the presence of vehicles. An output is closed when a vehicle is present in a certain detection zone, and the output is opened when there is no vehicle.

OUT OF THE BOX

While out-of-the-box thinking created TrafiCam®, it's also an out-of-the-box product: install it, connect it, and start analyzing traffic!

KEY FEATURES

- Intelligent sensor for vehicle presence detection
- All-in-one sensor: integration of camera and detection
- Field-proven video detection technology
- Non-intrusive, above-ground installation
- Direct loop replacement
- Image for precise zone positioning
- Real-time visual verification of detection performance
- Easy installation and configuration
- Aesthetic design



Visit www.traficam.com for more information!

RECORDING & PLAYBACK FUNCTION

BEHIND THE SCENES

BASED ON TRUE STORIES

FRÉJUS TUNNEL

AUTOMATIC INCIDENT DETECTION & DIGITAL RECORDING



Fréjus Tunnel (France)

The Fréjus Alpine Tunnel is a 2-lane bi-directional tunnel between France and Italy with a length of 12.87 km. In 2003, SFTRF/SITAF launched a project to replace the existing video surveillance system by a new system that integrated Automatic Incident Detection and Digital Recording into the tunnel management system. Redundancy is required for

data storage, network communication and power supply. In addition, the software platform for collection and storage of traffic data and events, monitoring and reporting also provides a configurable function in order to filter or inhibit events.

INSTALLATION

The tunnel cameras are wall-mounted. Each camera covers 130 metres. Camera images are transferred over a fibre optic network to the racks of VIP-T boards and E-COM. The equipment is centralised in two technical rooms: one is in Italy (PCCI) containing 122 camera signals, the other is in France (PCCF) containing another 122 camera signals. Traffic data, events and pre- and post-incident sequences are transferred to two redundant T-Port management software PCs via the E-COM boards and Ethernet switches. The T-Port software platform collects and stores data, events and pre-and post-incident sequences. T-Port serves as the interface between Traficon's incident detection system and the overall traffic management system in the control room.

More info: www.sftrf.fr

204 VIP-T MODULES

- Stopped vehicles, slow moving vehicles, traffic congestion, queue, smoke
- MPEG-4 compression, streaming video

T-PORT PC SOFTWARE

- Software platform for VIP system configuration & management
- Collection and storage of traffic data and events, pre-and post incident sequences, monitoring and reporting, event filtering and inhibition

COLORADO SPRINGS

INTERSECTION MANAGEMENT



Colorado Springs (U.S.A.)

The Colorado authorities have been on a mission to replace pavement loops with video detection technology for signal control. The plan has had the desired effect—complaints, as well as costs, are down. After installing over 350 intersections, Colorado Springs is convinced it made the right choice to replace the in-ground loops with video detection.

MORE FLEXIBLE, MORE DEPENDABLE ... LESS EXPENSIVE

"We have improved our abilities and installation procedures, improved service to our citizens, reduced delay caused by constant calls from broken loops, and reduced signal installation and maintenance costs. When there is a construction project, we can set-up 'virtual loops' in adjoining lanes to match the temporary traffic lanes and we are in the process of using a VIEWCOM module to enable us to communicate from our Traffic Operations Centre (TOC) to the individual intersection over phone, fibre or radio. This will allow us to download/upload different configurations, pick-up traffic counts, make sure the camera is working, check for glare or false calls and trouble-shoot remotely from the TOC. When the system is fully installed, we will have better, flexible, less expensive and dependable detection for our actuated signals."

More info: www.dot.state.co.us or www.catrip.org

1500 VIP/3X PRESENCE MODULES

- Vehicle presence detection, queue length measurement and counting

300 VIEWCOM MODULES

- Communication module for remote monitoring & configuration

ITIS KUALA LUMPUR

AUTOMATIC INCIDENT DETECTION & DATA COLLECTION



Kuala Lumpur (Malaysia)

The Malaysian government is making substantial investments in infrastructure projects to improve quality of life for its people and to make its Federal Capital, Kuala Lumpur, a world-class city. A major project, undertaken by City Hall KL, is the Integrated Transport Information System (ITIS). ITIS helps reduce traffic congestion, improves traffic

management, and enhances public transportation. Closed Circuit Television (CCTV) surveillance cameras are installed all over Kuala Lumpur's Klang Valley to capture real-time traffic information for incident management and long-term transportation planning. ITIS uses this information to inform the public about the actual situation in the city via Variable Message Signs (VMS) along the roads, via a Call Centre and via the Internet.

MAKING INCIDENT MOVIES

Traficon is participating in this mega-project by supplying 932 VIP modules for data monitoring and incident detection and 126 VICCOM/E modules sending data, images and "incident movies" to the Traffic Management Centre. The WATTS software collects all this numeric and image information from the field equipment and provides extensive tools for the integration of Automatic Incident Detection into the Advanced Traffic Management System.

More info: www.itis.com.my

932 VIP/I - VIP/D MODULES

- Data monitoring, flow monitoring, queue and stopped vehicle detection, wrong-way drivers

126 VICCOM/E MODULES

- Alarm monitoring including video sequence storage with pre- and post-incident information

WATTS PC SOFTWARE

- Software for collecting, storing and reporting all VIP data, images and events.

ANTWERP RING ROAD

AUTOMATIC INCIDENT DETECTION



Antwerp (Belgium)

Because traffic on the ring road of Antwerp is very hectic, an intelligent traffic management system involving Automatic Incident Detection (AID) was installed for observing and evaluating traffic. For each "abnormal" observation, an alarm is transmitted to the Flanders traffic centre in Antwerp. The operator is immediately notified of queues, accidents and other incidents – and, as a consequence, emergency services can now be called in rapidly.

REDUCING QUEUES AND DANGER

The operator also continuously receives figures on traffic flow speed and occupancy on the ring. From the traffic centre, all drivers on the ring road and its feeder roads can now be warned rapidly via VMS panels. Traffic services can project warnings about queues, accidents, redirection advice or speed restrictions. This way, they can prevent road users from extending a queue or creating extra danger.

INSTALLATION

The ring around Antwerp has 188 fixed cameras. The average camera height is 20 metres, with a field of view of 300 to 350 metres. All video signals are transmitted to the control centre, where it is processed by the VIP/I detection module. Alarm monitoring and communication of data and images to the operator room are performed through the VICCOM module.

184 VIP/I MODULES

- Flow monitoring, queue and stopped vehicle detection, wrong-way drivers

23 VICCOM MODULES

- Communication of traffic data, events and images including pre- and post-incident sequences to the Traffic Management System.

ADDITIONAL RESOURCES

We're a customer-minded company. Our goal? Ease-of-use and top-level service. We know for a fact that quality service leads directly to customer satisfaction. To maximize your investment, Traficon provides customized video detection solutions and professional project support. In the project preparation and feasibility stage, we conduct a site survey and assist you with video analysis, camera position and selection, and system lay-out. At the implementation stage, we provide on-site set-up and advice. From that point forward, we offer regular product training sessions, and we provide technical support either directly or through our network of trained partners. Finally, we encourage you to consult our various communication tools on a regular basis. We promise you up-to-date information about all evolutions in the world of traffic video detection!

"CUSTOMER SATISFACTION IS THE ULTIMATE CRITERION FOR OUR PERFORMANCE."



WWW.TRAFICON.COM

- Keep up with the latest video detection evolutions and solutions.
- Download product leaflets.
- Read inspiring case studies.
- Available in English, French, Spanish, German and Chinese.



WWW.TRAFICAM.COM

- Dedicated website for TraciCam®.
- Download product manuals and more.
- Installation, configuration and maintenance instructions.
- Available in English, French, Spanish and German.



THE INSIDER

- Restyled newsletter!
- Download your copy from the website or request a printed version.
- Get the latest scoop on Traficon projects worldwide.

THE TRAFICON STUDIOS HOW TO REACH US WORLDWIDE

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