

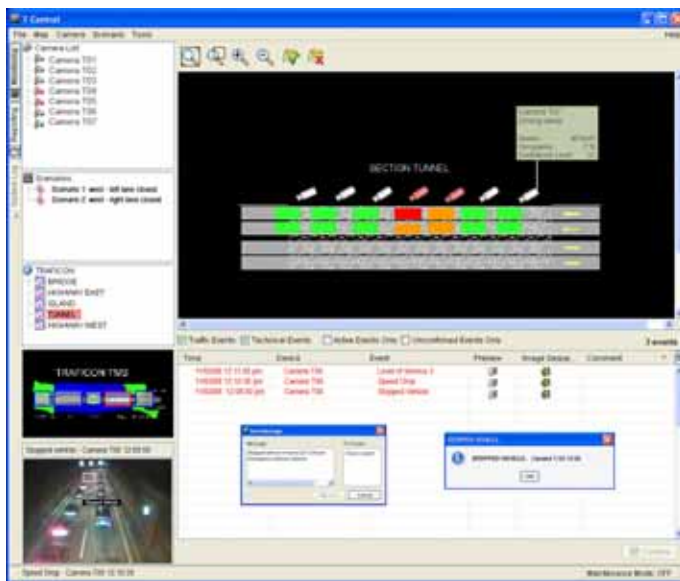


TRAFICON

TRAFFIC VIDEO DETECTION

TMS Traficon Management System

MANAGEMENT, CONTROL AND VISUALISATION OF TRAFFIC DATA AND EVENTS
GRAPHICAL USER INTERFACE WITH POWERFUL EVENT ALERTING AND INTELLIGENT INHIBITION FUNCTION



Features

- ✓ Collection and storage of traffic data, events and alarms generated by the Traficon VIP detection system
- ✓ Optimum data and event management + reporting
- ✓ Graphical user interface for stand-alone use with powerful event alerting and extensive event logging
- ✓ Intelligent filtering for inhibition management
- ✓ Expandable and scalable system with server-client architecture and modular design

Benefits

- ✓ Fast, reliable, redundant and stable system
- ✓ Easy to install, user-friendly configuration and operation
- ✓ Customisable and multi-user setup 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

TMS is a stand-alone software platform for use with the VIP video detection system. TMS 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.

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

Traffic and non-traffic events are automatically visualised 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.

Real-time video can be viewed from several cameras simultaneously.

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

TMS allows defining different filtering functions or scenarios in order to ensure relevant data collection and event alerting to the operator during situations such as maintenance or roadwork. Scenario parameters include events, cameras and zones.

Scenarios can be managed from a larger traffic management system.

TMS visualises the layout of the VIP video detection system via the network tree. The customised 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.

TMS: a system with a carefully designed structure for easy setup by the system administrator

The TMS maintenance mode allows the administrator to set up or maintain the system without interrupting the operation of TMS.

- CONFIGURE THE NETWORK ZONE -

A straightforward **plug-and-play** instruction populates the network zone with all components of the VIP video detection system. Via the network zone, the administrator also manages the redundant configuration of TMS. For the operator, the network zone provides a list of cameras to monitor.

- DEFINE USERS, USER GROUPS AND EVENT ALERTING -

The TMS system setup allows defining users and user groups with **different authorisation levels**.

A multitude of tools are available to define a **powerful alerting function for the operator** upon an event.

- MANAGE DATA, EVENTS & VIDEO IMAGE STORAGE -

The administrator is **authorised to change** the default settings for data compression and storage in the relational database.

- COMPOSE THE GRAPHICAL USER INTERFACE -

TMS enables an **intuitive and straightforward setup** of the graphical user interface. Elements are added to the central map image via drag-and-drop from the network tree. The result is a customised GUI for the operator. To verify the system setup the administrator can **force events**.

- SET UP SCENARIOS FOR EVENT FILTERING -

Both the operator and the system administrator may define **event filtering scenarios**. All scenarios are listed in the scenario zone.

- USE THE LOGGING FUNCTION OF TMS -

TMS includes a system log function to **fully document** all TMS operations. When TMS is integrated into a larger management system, the system log function also allows logging all TMS **communication**.

- SCALE, EXPAND or INTEGRATE TMS -

The TMS server-client architecture allows **scaling the system** to the **exact requirements of the project**. Also upon expansion of the VIP detection system, TMS can be adapted easily. The maintenance mode enables **remote configuration** or **firmware upgrade** of selected VIP boards.

Because of its **open architecture** TMS can be integrated into any larger traffic management system.

TMS: a system with a versatile and intuitive graphical user interface for traffic monitoring by the system operator

> Graphical User Interface for Monitoring of all Traffic Information + Event Alerting

MAP ZOOM TOOL, MAP TREE and CENTRAL MAP IMAGE
The operator has a totally integrated view of the monitored area, including the location of each camera and an indication of the levels of service. The map tree and the map zoom tool allow the operator to split the monitored area into smaller units for supervision.

REAL-TIME DATA MONITORING
Camera T07
Driving away
Speed: 90 km/h
Occupancy: 7 %
Confidence Level: 10

SCENARIO ZONE
TRAFICON
BRIDGE
HIGHWAY EAST
ISLAND
TUNNEL
HIGHWAY WEST

EVENT ALERTING
Upon incident detection, the operator is alerted in real-time via a series of visual tools. A full package of information on the event becomes available via the event stack: event type and status, camera location, image or image sequence, date and time.

Time	Device	Event	Preview	Image Sequ...	Comment
11/03/08 12:11:05 pm	Camera T05	Level of Service 3			
11/03/08 12:10:35 pm	Camera T05	Speed Drop			
11/03/08 12:09:50 pm	Camera T04	Stopped Vehicle			

MESSAGING
Send Message
Message: Stopped vehicle in tunnel at 12:09 pm
Emergency services warned
To Groups: Police station
Send Cancel

EVENT STACK MANAGEMENT
The operator will comment and acknowledge the event.
STOPPED VEHICLE - Camera T-04 12:09
OK

Maintenance Mode: OFF

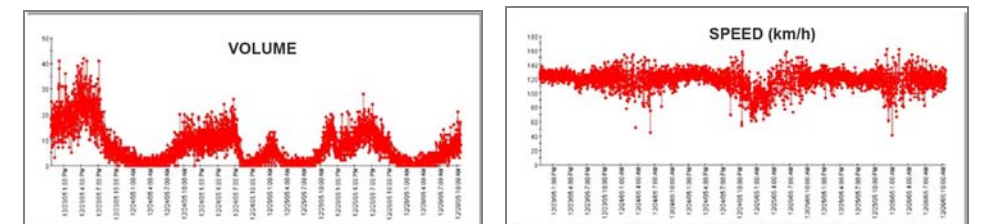
> Scenarios: intelligent event filtering to ensure relevant event alerting and data collection

TMS allows maximum flexibility for the configuration of scenarios. A scenario is a set of inhibitions to be launched for a group of cameras. Each inhibition is characterised by events that must be filtered on one or more zones. Digital inputs from the video detection system may serve as a trigger for the scenario. Scenarios can be launched directly in TMS or remotely from a larger management system.

> Reporting Application

TMS has a separate reporter application to generate data and event reports by queering the relational database where all traffic data and events are stored. Traffic data reports are available as graphs or tables.

Data and event tables are exportable. Graphs have a HTML compatible format.

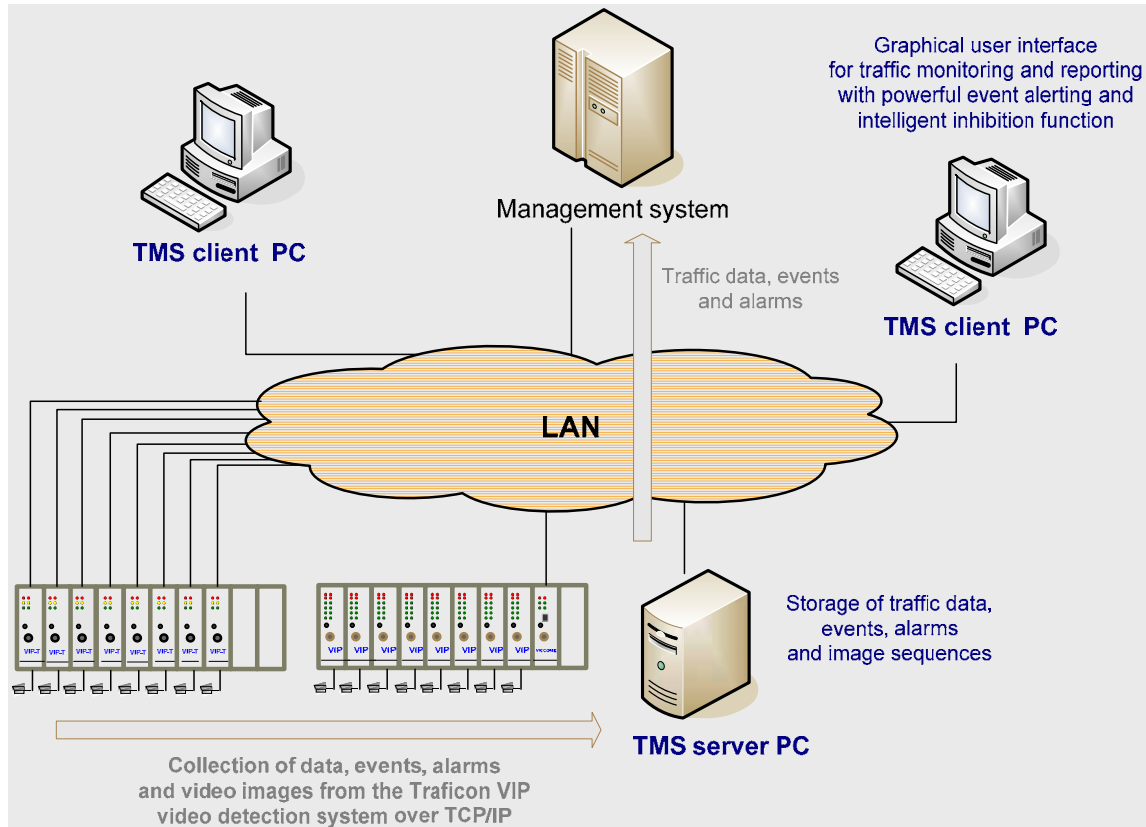


The reporting function of TMS: example of volume and speed graphs

VIP/TMS system architecture

In a typical installation, VIP boards (detection/communication) are integrated into a full or half 19" rack.

Transfer of all traffic data, events, alarms and video images is done over the network in real-time to the TMS server PC. The TMS server communicates via TCP/IP protocol with other systems; this could be a network PC that has the TMS client application installed or a larger traffic management system to which the TMS is integrated. The TMS server and client can run on one PC or on separate PC's in line with the project requirements.



TMS can be configured as a redundant system. In a redundant setup, TMS will generate an alarm alert for each redundancy failure. Please contact Traficon for more information.

TMS options for configuration: T-Port or T-Control

	T-Port	T-Control
Functional properties	<ul style="list-style-type: none"> > Traffic data and event management (collection, storage and reporting) > Overview of the VIP detection system and visualisation of traffic events and alarms > Real-time camera monitoring 	<p><i>In addition to T-Port:</i></p> <ul style="list-style-type: none"> > Graphical user interface with map tree, map zoom tool and map image > Authorised users and user groups, messaging
Intended use	<i>Integration into a larger management system</i>	<i>Stand-alone management system</i>



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YOUR CONTACT



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