

Video detection and monitoring for any traffic environment

No matter if you are using video or thermal cameras, or a combination of both, FLIR solutions can be installed in any traffic environment. No matter if you want to monitor intersections, analyze what is happening on highways or perform automatic incident detection in tunnels, FLIR has the correct hardware and software for your specific application.



Urban areas

Urban areas are very challenging for traffic managers. Traffic lights at numerous intersections need to be controlled so that traffic flows smoothly through the city. In order to smoothen urban traffic flows, traffic control needs to be respected. Pedestrians and bicyclists need to be detected in order to avoid accidents. Data is collected in order to optimize traffic streams. FLIR Systems has a solution for all of these urban applications.



Highways

Traffic flows on highways have become increasingly complicated over the past years. A small incident can have far reaching consequences. Traffic jams need to be avoided as much as possible. Not only is there an economical cost involved but an ecological one as well. If an incident takes place it needs to be detected and corrected immediately.

Traffic streams are monitored continuously so that appropriate actions can be taken when necessary. Data about traffic density and speed is collected for analysis and future improvements.



Tunnels

Tunnels are among of the most dangerous traffic 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. Investments in incident management are necessary as effective incident management can save lives.



More and more traffic managers are convinced that, whatever traffic situation they want to monitor, video detection can offer a cost-effective and life-saving solution.

A FLIR solution for any traffic application



Whether you are monitoring traffic in an urban area, on highways or in tunnels, FLIR Systems offers a solution to ensure safe and smooth traffic.

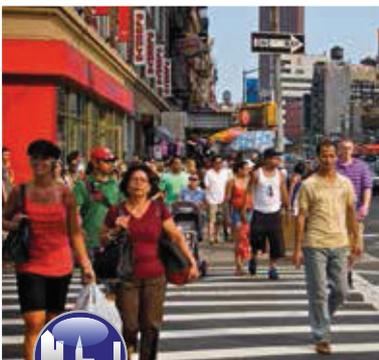


Intersection control

FLIR's video and thermal detection technology is a highly reliable and accurate alternative to loops and other detection technologies. FLIR sensors, both daylight and thermal, provide information on approaching or waiting vehicles at the intersection.

Vehicle and pedestrian detectors from FLIR Systems turn traffic lights into active management devices.

Thanks to smart intersection control, vehicle waiting times can be reduced so that traffic flows smoother. This reduces CO₂ emissions and enhances safety and mobility for vulnerable road users.



Pedestrian safety and mobility

Pedestrians are also very vulnerable in urban areas. Next to traffic light management, pedestrian detection can be used to activate in road warning lights or flashing beacons. Compared to continuously flashing lights, detection-based warning signal activation is much more effective in alerting motorists and enhancing the visibility of pedestrians.



Automatic Incident Detection (AID)

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.

Stopped vehicles, wrong-way drivers, queues, slow-moving vehicles, fallen objects... FLIR's AID solution analyses camera images in real-time and detects all major incidents within seconds.

This results in a substantially reduced risk of secondary incidents.



Data collection & flow monitoring

Traffic is becoming more and more congested in all parts of the world. FLIR Systems accurately monitors traffic flow speed to help keep highways safe by differentiating levels of service: fluid, dense, congested or stop & go.

Queues during road-works can be monitored and travel time can be calculated based on information flows from Video Image Processors (VIPs).



VIP series



VIP series - Multi-functional video detection boards

The VIP series offers multi-functional Video Image Processing modules for traffic control. VIP boards integrate automatic incident detection, data collection, recording of pre and post incident image sequences and streaming video in one board. VIP modules have been installed for road and tunnel projects all over the world.

VIP-T



Multi-functional video detection board for analog cameras

VIP-IP



Multi-functional video detection board for network cameras

VIP-HD



Multi-functional video detection board for network HD cameras

VIP-TX



Video encoder with multi-functional video detection



Stopped vehicle detection

Key benefits

- Instant operator warning, logging and recording of events, data and video sequences
- On-board digital recording of pre- and post incident video sequences
- Extensive interfacing and reporting capabilities
- Field-proven video detection experience
- Fast and reliable 24/7
- Easy to install, trouble-free system integration
- High lifetime, low power, easy maintenance