clearview

case studies

ITS & Traffic Monitoring

By applying machine vision technology to ITS problems, providers reach the market faster and more cost-efficiently. To address a wide variety of ITS applications, Teledyne FLIR cameras come in a selection of digital interfaces, sensors, price points, and board-level or boxed options are available.

Automated tolling

In recent years, with the use of digital camera technology, new tolling practices have drastically increased the throughput and accuracy of toll charges. Cameras are used to capture images of fast moving vehicles for the purpose of automatic number plate recognition (ANPR/ALPR).

Figure 1: An automated tolling booth in action

Teledyne FLIR's triggering accuracy ensures consistent vehicle positioning in the field of view by synchronising image capture with vehicle detection methods such as ground loops, radar, or laser devices. A wide variety of global shutter CCD and CMOS sensors along with excellent low light sensitivity are just a few reasons why FLIR cameras are specifically chosen for crisp, undistorted imaging of high-speed multi-lane traffic environments.

Traffic enforcement

Figure 2: Teledyne FLIR camera in an outdoor case

The use of traffic cameras puts more eyes on the road with the aim of improving driving behaviour for safer roads. Digital camera technology can be used for vehicle identification, speed detection, and red light violations. Teledyne FLIR cameras feature image compression ideally suited for efficient storage and image transfer across bandwidth limited interfaces. With ONVIF support, FLIR cameras can be easily integrated with popular traffic monitoring and security software.