Thermal imaging cameras for traffic applications

Traditionally, CCTV cameras are being used for video monitoring. Although CCTV cameras are reliable tools for video analysis, they need additional algorithms to overcome the limitations of traditional video cameras. In order to work at night, light needs to be installed. CCTV cameras can also be blinded by light from the sun. Vehicles or pedestrians that are moving in shadows are sometimes not detected.

Thermal imaging cameras do not have these issues. A thermal imaging camera creates a crisp image based on subtle temperature differences. They do not need any light whatsoever. They are also not blinded by direct sunlight.

FLIR's high-performance thermal imaging cameras give you uninterrupted 24-hour detection of vehicles, pedestrians and cyclist regardless of the amount of light available.

Sun glare
Glare from the sun blinds conventional video cameras, effectively hiding vehicles, people, and animals. Thermal cameras ignore this glare, and only respond to the heat signatures they detect.

Headlights
Headlights are confusing to CCTV cameras. This causes false and missed calls and makes accurate observation of highway traffic at night impossible. Thermal cameras are immune to headlight glare, so they see clearly.

See through shadows
Video cameras can miss pedestrians, cyclists, animals, and even cars if they’re in the shadows. But since thermal cameras see heat, not light, there are no shadows in a thermal world.

Long-range night viewing
At night, a highway looks like an indistinct row of lights to a video camera, making meaningful data collection and incident assessment impossible. But thermal cameras see the heat signatures of vehicles clearly from miles away. They also provide clear video of the roadsides for awareness of parked vehicles or other hazards.
FLIR FC-series T - Thermal imaging cameras for traffic monitoring

FLIR thermal imaging cameras are commonly integrated in traffic video detection and monitoring solutions. Needing no light at all to produce an image they can be used for a wide variety of traffic applications.

High image quality
The FLIR FC-Series T are equipped with a maintenance free uncooled microbolometer detector that produces accurate images on which the smallest detail can be seen.

Different lens options
FLIR Systems offers the FLIR FC-Series T with different lens options. They are available with a 9 mm, 13 mm or 19 mm lens. Longer lenses offer a narrower field of view so that you can see farther.

Easy to install
All FLIR FC-Series T thermal imaging cameras can be installed on existing infrastructure.

Designed for use in harsh environments
The FC-Series T are extremely rugged systems. Their vital core is well protected, meeting IP66 requirements, against dust and water ingress. They operate between -50 ºC and +75 ºC. Perfect for all climates.

Video analytics
Just like all thermal imaging cameras, the FLIR FC-Series T works perfectly together with video analytics.

Thermal imaging cameras:
- Need no light to operate
- See in total darkness in practically all weather conditions
- Can be used in daylight as well
- Eliminate problems which visible camera detection systems are faced with such as missed or false calls
- Serve as a simple plug and play replacement for existing daylight cameras
- Are extremely affordable and easy-to-use