FLIR TrafiCam Series

Vehicle presence sensor

The TrafiCam series of vehicle presence sensors combines a CMOS camera and video detector in one. The series includes two products:

- TrafiCam: vehicle presence sensor
- TrafiCam x-stream: vehicle presence sensor and data collector with video streaming (MJPEG, MPEG-4 or H.264)

Both the TrafiCam and TrafiCam x-stream sensors are used for detection and monitoring of moving and stationary vehicles at signalized intersections. Via detection outputs or via IP protocol, vehicle presence information is transmitted to the traffic controller so that signal timing can be adjusted dynamically. This way, vehicle waiting time at traffic lights is reduced and traffic flows are optimized. The smart TrafiCam sensors are a cost-effective and reliable alternative to inductive loops.

DIRECT VISUAL VERIFICATION OF PRESENCE ZONES

The TrafiCam series allows you to exactly position and verify the vehicle presence detection zones. Since these zones are displayed on a video image, you can easily reposition them in case of changing traffic situations.

MULTIPLE & DIRECTION SENSITIVE VEHICLE DETECTION ZONES

TrafiCam and TrafiCam x-stream detect vehicles, day and night. This allows vehicle presence detection over different lanes. The TrafiCam series has detection zones indicating presence of vehicles moving in a specific direction.
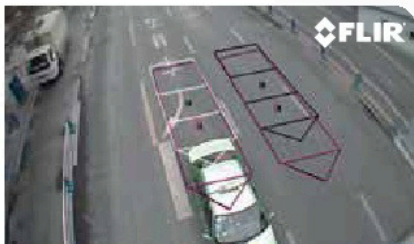
EASY INSTALLATION AND FAST CONFIGURATION

TrafiCam is easy to install. You can simply mount it on the existing infrastructure.
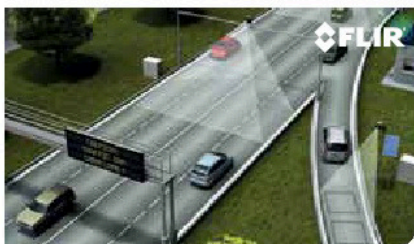
KEY FUNCTIONALITIES:
- Vehicle presence detection at intersections
- Data collection, queue detection and traffic flow monitoring (TrafiCam x-stream only)

KEY BENEFITS:
- ALL-IN-ONE SENSOR (CAMERA + VIDEO DETECTION)
- NON-INTRUSIVE, ABOVE-GROUND INSTALLATION
- REAL-TIME VERIFICATION AND MONITORING
- REAL-TIME TRAFFIC VIEW

Presence zones can be implemented and changed on a video image.

TrafiCam x-stream is an above-ground sensor providing a wide range of traffic data on up to 4 lanes.

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Imaging Specifications

System Overview	TrafiCam		TrafiCam x-stream	
Detection Functionalities	Vehicle presence		Vehicle presence + data	
# Detection Zones	8		24 presence zones 4 data zones	
# Detection Outputs	4 via interface 1TI 8 via interface 4TI ETH 8 via 4TI ETH EDGE & 4/Os xp (*)		3 for ETH versions, direct or via optional ETH interface 16 for BPL versions, via TI x-stream BPL	
CAMERA				
Resolution	640x480 pixels (VGA)		640x480 pixels (VGA)	
Frame rate	20 FPS		25 FPS	
Lens Types Focal Distance Detection Distance	Wide Angle 2.1mm 0-25m	Narrow Angle 6.0mm 15-75m	Wide Angle 2.1mm 0-25m	Narrow Angle 6.0mm 15-75m
Mounting Height	3,5-12m		3,5-12m	
CMOS type	1/4" black & white		1/4" color	
Compression	JPEG		MJPEG, MPEG-4, H.264 (dual stream)	
Housing				
Material	Aluminum		Aluminum	
Dimensions	Vertically mounted 45 cm x 16 cm x 12 cm, Horizontally mounted 41 cm x 18 cm x 12 cm		Vertically mounted 45 cm x 16 cm x 12 cm, Horizontally mounted 41 cm x 18 cm x 12 cm	
Sunshield	Optional		Optional	
Power, outputs, communication				
Operating voltage	12-26VAC/DC		12-32VAC, 12-42VDC	
IP Address	No		Yes	
Communication PC - Sensor	Via interface		Via interface or direct (ETH)	
Interface(s)	1TI, 4TI ETH , 4TI ETH EDGE (*)		TI x-stream for BPL sensors, optional ETH interface for ETH sensors	
Outputs (Pmax=300m>, Imax=50mA, Umax=48VDC)	4 for 1TI 8 for 4TI ETH 4 for 4TI ETH EDGE (**)		16 for BPL ((PN 10-6085)) 3 for ETH (PN 10-6075)	
PC Tool for Setup	TrafiCam PC Tool		Traficon Configuration Tool (TCT)	
Regulatory, environmental				
EMC	Electromagnetic Compatibility 2004/108/EG		Electromagnetic Compatibility 2004/108/EG	
FCC	FCC Part 15 Class A		FCC Part 15 Class A	
Temperature Range	-34°C to +80°C		-34°C to +80°C	
Materials	Weatherproof (UV-resistant)		Weatherproof (UV-resistant)	
Protection grade	IP67		Housing = IP68, connectors = IP67	

[*] US only
[**] 4 extra outputs via 4/Os xp expansion board

Part numbers

TrafiCam	Lens type	Focal distance	Detection distance
10-6090A	Wide	2.1 mm	0 - 25 m
10-6091A	Narrow	6.0 mm	15 - 75 m
TrafiCam x-stream	**Lens type**	**Focal distance**	**Detection distance**
10-7000	Wide BPL	2.1 mm	0 - 25 m
10-7008	Wide ETH	6.0 mm	0 - 25 m
10-7001	Narrow BPL	2.1 mm	15 - 75 m
10-7009	Narrow ET H	6.0 mm	15 - 75 m

Interfaces	
10-6078	1TI
10-6077	4TI ETH
10-6083	4TI ETH EDGE [*] [**]
10-6085	TI x-stream BPL
10-6075	ETH interface
10-4670	4/Os xp