

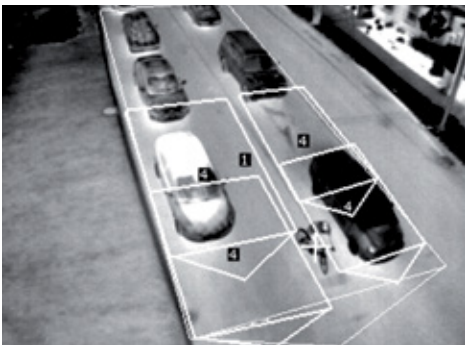


## THE WORLD'S MOST ADVANCED INTEGRATED THERMAL TRAFFIC DETECTOR

# TRAFISENSE2

TrafiSense2 is an integrated thermal sensor and detector for vehicle, pedestrian, and bike detection. TrafiSense2 does not need light to operate, and instead uses the thermal energy emitted from road users. This enables the sensor to detect vehicles and vulnerable road users at night, over long distances, and in harsh weather conditions. With available 640x480 resolution, the TrafiSense2 offers 24/7 traffic detection for a wide range of applications.

[www.flir.com/Traffic](http://www.flir.com/Traffic)



### Intersection control

TrafiSense2 detects vehicles and bicycles approaching an intersection, allowing more dynamic control of traffic lights.

- Accurate vehicle and bicycle detection based on thermal signatures
- Typical applications include "green on demand" and "lengthening clearance times"
- Reduces vehicle idling time, improves traffic flow and safety for all road users



### Wrong-way driver detection

TrafiSense2 detects wrong-way drivers in a matter of seconds.

- Ideal for installation on urban roads, highways, and highway entries or exits
- Detects across multiple lanes
- Improves traffic safety
- Records thermal video sequence of wrong-way driver



### Vehicle, bicycle and pedestrian counting

TrafiSense2 also offers accurate pedestrian counting, vehicle counting and bicycle counting, with the ability to distinguish bicycles from vehicles.

- Works simultaneously with presence detection functionality
- Uses the same detection zones and regions
- Field-proven detection performance

## TECHNICAL SPECIFICATIONS

### System Overview

Detection functionalities	Vehicle and bicycle presence detection, vehicle and bicycle counting, pedestrian presence detection, pedestrian counting, traffic data collection, traffic flow monitoring, wrong way driver detection (requires extra license)
# detection zones	24 vehicle presence zones \ 8 bicycle presence regions \ 8 pedestrian zones \ 6 traffic data zones \ 6 wrong way driver zones

### Camera

Resolution	VGA (640x480)
Frame rate	30 FPS
Type	Long wave Infrared (7 – 14 µm)
Compression	H.264, MPEG-4, MJPEG

Model	Part #	Resolution	Field of view	Functionality	Detection distance for vehicle presence
TrafiSense2 690	10-7470	VGA	Horizontal: 90° Vertical: 69°	Vehicle presence, Bicycle presence, Vehicle and bicycle counting, Pedestrian presence, Traffic data, wrong-way driver detection	2-30 m / 6-100 ft
TrafiSense2 645	10-7474	VGA	Horizontal: 45° Vertical: 35°	Vehicle presence, Bicycle presence, Vehicle and bicycle counting, Pedestrian presence, wrong-way driver detection	10-75 m / 32-245 ft
TrafiSense2 632	10-7476	VGA	Horizontal: 32° Vertical: 26°	Vehicle presence, Bicycle presence, Vehicle and bicycle counting, Pedestrian presence, wrong-way driver detection	15-90 m / 100-300 ft

### Housing

Material	Aluminum
Dimensions (incl. mounting bracket)	Vertically mounted 45 cm x 16 cm x 12 cm (9.8 in x 6.3 in x 4.7 in) / Horizontally mounted 41 cm x 18 cm x 12 cm (16.2 in x 7.1 in x 4.7 in)
Sunshield	Integrated

### Power, outputs, communications

Contact closures	2 direct, 4 via TI BPL2 EDGE interface (PN 10-7013), extra via 4I/O USB expansion board(s) (PN 10-4675)
SDLC	Up to 16 output channels via TI BPL2 EDGE interface (PN 10-7013) and Port-1 Interface Module (PIM)
Broadband over Power Line or Power over Ethernet	For communication of output state events, configuration & monitoring (streaming video)
Input Power	12-42VAC, 12-60VDC
Current Consumption	< 230 mA @ 24VDC (< 320mA @ 24VDC peak at startup)
Power Consumption	< 5.5W (< 7.5W peak at startup)
Set-up	Web interface
Traffic monitoring, event and data reporting	TMS FLUX Public API for 3rd party integration

### Regulatory

EU Directives	EMC 2014/30/EU, RoHS 2011/65/EU
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### Environmental

Shock & Vibration	NEMA TS2
Materials	All weatherproof (UV-resistant)
Protection Grades	Housing = IP68, Connectors = IP67
Temperature Range	NEMA TS2. From -34°C to +74°C (-29°F to 165°F)
FCC	FCC part 15 Class A

Specifications are subject to change without notice. For the most up-to-date specs, go to [www.flir.com](http://www.flir.com)

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