AI-POWERED HD TRAFFIC SENSOR

TRAFCAM AI

Designed to reliably detect and classify road users, the TrafiCam AI is an intelligent HD visible sensor for traffic monitoring in complex urban environments. Featuring a low-light HD visible camera and AI algorithms built on 25+ years of traffic detection, TrafiCam AI offers detailed vision and data collection for safer, more efficient cities. Capable of tracking multiple objects, the advanced edge-based AI effectively controls intersections and gathers detailed traffic data for better city planning decisions.

www.flir.com/Traffic

PRECISE DETECTION AND CONTROL

Edge-based AI and Full HD imaging offer advanced intersection control that outperforms other signal control technologies

- Low light visual HD camera provides reliable vehicle detection at night and in challenging weather conditions
- Detect the position, speed and heading of vehicles in any direction
- Directly integrate with traffic controllers through accurate virtual loop configuration and dry contacts

FUTUREPROOF TRAFFIC INSIGHT

TrafiCam AI captures advanced and high-resolution traffic data for better-informed city planning decisions

- Automatically detect and classify road users and vehicle types into a wide range of subcategories
- Gather valuable data, including vehicle trajectories throughout intersections
- Provides real-time integration over APIs for adaptive and predictive traffic systems

COMPREHENSIVE REPORTING

Generate automated reports with Acyclica to identify bottlenecks

- Determine the turning movement count per vehicle class at intersections throughout the day
- Measure travel & delay time between intersections
- Streamlined data visualization creates easy-to-read, compelling reasoning for city planning adjustments
## System Overview

### Functionalities
- Vehicle Presence Detection
- Traffic Data Collection (Integrated Data)
- Queue Length Monitoring
- Premium Traffic Data Collection (Individual Data) - optional license

### Services
- FLIR VSO data - optional Acyclica license
- Wi-Fi Travel Time analytics - optional Acyclica license
- Modules (Reporting Module, Planning Module, Signal Timing Tools) - optional Acyclica licenses

### Detection Zones
- 24 virtual loops for presence detection
- 8 traffic data zones for classification and counting

### Configuration
- Local/remote web page setup via Wi-Fi, PoE or BPL

## Imaging & Optical

### Type
- CMOS Type 1/2.8 color High Dynamic Range

### Resolution
- Full HD [1920 x 1080]

### Frame Rate
- 25 fps

### Compression
- H.264, MJPEG

### Streaming Video
- RTSP

## Product Types

### TrafiCam AI - Wide
- Part Number: 10-7710
- Focal Distance: 2.8 mm
- Detection Distance for Vehicle Presence: 0 - 75 m / 0 - 250 ft

### TrafiCam AI - Narrow
- Part Number: 10-7715
- Focal Distance: 8.0 mm
- Detection Distance for Vehicle Presence: 75 - 150 m / 250 - 500 ft

## Mechanical

### Material
- Aluminum housing with integrated polycarbonate sunshield

### 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

## Electrical

### Input power
- 24-42 VAC / 24-48 VDC

### Power consumption
- Avg 6 W / Peak 9 W

### Communication

#### Output contacts
- 1 N/O and 1 N/C dry contact direct
- 16 N/C dry contacts via TI BPL2 interface
- 4 N/C dry contacts via TI BPL2 EDGE interface (more with additional 4 I/O USB expansion boards)
- 30 N/C to traffic light controller via TI BPL 2 EDGE interface and PM module

#### PoE
- PoE mode A for configuration, video streaming and data communication

#### BPL
- 80 Mbps Broadband over Powerline communication via TI BPL2 (EDGE) interface

#### Wi-Fi
- IEEE 802.11 type b,g,n EIRP < 100mW

## Environmental

### Shock & Vibration
- NEMA TS2 specs

### Materials
- All weatherproof UV resistant

### IP Rating
- IP 67

### Temperature Range
- -34°C to + 74°C

## Regulatory

### FCC / EU Directives
- FCC part 15 class A, EMC 2014/30/EU
- RoHS 2011/65/EU, LVD 2014/35/EU

Specifications are subject to change without notice. For the most up-to-date specs, go to www.flir.com