



FLIR TrafiBot AI

Premium Optical IP Camera with Embedded AI Deep Learning for Automatic Incident Detection

www.flir.com/products/TrafiBot-AI



Key Features

- Detects incidents and collects traffic data in inter-urban environments—including tunnels, bridges, and highways—for enhanced road management
- Embedded AI classifies fallen objects, vehicles, and vulnerable road users, limiting false alarms
- 3D tracker detects the movement of vehicles even after losing line of sight
- Built-in tilt sensor reduces installation time in tunnels with sloping walls, limiting tunnel closure

Main Applications

- AI-based automatic incident detection (AID)
- Traffic incident management and roadway safety
- Data collection for traffic management
- Integrates seamlessly with FLIR Cascade

SPECIFICATIONS

Visual image and lens	
Motorized zoom	4x
Focal length	6 to >22 mm (0.24 in to 0.87 in)
Image sensor	1/1.8" CMOS
Field of view (FOV)	HFOV: 26° to 53° VFOV: 15° to 31°
Effective pixels	3840 (H) × 2160 (V), 8 MP (4K)
Minimum illumination	0.02 lux color/0.005 lux B/W analytics, min. 5 lux (street lighting)
Dynamic range	120 dB
Video stream	
Number of streams	2
Encoding formats	AVC/H.264, HEVC/H.265, MJPEG
Analytics	
AI-powered automatic incident detection	Traffic events: Stopped vehicle, speed drop, levels of service, overspeed, wrong-way drivers, traffic congestion, underspeed, lane changes Non-traffic events: Smoke in tunnel, pedestrian, fallen object Technical alarms, image quality
AI-powered traffic data collection	Traffic flow data per lane: Traffic flow speed, zone occupancy Integrated vehicle traffic data: Average speed per vehicle class per lane (headway, gap time per length, class per lane), occupancy Individual vehicle traffic data: Speed, gap time, headway, vehicle classification

AI track data	Historical, live, instant count
AI vehicle classification	Person, bicycle, motorcycle, car, car+trailer, van, van+trailer, small truck, bus, large truck
AI lost object classification	Cones, boxes
Electrical	
Input voltage	24 V AC/DC PoE+ 802.3 at
Power consumption	12 W heater off (normal operation) 17 W heater on
Network	
RJ45 interface	10/100/1000 Mbps
Protocols	IPv4, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, SMTP, DHCP, IGMP, SNMP, QoS, ONVIF, TLS1.2, IEEE802.1x
Outputs	2 (NO/NC)
Environmental	
Operating temperature	Continuous: -40°C to 60°C / -40°F to 140°F (sheltered, air temp)
Relative humidity	0% to 100%, no condensation
Ingress protection	IP66/IP67
Impact casing	IK10
General	
Casing	316 L stainless steel, corrosion-free for harsh environments
Weight	Camera: 3.7 kg (8.2 lbs), 3 kg (6.6 lbs)

Specifications subject to change. For the most up-to-date specifications, please visit flir.com.

For technical or sales support, please visit:
www.flir.com/about/general-inquiries

This product is subject to United States export regulations and may require US authorization prior to export, reexport, or transfer to non-US persons or parties. Diversion contrary to US law is prohibited.

For assistance with confirming the Jurisdiction & Classification of Teledyne FLIR, LLC products, please contact exportquestions@flir.com. ©2024 Teledyne FLIR, LLC. All rights reserved.

Revised 04/05/24
TrafiBot-AI-Datasheet-LTR-24-0025-ITS



FLIR TrafiBot AI

Premium Optical IP Camera with Embedded AI Deep Learning for Automatic Incident Detection

www.flir.com/products/TrafiBot-AI

SPECIFICATIONS, CONT.

Dimensions	Camera: 28.8 × 19.8 × 10.5 cm (11.3 × 7.8 × 4.1 in) Bracket: 32.0 × 17.5 × 24.0 cm (12.6 × 6.9 × 9.4 in)
Brackets	Combo wall/pole/ceiling/curved wall
Finishing	Powder coated RAL9016
Sunshield	316L C5 Marine grade, powder coated RAL9016
Product SKUs	Camera: 10-7655 TrafiBot AI ETH Accessories: 10-7790 Interurban 3 axis swivel only 10-7792 Interurban 3 axis swivel variant only (for direct one-bolt ceiling or cable ladder mounting) 10-7794 Interurban 3 axis swivel and bracket 10-7796 Interurban 3 axis swivel short bracket

Specifications subject to change. For the most up-to-date specifications, please visit flir.com.



For more information about
FLIR TrafiBot AI, please
scan or visit:



For technical or sales support, please visit:
www.flir.com/about/general-inquiries

This product is subject to United States export regulations and may require US authorization prior to export, reexport, or transfer to non-US persons or parties. Diversion contrary to US law is prohibited.

For assistance with confirming the Jurisdiction & Classification of Teledyne FLIR, LLC products, please contact exportquestions@flir.com. ©2024 Teledyne FLIR, LLC. All rights reserved.

Revised 04/05/24
TrafiBot-AI-Datasheet-LTR-24-0025-ITS