



# FLIR TrafiBot Dual AI™

Automatic Incident, Data Collection, and Fire Detection Camera with Embedded AI Deep Learning

[www.flir.com/products/TrafiBot-Dual-AI](http://www.flir.com/products/TrafiBot-Dual-AI)



## SPECIFICATIONS

Visual image and lens	
Motorized zoom	Yes, 4K
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
Thermal image	
Detector type	Focal Plane Array (FPA), uncooled vanadium oxide microbolometer
Spectral range	7.5 to 13.5 μm
Resolution	640 × 512 (fast)
Focal	13/19/25/35 mm (645/632/625/617) mm
Video stream	
Number of streams	2
Encoding formats	AVC/H.264, HEVC/H.265, MJPEG
Analytics	
AI-powered automatic incident detection	<p><b>Traffic events:</b> Stopped vehicle, speed drop, levels of service, overspeed, wrong-way drivers, traffic congestion, underspeed, lane changes</p> <p><b>Non-traffic events:</b> Smoke in tunnel, pedestrian, fallen object, technical alarms, image quality, camera movement</p>

## Key Features

- 14 bit early fire detection ensures the highest quality standard in fire detection for road tunnel environments
- Next-gen AID with AI data classification ensures highly accurate traffic data for more than 8 classes
- Intelligent 3D world tracker tracks the movement of every object in its field of view, ensuring accurate event position information, tracking driving behavior and creation of a digital twin
- Embedded analytics (on-the-edge) performed on direct video input stream guarantees best performance, accuracy, and detection distance, combined with fastest reaction time

## Main Applications

- 14 bit early fire detection
- AI traffic data collection for traffic management
- AI-powered automatic incident detection
- Integrates seamlessly with FLIR Cascade and major VMS and Scada systems
- See and detect through a smoke filled tunnel

Early fire detection	14 bit early fire detection in tunnels, EV-compliant
AI-powered traffic data collection	<p><b>Integrated vehicle traffic data:</b> Average speed, gap time, number of vehicles per class per lane, headway, occupancy, confidence</p> <p><b>Individual vehicle traffic data:</b> Speed, vehicle classification, confidence, length</p>
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	<b>Continuous:</b> -40°C to 60°C / -22°F to 140°F (sheltered, air temp)
Relative humidity	0% to 100%, no condensation
Ingress protection	IP66/IP67
Impact casing	IK10
MTBF / MTTR	>10 years/30'

Specifications subject to change. For the most up-to-date specifications, please visit [flir.com](http://flir.com).

For technical or sales support, please visit:  
[www.flir.com/about/general-inquiries](http://www.flir.com/about/general-inquiries)

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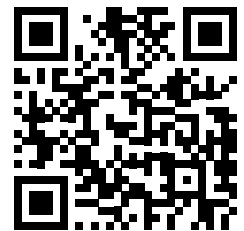
## SPECIFICATIONS, CONT.

General	
Casing	316 L stainless steel corrosion free for harsh environments, C5 marine grade
Weight	Camera: 5.7 kg (12.5 lb), Bracket: 3 kg (6.6 lb)
Dimensions	Camera: 30.1 × 19.2 × 9.4 cm (11.8 × 7.5 × 3.7 in) excluding sunshield Camera: 36.6 × 20.2 × 10.4 cm (14.4 × 7.9 × 4.1 in) including sunshield Bracket: 32 × 17.5 × 24 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	<b>Camera:</b> 10-7800 TrafiBot Dual AI ETH 645 10-7802 TrafiBot Dual AI ETH 632 10-7804 TrafiBot Dual AI ETH 625 10-7806 TrafiBot Dual AI ETH 617 <b>Accessories:</b> 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](http://flir.com).



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



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