

# FLIR ITS-Series Dual AID 316L

Intelligent Dual vision camera for  
Automatic Incident & Fire detection



FLIR ITS-Series Dual AID cameras combine best-in-class thermal and visual imaging technology with advanced video analytics to provide a complete solution for automatic incident detection, data collection and early fire detection. FLIR's traffic video analytics have proven their effectiveness worldwide along highways and in tunnels and are now combined with the power of thermal imaging that allows traffic operators to see clearly in total darkness, in bad weather and over a long range.

## DAYLIGHT CAMERA

All versions are equipped with a daylight/low light camera with a motorized optical zoom. The video output of the thermal imaging and daylight/low light camera are simultaneously available.



## AUTOMATIC INCIDENT DETECTION

The FLIR ITS-Series Dual AID camera provides critical traffic information, supporting traffic operators with alerts on stopped vehicles, wrong-way drivers, pedestrians, lost cargo, traffic flow data and much more.

## THERMAL IMAGING

Thermal imaging cameras outperform other camera technologies by detecting the heat energy given off by everything in their field of view. Because they see heat, not visible light, they don't get confused by sun glare, darkness, headlights, shadows, wet streets, snow and fog, like conventional video cameras do. FLIR thermal cameras do not get damaged at all by looking continuously in direct sun light.

## THERMAL EARLY FIRE DETECTION

The FLIR ITS-Series Dual AID can measure the temperature of any object in its field of view. This unique capability allows detecting fires at an early stage over the full detection range. Unlike other fire detection technologies, no contact is required with flames or heated gasses, nor is any smoke propagation needed for the camera to detect excessive heat generated by fire or another vehicle malfunction. As a result, the thermal camera is capable of detecting fires within seconds of ignition, long before any traditional fire detection system can trigger an alarm. The intelligent fire detection algorithm takes into account multiple parameters, including size, dynamics, growth rate, movement, etc..., resulting in unprecedented fire detection accuracy.



## SEE THROUGH SMOKE

Thermal cameras can penetrate smoke and as such provide a better view in case of fire. This enhanced visibility can help guide emergency personnel to locate people inside the tunnel and save lives in critical situations.

## DESIGNED FOR USE IN HARSH ENVIRONMENTS

Extremely rugged in 316L stainless steel housing. The vital core is well protected, meeting IP66 requirements, against dust and water ingress.

## Specifications

<b>Thermal image</b>	
Detector type	Focal Plane Array (FPA), uncooled Vanadium Oxide Microbolometer
Spectral range	7.5 to 13.5 $\mu$ m
Resolution	640 x 480
Focal	9/13/19/25/35mm
Image frequency	NTSC: 30Hz PAL: 25Hz
Image processing	Automatic Gain Control (AGC), Digital Detail Enhancement (DDE)
<b>Visual image</b>	
Image sensor	1/3" Sony CMOS sensor
Max. Resolution	1920 x 1080
Optical zoom	10x motorized optical zoom
Focal length	5-50mm
<b>Image presentation</b>	
Video over Ethernet	Two independent channels for each camera (4 total) of streaming H.264 or M-JPEG
Streaming Resolutions	Visual : up to 1920 x 1080 @ 30 Hz Thermal: up to 640 x 480 @ 30 Hz
<b>Analytics</b>	
Automatic Incident Detection	<p><b>Traffic events</b> Stopped vehicle, Speed drop, Levels of service, Overspeed, Wrong-way drivers, Traffic congestion, underspeed</p> <p><b>Non-traffic events</b> Smoke in tunnel, Pedestrian, Fallen object</p> <p><b>Technical alarms</b> Image quality, Camera tampering</p>
Traffic Data Collection	<p><b>Traffic flow data per lane</b> Traffic flow speed, zone occupancy</p> <p><b>Integrated vehicle traffic data</b> Average speed per vehicle class per lane (headway, gap time per length, class per lane), occupancy</p> <p><b>Individual vehicle traffic data</b> Speed, gap time, headway, vehicle classification</p>
Fire detection	Early fire detection in tunnels
<b>Power</b>	
Power options	230 Vac, 12Vdc, PoE camera only, PoE+ for camera & heater
Consumption	12W heater off, 24W heater on
<b>Environmental</b>	
Operating temp. range	-10°C to 50°C
Relative humidity	10% to 90%, no condensation
<b>Network</b>	
Interface	10/100 Mbps Ethernet (RJ-45), internal SFP slot optional
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMPv1/2/3, QoS, ONVIF, 802.1X
API	ONVIF Profile S
<b>Standard package</b>	
Dual imaging camera, operator manual	
<b>Mechanical</b>	
Housing material	Stainless steel 316L
Mounting	Wall/pole/ceiling mount
Dimensions(HxWxD)	Housing only: 71 x 130 x300 mm With bracket: 201x134x408 mm
Weight	4kg
Cable glands	2xM20 or IP67 network and power connector

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