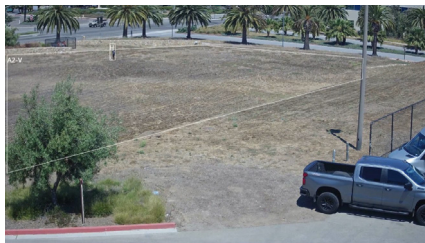


# Triton™ FH-Series ID

## Multispectral Fixed Camera for Perimeter Security

The FLIR Triton FH-Series ID are ruggedized, multispectral fixed cameras that integrate industry-leading thermal imaging with 4K visible imaging to provide reliable intruder-detection capabilities for perimeter security. Built-in convolutional neural network (CNN) analytics accurately detect and classify human and vehicle threats moving at high or low speeds, minimizing false alarms and daily operations costs. Custom scheduling enables security operators to set intrusion analytics to run on visible streams during the day and on thermal streams throughout the night, establishing optimized coverage for any lighting condition.

**PERIMETER PROTECTION**  
**INTRUSION DETECTION**  
**TARGET GEOLOCATION**  
**OBJECT CLASSIFICATION  
WITH CNN ANALYTICS**  
**24/7 SITUATIONAL AWARENESS**  
**CYBERSECURITY HARDENED**  
**SEAMLESS INTEGRATION WITH VMS**



### ALWAYS READY, ALWAYS WORKING

Integrates high-resolution thermal imaging and a visible sensor into a single camera for optimal performance in any environment or lighting condition

- Gain 24/7 situational awareness in the most challenging perimeters with the 640 × 512 thermal imager and market-leading <30 mK thermal sensitivity
- Assess threats in real time and see forensic detail with the 4K visible camera
- Combines a two-camera installation in one physical connection for a cost-efficient solution
- 10-year thermal sensor warranty

### HIGH-ACCURACY INTRUSION DETECTION

Features CNN-based decision support, allowing on-camera video analytics to run on both the visible and thermal spectrum for robust intrusion detection customized for each installation

- Minimize false alarms and the cost of daily operations by detecting and classifying threats (human and vehicle) with high accuracy
- Make detections based on time of day, business hours, and seasonality with the on-board scheduling tool, which allows the operator to select either visible or thermal analytics
- Clearly detect intruders in challenging poses – even when they're only in partial view of the camera or moving at high or low speeds

### EASY INTEGRATION

Deploy this camera as part of a Teledyne FLIR end-to-end solution or in combination with preferred third-party solutions

- Strengthen end-to-end systems with on-board NEXUS® technology, which enables network connections to FLIR edge devices
- Tightly integrated with FLIR United VMS and major third-party VMS
- ONVIF® Conformant to S/G/T profiles



## TRITON FH-SERIES ID

Thermal Sensor & Optics					Network	
Array Format (NTSC)	640 × 512				Supported Protocols	IPV4, HTTP, HTTPS, UPnP, DNS, NTP, RTSP, TCP, UDP, ICMP, IGMP, DHCP, ARP, IEEE 802.1X
Detector Type	Long-Life, Uncooled VOx Microbolometer				General	
Pixel Pitch	17 μm				Input Voltage	12 VDC (±10%) 24 VDC (±10%) 24 VAC (±10%) 802.3 bt
Thermal Frame Rate	NTSC: 30 Hz or PAL: 25 Hz / 8.3 Hz				Power Consumption	Nominal: 15 W Heaters enabled, 12 VDC: 48 W Heaters enabled, all other inputs: 70 W
Optical Characteristics	Model	FOV	Focal Length	F/#	Environmental	
	669	69° × 56°	9 mm	F1.4	IP Rating (Dust & Water Ingress)	IP66, IP67
	644	44° × 36°	13 mm	F1.0	Operating Temperature Range	-40°C to 70°C (-40°F to 158°F)
	625	25° × 18°	25 mm	F1.1	Storage Temperature Range	-55°C to 85°C (-67°F to 185°F)
	617	17° × 14°	35 mm	F1.1	Corrosion	MIL-STD 810G, 1000 hr salt spray
	612	12° × 10°	50 mm	F1.2	Humidity	0-95% relative
	610	10° × 8.2°	60 mm	F1.2	Shock	IEC 60068-2-27
	608	8.6° × 6.6°	75 mm	F1.1	Vibe	IEC 60068-2-64
Spectral Range	7.5 μm to 13.5 μm				Vandalism	IK10 (Except Windows)
Sensitivity (NEΔT)	<30 mK @ 25°C (77°F) F# 1.0				Surge Immunity on AC Power Lines	EN 50130- 4
Visible Light Camera						
Sensor Type	4K 2160p (3840 × 2160)					
Optical Characteristics	Model	Default FOV	Focal Length	F/#	Surge Immunity on Signal Lines	EN 50130- 4
	669	98° × 55°	3.6-10 mm	1.5 - 2.8	Surge/Lightning Protection	TVS 6000 V Lightning protection, surge protection, voltage transient protection
	644	63° × 35°	3.6-10 mm	1.5 - 2.8	Compliance & Certifications	
	625	36° × 20°	9-22 mm	1.4 - 1.7	FCC Part 15 (Subpart B, class A)	
	617	24° × 14°	13-55 mm	1.6 - 2.2	CE Marked	
	612	17° × 10°	13-55 mm	1.6 - 2.2	RoHS	
	610	14° × 8°	13-55 mm	1.6 - 2.2	IP66	
	608	11° × 6°	13-55 mm	1.6 - 2.2	WEEE	
Video						
Video Type	IP or Analog Video					
Sensitivity	Color: 0.25 Lux (@ f1.6 AGC On, 30 fps) B/W: 0.10 Lux (@ f1.6 AGC On, 30 fps)					
Visible Frame Rate	30 Hz					
Video Compression	Two independent channels of H.264/H.265 or M-JPEG (except 4K) for visible and thermal					
Streaming Resolution	Primary Stream:					
	Thermal: VGA (640 × 512), QVGA (320 × 256) Visible: 4K (3840 × 2160), 1080p (1920 × 1080), 720p (1280 × 720) & VGA (640 × 480)					
	Secondary Stream:					
	Thermal: VGA (640 × 512), QVGA (320 × 256) Visible: 1080p (1920 × 1080), 720p (1280 × 720) & VGA (640 × 480)					
Thermal Image Settings	Auto AGC, Dynamic Detail Enhancement (DDE), Brightness, Contrast					
Thermal AGC Region of Interest (ROI)	Default, Presets and User definable to ensure optimal image quality on subjects of interest					
Image Uniformity Optimization	Automatic Flat Field Correction (FFC) - Thermal and Temporal Triggers					
System Integration						
Ethernet	100/1000 Mbps					
Network APIs	NEXUS® SDK NEXUS® CGI ONVIF Profile S, G, T					
Digital I/O	Input: two dry alarm contacts Output: two relay contacts 1 A max at 24 VAC/30 VDC Configurable between normally open and normally closed					

## AMERICAS

27700 SW Parkway Ave.  
Wilsonville, OR 97070  
Office: +1 877.773.3547

6769 Hollister Ave.  
Goleta, CA 93117  
Office: +1 805.690.6600

For more information visit:  
[www.flir.com/FH-Series-ID](http://www.flir.com/FH-Series-ID)

[www.teledyneflir.com](http://www.teledyneflir.com)

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