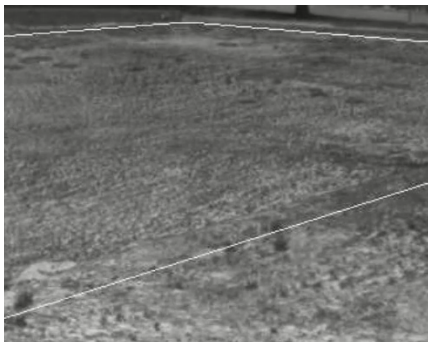
FH-Series ID

Multispectral Fixed Camera for Perimeter Security

The FLIR 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 deep neural network (DNN) 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 DNN 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 <25 mK thermal sensitivity
- Assess threats in real time and see forensic detail with the 4K visible camera
- Multispectral, combines a thermal and a visible camera in one device, only needing one physical connection for a cost-efficient solution
- 10-year thermal sensor warranty

HIGH-ACCURACY INTRUSION DETECTION

Features DNN-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

For more information visit:
www.flir.com/FH-Series-ID

www.teledyneflir.com

TELEDYNE FLIR

FH-SERIES ID

Thermal Sensor & Optics				
Array Format (NTSC)	640 × 512			
Detector Type	Long-life, uncooled VOx microbolometer			
Pixel Pitch	17 µm			
Thermal Frame Rate	NTSC: 30 Hz or PAL: 25 Hz / 8.3 Hz			
Optical Characteristics	Model	FOV	Focal Length	F/#
	669	69° × 56°	9 mm	F1.4
	644	44° × 36°	13 mm	F1.0
	625	25° × 18°	25 mm	F1.1
	617	17° × 14°	35 mm	F1.1
	612	12° × 10°	50 mm	F1.2
	610	10° × 8.2°	60 mm	F1.2
	608	8.6° × 6.6°	75 mm	F1.1
Spectral Range	7.5 µm to 13.5 µm			
Thermal Sensitivity (NETD)	<25 mK @ 25°C (77°F) F# 1.0			
Visible Light Camera				
Sensor Type	4K 2160p (3840 × 2160)			
Optical Characteristics	Model	Default FOV	Focal Length	F/#
	669	98° × 55°	3.6-10 mm	1.5 - 2.8
	644	63° × 35°	3.6-10 mm	1.5 - 2.8
	625	36° × 20°	9-22 mm	1.4 - 1.7
	617	24° × 14°	13-55 mm	1.6 - 2.2
	612	17° × 10°	13-55 mm	1.6 - 2.2
	610	14° × 8°	13-55 mm	1.6 - 2.2
	608	11° × 6°	13-55 mm	1.6 - 2.2
Video				
Video Type	IP and 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			

Network	
Supported Protocols	IPV4, HTTP, HTTPS, UPnP, DNS, NTP, RTSP, TCP, UDP, ICMP, IGMP, DHCP, ARP, IEEE 802.1x
General	
Input Voltage	12 VDC (±10%) 24 VDC (±10%) 24 VAC (±10%) 802.3 bt
Power Consumption	Nominal: 15 W Heaters enabled, 12 VDC: 48 W Heaters enabled, all other inputs: 70 W
Environmental	
IP Rating (Dust & Water Ingress)	IP66, IP67
Operating Temperature Range	-40°C to 70°C (-40°F to 158°F)
Storage Temperature Range	-55°C to 85°C (-67°F to 185°F)
Corrosion	MIL-STD 810G, 1000 hr salt spray
Humidity	0-95% relative
Shock	IEC 60068-2-27
Vibe	IEC 60068-2-64
Vandalism	IK10 (except Windows)
Surge Immunity on AC Power Lines	EN 50130- 4
Surge Immunity on Signal Lines	EN 50130- 4
Surge/Lightning Protection	TVS 6000 V Lightning protection, surge protection, voltage transient protection

Compliance & Certifications

FCC Part 15 (Subpart B, class A)
UL Listed
CE Marked
RoHS
IP66
WEEE
IEC 62368
ONVIF Profile S, G, T

Video Analytics

Region entrance/Intrusion detection
Tampering
Loitering
DNN classifier

Cybersecurity

IEEE 802.1x
TLS/HTTPS
User authentication
Access control via firewall
User credentials with policy enforcement
Digest authentication

General	
Dimensions, with sunshield	233 x 124 x 313 mm / 9.2 x 4.9 x 12.3 in. (W x H x D)
Unit Weight	11.3 lbs. / 5.1 kg

NDAA Compliant

For accessories, product registration, and warranty information, scan or visit:

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For more information visit:
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