FLIR FC-SERIES AI

Thermal AI Analytics Camera

Key Features:

- Robust DNN video analytics, reliably recognize humans and vehicles with high accuracy
- Differentiate between true threats and false alarms, even when someone is attempting to deceive the system
- Target geolocation for situational awareness and precise handoff to a PTZ device
- Choose from 8 high-performance lenses from 8° to 90° fields of view
- Cyber-hardened, seamless integration with Video Management Systems, including FLIR UVMS and 3rd party video management systems

Main Applications:

- Perimeter protection
- Large and small area protection
- Remote site monitoring

www.flir.com/fc-series-ai

SPECIFICATIONS

Overview	
Array format	640 × 512
Detector type	Long-life, uncooled VOx microbolometer
Spectral range	7.5 µm to 13.5 µm
Effective resolution	327,680 pixels
Pixel pitch	17 µm
Thermal frame rate	NTSC: 30 Hz - PAL: 30 Hz / 8.3 Hz
Focus	Athermalized, focus-free
Sensitivity	<25 mK @ 25°C (77°F) for f/1.0
Video	
Composite video NTSC or PAL	Hybrid system with IP & analog video, dynamic NTSC or PAL settings
Analog video output composite	1Vp-p (PAL or NTSC), 1 x BNC 75 Ω
Video compression	Two independent channels of H.264 / H.265 or MJPEG
Streaming resolution	640×512
Thermal Image Settings	Brightness, Contrast, Sharpness, Auto AGC, Digital Detail Enhancement (DDE), Gamma, Smart Screen Optimization
Thermal AGC region of interest	Default, Presets, and User definable to ensure optimal image quality on subjects of interest
Analytics management	Web-based configuration and management; masking of analytic detection areas, adjustable sensitivity, automatic responses, remote I/O control
Analytics features	Region entrance/Intrusion detection, Crossover/fence trespassing, CNN classifier
Image uniformity optimization	Automatic flat field correction (FFC); thermal and temporal triggers
SD card snapshot capture	Support up to 512 GB SD card (sold separately)

System Integration	
Ethernet	10/100 Mbps
External analytics compatible	Yes
Control input/output network	1x dry contact in; 1x relay out (rated load 0.025 A@ 5 VDC)
APIs	NEXUS SDK, NEXUS CGI, ONVIF Profile S, G, T
Network	
Supported protocols	IPV4, HTTP, HTTPS, UPnP, DNS, NTP, RTSP, TCP, UDP, ICMP, IGMP, DHCP, ARP, IEEE 802.1x
General	
Weight with sunshield	7.5/9/13/19/25/35 mm 2.2 kg (4.75 lb) - 60 mm 2.4 kg (5.25 lb) - 75 mm 2.5 kg (5.5 lb)
Weight without sunshield	7.5/9/13/19/25/35 mm 1.8 kg (4 lb) - 60 mm 2.0 kg (4.5 lb) - 75 mm 2.2 kg (4.75 lb)
Dimensions (l × w × h)	Without sunshield: 259 × 114 × 106 mm/10.2 × 4.5 × 4.2 in With sunshield: 282 × 129 × 115 mm/11.1 × 5.1 × 4.5 in
Input voltage	Source: PoE+ (802.3 at) / 12 VDC / 24 VDC / 24 VAC(VA) Heater off: <9 W / <10 W / <9 W / <15 W Heater on (@ 100%): <25 W / <28 W / <25 W / <32 W
Surge immunity on AC power and signal lines	ESD: EN 61000-4-2 RS: EN 61000-4-3; EN 55035 (2017 + A11: 2020); EN 50130-4 EFT: EN 61000-4-4 Surge: EN 61000-4-5 CS: EN 61000-4-6 PFMF: EN 61000-4-8

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

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FC-Series-AI-Datasheet-LTR 23-0634-SEC

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SPECIFICATIONS, CONT.

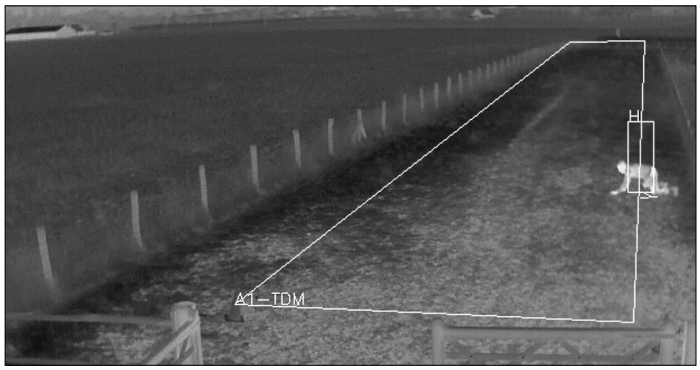
Cybersecurity	IEEE 802.1x, TLS/HTTPS, User authentication access control via firewall, user credentials with policy enforcement, digest authentication
Environmental	
IP rating (dust & water ingress)	IP66 & IP67
Operating temperature range	-40°C to 70°C/-40°F to 158°F (cold start)
Storage temperature range	-50°C to 85°C (-58°F to 185°F)
Humidity	0-95% relative humidity
Shock	Shock (Operational) MIL-STD-810G, Method 516.6 Shock (Transportation) IEC 60068-2-27:08
Vibration	IEC 60068-2-64:08
Vandalism	IK10 (except lens and windows)
De-icing/Anti-icing	MIL-STD 810F:00 + Notice 1:00 + Notice 2:02 + Notice 3:03
Warranty & Regulatory	
Emission	FCC 47 CFR Part 15, Subpart B, Class A (within CISPR 22:2008 Class A limits); EN55032 Class A
Safety	EN 62368-1: 2014 + A11: 2017 (certification pending)
Compliance	CE Marked; RoHS III Directive 2015/863/EU; WEEE Directive 2012/19/EU
Warranty	Camera: 3 years / Sensor: 10 years

Optics			
Model	FOV	f/number	Focal Length
FC-690 AI	90° × 69°	f/1.2	7.5 mm
FC-669 AI	69° × 56°	f/1.4	9 mm
FC-644 AI	44° × 36°	f/1.0	13 mm
FC-632 AI	32° × 26°	f/1.0	19 mm
FC-625 AI	25° × 18°	f/1.1	25 mm
FC-617 AI	17° × 14°	f/1.1	35 mm
FC-610 AI	10° × 8.2°	f/1.2	60 mm
FC-608 AI	8.6° × 6.6°	f/1.1	75 mm

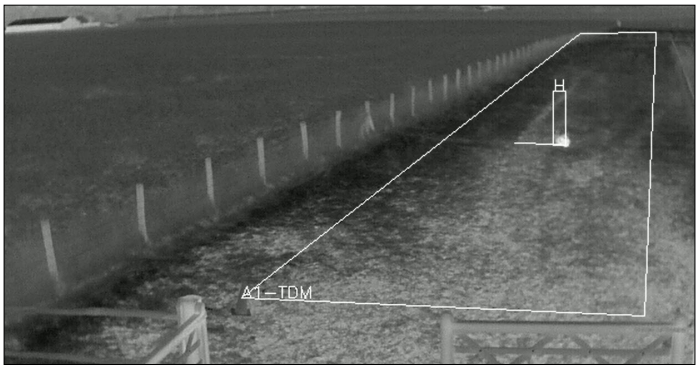
Specifications are subject to change without notice.

NDAA Compliant

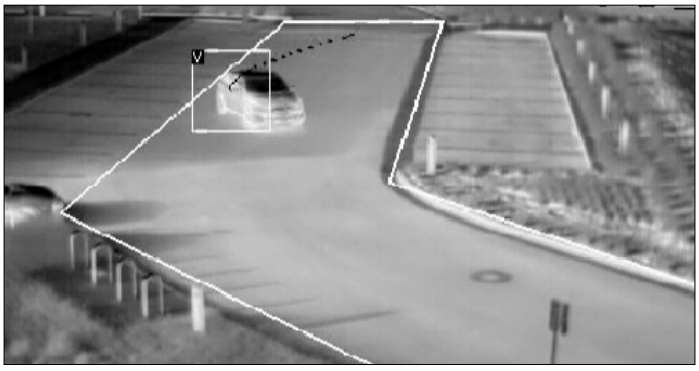
For accessories, product registration, and warranty information, scan or visit:



FC-Series AI detecting a human crawling in alarm zone



FC-Series AI detecting a human rolling in alarm zone


FC-Series AI detecting a vehicle in alarm zone

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