

FLIR FC-SERIES AI Thermal AI Analytics Camera



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)			

Key Features:

- Robust DNN video analytics, reliably recognize humans and vehicles with high accuracy
- Differentiate between true threats and nuisance 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

System Integration						
Ethernet	10/100 Mbps	10/100 Mbps				
External analytics compatible	Yes	Yes				
Control input/output network		1x dry contact in; 1x relay out (rated load 0.025 A@ 5 VDC)				
APIs	NEXUS SDK,	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 ($I \times w \times h$)	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					

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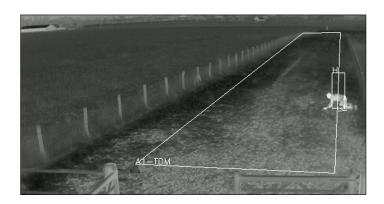
SPECIFICATIONS, CONT.

Cybersecurity	IEEE 802.1x, TLS/HTTPS, User authentication access con- trol 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	

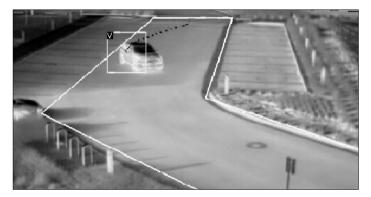
Optics						
Model	FOV	f/number	Focal Length			
FC-690 AI	90°×69°	f/1.2	7.5 mm			
FC-669 AI	69° × 56°	f/1.4	9 mm			
FC-644 AI	44°×36°	f/1.0	13 mm			
FC-632 AI	32°×26°	f/1.0	19 mm			
FC-625 AI	25° × 18°	f/1.1	25 mm			
FC-617 AI	17° × 14°	f/1.1	35 mm			
FC-610 AI	10° × 8.2°	f/1.2	60 mm			
FC-608 AI	8.6°×6.6°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

Specifications are subject to change without notice.









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