

# THERMAL SECURITY MATRIX

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FLIR Security offers the most technically-advanced thermal perimeter protection for critical infrastructure. We feature a full range of cameras that provide unparalleled intrusion detection, day and night, at such critical locations as airports, power grids and utilities.

Thermal cameras see far along fence lines by detecting the heat of intruders at great distances in all lighting conditions. When utilizing onboard or external analytics, FLIR cameras also intelligently classify human and vehicles, resulting in fewer false alarms.

Because our cameras are open platform, they easily integrate into FLIR Latitude VMS, as well as major third party video management systems, access control systems, and sensor technologies.

FLIR is the world leader in developing thermal technology for the security industry. Our cameras are available in a wide range of configurations—including bullet, dome, and PTZ options—with multiple lens options. They are renowned for their reliability, performance and solid ownership experience.



FLIR ELARA™



	FC-Series R	FB-Series O	FB-Series ID	FC-Series O	FC-Series ID
	Fixed IP Thermal Camera with Radiometrics	Fixed IP Thermal Camera	Fixed IP Thermal Camera with built-in analytics	Fixed IP Thermal Camera	Fixed IP Thermal Camera with built-in analytics
Resolution	VGA (640 x 480),	QVGA (320 x 240) VGA (640 x 480)	QVGA (320 x 240) VGA (640 x 480)	VGA (640 x 480), QVGA (320 x 240)	VGA (640 x 480), QVGA (320 x 240)
Thermal Sensor	Uncooled Sun-safe VOx Microbolometer	Uncooled Sun-safe VOx Microbolometer	Uncooled Sun-safe VOx Microbolometer	Uncooled Sun-safe VOx Microbolometer	Uncooled Sun-safe VOx Microbolometer
Thermal FOV	VGA 2 models 32° & 45° (13 & 19mm)	Five 320 x 240 models – 9°, 12°, 24°, 49° & 93° (3.7, 6.8, 12.8, 18 & 24mm) Four 640 x 480 models – 95°, 50°, 32°, & 18° (4.9, 8.7, 14, & 24mm)	Five 320 x 240 models – 9°, 12°, 24°, 49° & 93° (3.7, 6.8, 12.8, 18 & 24mm) Four 640 x 480 models – 95°, 50°, 32°, & 18° (4.9, 8.7, 14, & 24mm)	4° to 69° QVGA, 9 models (9 to 75mm) 8° to 90° VGA, 8 models (7.5 to 75mm)	4° to 69° QVGA, 9 models (9 to 75mm) 8° to 90° VGA, 8 models (7.5 to 75mm)
Wide Dynamic Range Thermal	Yes	Yes	Yes	Yes	Yes
Video Outputs	IP & Analog	IP & Analog	IP & Analog	IP & Analog	IP & Analog
Video	Dual stream H.264, MPEG-4 & MJPEG	Dual stream H.264 & MJPEG	Dual stream H.264 & MJPEG	Dual stream H.264, MPEG-4 & MJPEG	Dual stream H.264, MPEG-4 & MJPEG
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S	Profile S
Ingress Rating /Min. Oper. Temp.	-50°C to 70°C (-58°F to 158°F) continuous operation -40°C to 70°C (-40°F to 158°F) cold start IP66 and IP67	-40°C to 50°C (-40°F to 122°F) cold start IP66	-40°C to 50°C (-40°F to 122°F) cold start IP66	-50°C to 70°C (-58°F to 158°F) continuous operation -40°C to 70°C (-40°F to 158°F) cold start IP66 and IP67	-50°C to 70°C (-58°F to 158°F) continuous operation -40°C to 70°C (-40°F to 158°F) cold start IP66 and IP67
Anti-Ice/De-Ice	Yes	No	No	Yes	Yes
Power Inputs	PoE, PoE+, 18-32 VAC, 18-44 VDC	12 VDC, 24VAC, PoE	12 VDC, 24VAC, PoE	PoE, PoE+, 14-32 VAC, 11-44 VDC	PoE, PoE+, 14-32 VAC, 11-44 VDC
High Performance Surge Protection	Yes	Yes	Yes	Yes	Yes
Warranty Period	3 Years on Cameras, 10 Years on Thermal Sensor				



	PT-Series HD	PT-602CZ HD	A310PT	F-Series ID
Resolution	Thermal VGA (640 x 480) Visible – Full HD 1080p	Thermal VGA (640 x 480) Visible – Full HD 1080p	Thermal QVGA (320 x 240) Visible – D1 Radiometric Measurement	Fixed IP Thermal VGA (640 x 480) with built-in analytics
Thermal Sensor	Uncooled Sun-safe VOx Microbolometer	Cooled Sun-safe FPA Detector Technology	Uncooled Sun-safe VOx Microbolometer	Uncooled Sun-safe VOx Microbolometer
Thermal FOV	Continuous optical zoom model 6° to 24° (26 and 105mm) 5 fix lens models 8° to 44° (13 to 75mm)	Continuous optical zoom model 2° to 28° (19 to 275mm)	25° Standard (7°/15°/45°/90° options available)	VGA 5 models 8° to 44° (13 to 75mm)
Wide Dynamic Range Thermal	Yes	Yes	No	Yes
Pan Angle/Speed Tilt Angle/Speed	Continuous 360°, 0.1° to 60°/sec +90° to -90°, 0.1° to 30°/sec	Continuous 360°; 0.1° to 60°/sec +90° to -90°, 0.1° to 30°/sec	Continuous 360°, 0.1° to 60°/sec +90° to -90°, 0.1° to 30°/sec	Fixed
Video Outputs	IP & Analog	IP & Analog	IP & Analog	IP & Analog
IP Video	Dual stream H.264 & MJPEG for each sensor	Dual stream H.264 & MJPEG for each sensor	Dual stream H.264, MPEG-4 & MJPEG	Dual stream H.264 & MJPEG
Visible Camera	CMOS, 30x optical zoom with auto-focus and 12x digital zoom FOV 63.7° to 2.3°	CMOS, 30x optical zoom with auto-focus and 12x digital zoom FOV 63.7° to 2.3°	HAD CCD, 36x optical zoom, 12x digital FOV 57.8° to 1.7°	No
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S
Ingress Rating /Min. Oper. Temp.	-40°C to 70°C (-40°F to 158°F) cold start IP66	-32°C to 55°C (-25°F to 131°F) cold start IP66	-25°C to 50°C (-13°F to 122°F) IP66	-50°C to 70°C (-58°F to 158°F) continuous operation -40°C to 70°C (-40°F to 158°F) cold start IP66
Anti-Ice/De-Ice	Yes	Yes	Yes	Yes
Power Inputs	24 VAC, 24 VDC	24 VAC, 24 VDC	24V AC, 24 VDC	24 VAC, 24 VDC
High Performance Surge Protection	Yes	Yes	Yes	Yes
Warranty Period	2 Years on Cameras, 10 Years on Thermal Sensor			



1080p IR PTZ	
Resolution	1080p 1920 x 1080 @ 30/25 fps
Image Sensor	1/2.8" CMOS
WDR support	sWDR
Focal Length/FOV (H)	30x Continuous Zoom Lens 4.3 to 129mm 2.6°– 68.7° HFOV
Built-in IR	Yes – Up to 200m (656 ft.)
ONVIF Conformance	Profile S/G
Edge Storage Support	microSDx C up to 128GB (Class 10)
Audio Support	Yes/Full Duplex
Ingress Rating / Operating Temperature	IK10 Upper / IK8 Lower IP66 Overall -45° to 50° C (-49° to 122° F)
Power Inputs	PoE++ 802.3bt 60W, 12VDC, 24VAC
Warranty Period	2 Years

DH-390 Dome	
Resolution	320 x 120 native, 960 x 360 VividIR
Thermal Sensor	Uncooled Sun-safe VOx Microbolometer @ 10 fps
Pixel Pitch	12 µm
Optical Characteristics	2x Lepton 3.5, HFOV 57° each Min. Stitched, HFOV 90°, f/1.1 Thermal sensitivity <50 mK
Visible Camera	1900 x 1080, 2.1MP, 1/2.8" @ 30 fps 3mm f/1.6 lens, P-Iris with auto-focus Automatic white balance, WDR
Video	Dual stream H.264, MJPEG
ONVIF Conformance	Profile S
Day / Night Mode	Automatic with 940nm NIR LEDs for very low light scenes. White light LEDs automatic on event for color detail.
Ingress rating / Operating Temperature	-40°C to 60°C without LEDs enabled, with LEDs (40°C max) IP66
Power Inputs	POE, 12VDC (10-14 VDC), 24 VDC (21-30 VDC), 24 VAC (21-30 VAC)
High Performance Surge Protection	Yes
Warranty Period	3 Years

Further information on thermal imaging cameras and their application can be obtained from:

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