THERMAL SECURITY MATRIX

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.



$^{FLIR}ELARA^{^{\mathrm{m}}}$













	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 (640x480),	QVGA (320x240)	QVGA (320x240)	VGA (640x480), QVGA (320x240)	VGA (640x480), QVGA (320x240)
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)	5 models - 9°, 12°, 24°, 49° & 93° (3.7, 6.8, 12.8, 18 & 24mm)	5 models - 9°, 12°, 24°, 49° & 93° (3.7, 6.8, 12.8, 18 & 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	-40°C to 50°C (-40°F to 122°F) cold start	-40°C to 50°C (-40°F to 122°F) cold start	-50°C to 70°C (-58°F to 158°F) continuous operation -40°C to 70°C (-40°F to 158°F) cold start	-50°C to 70°C (-58°F to 158°F) continuous operation -40°C to 70°C (-40°F to 158°F) cold start
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				

FLIR**TRITON**™













	PT-Series HD	PT-602CZ HD	A310PT	D-Series	F-Series ID
Resolution	Thermal VGA (640x480) Visible — Full HD 1080p	Thermal VGA (640x480) Visible — Full HD 1080p	Thermal QVGA (320x240) Visible — D1	Thermal VGA (640x480) and QVGA (320x240) Visible – D1	Fixed IP Thermal VGA (640x480) 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	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)	QVGA 4 models 13° to 48° (9-35mm) VGA 3 models 18° to 45° (13-35mm)	VGA 5 models 8° to 44° (13 to 75mm)
Wide Dynamic Range Thermal	Yes	Yes	No	Yes	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	Continuous 360°, 0.5° to 60°/sec +22° to -90°, 0.5° to 60°/sec	Fixed
Video Outputs	IP & Analog	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, 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°	HAD CCD, 36X optical zoom, 12X digital FOV 57.8° to 1.7°	No
ONVIF Conformance	Profile S	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	-32°C to 55°C (-25°F to 131°F) cold start	-25°C to 50°C (-13°F to 122°F)	-25°C to 70°C (-13°F to 158°F) continuous operation	-50°C to 70°C (-58°F to 158°F) continuous operation -40°C to 70°C (-40°F to 158°F) cold start
Anti-Ice/De-Ice	Yes	Yes	Yes	Yes	Yes
Power Inputs	24 VAC, 24 VDC	24 VAC, 24 VDC	24V AC, 24 VDC	24 VAC, 24 VDC	24 VAC, 24 VDC
High Performance Surge Protection	Yes	Yes	Yes	Yes	Yes
Warranty Period	2 Years on Cameras, 10 Years on Thermal Sensor				

$^{FLIR}SAROS^{^{ imes}}$













Resolution 30/25 fps Image Sensor 1/2.8" CMOS WDR support sWDR Focal Length/ FOV (H) 30X Continuos Zoom Lens 4.3 to 129mm 2.6° – 68.7° HFOV Built-in IR Ves – Up to 200m (656 ft.) ONVIF Conformance Edge Storage Support MicroSDXC up to 128GB (Class 10) Audio Support Ves/Full Duplex Ingress Rating / Operating Temperature Power Inputs Power Inputs Array Forma Array Forma Array Forma Amax Frame F Visible Light Sensor Type Lens Type White Balan Aspect Ratio Wide Dynam Power Inputs		1080p IR PTZ		
Image Sensor 1/2.8" CMOS WDR support sWDR Focal Length/FOV (H) Suilt-in IR ONVIF Conformance Edge Storage Support Audio Support Ingress Rating / Operating Temperature Power Inputs 1/2.8" CMOS SWDR Audio Support SWDR Pixel Pitch Max Frame Foundary Pixel Pitch Max Frame Foundary Optical Char Visible Light Sensor Type Lens Type Max Frame Foundary Visible Light Sensor Type Lens Type Max Frame Foundary White Balan Aspect Ration (-49° to 122° F) Power Inputs Poeth 802.3bt 60W, 12VDC, 24VAC Day Night Max Pixel Pitch Max Frame Foundary Visible Light Sensor Type Lens Type White Balan Aspect Ration Wide Dyname	Resolution	'	Thermal Cam	
WDR support SWDR Pixel Pitch Max Frame R 30X Continuos Zoom Lens 4.3 to 129mm 2.6°-68.7° HFOV Doptical Char Built-in IR Yes – Up to 200m (656 ft.) ONVIF Conformance Profile S/G Edge Storage Support MicroSDXC up to 128GB (Class 10) Audio Support Ves/Full Duplex Ingress Rating / Operating Temperature Poeth + 802.3bt 60W, 12VDC, 24VAC Pixel Pitch Max Frame R Visible Light Sensor Type Lens Type White Balan Aspect Ration Wide Dynam Poeth + 802.3bt 60W, 12VDC, 24VAC Day Night M			Array Format	
Focal Length/FOV (H) 30X Continuos Zoom Lens 4.3 to 129mm 2.6°-68.7° HFOV Built-in IR Yes – Up to 200m (656 ft.) ONVIF Conformance Edge Storage Support Max Frame F Optical Char Visible Light Sensor Type Lens Type Lens Type Max Frame F White Balan Aspect Ratio Operating Temperature PoE++ 802.3bt 60W, 12VDC, 24VAC Max Frame F Optical Char Whisple Light Conformance PoE++ 802.3bt 60W, 12VDC, 24VAC Day Night M	Image Sensor	1/2.8" CMUS		
Focal Length/FOV (H) 30X Continuos 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 Audio Support Ingress Rating / Operating Temperature Power Inputs 30X Continuos Zoom Lens 4.3 to 129mm 2.6° – 68.7° HFOV Post Ingress Rating / Operating Temperature 30X Continuos Zoom Lens 4.3 to 129mm 2.6° – 68.7° HFOV Visible Light Sensor Type Lens Type Max Frame Formula 1966 Overall 2.45° to 50° C 2.49° to 122° F) Power Inputs PoE++ 802.3bt 60W, 12VDC, 24VAC Day Night Max Frame Formula 2.45° to 50° C 2.49° to 122° F)	WDR support	sWDR		
Focal Length/FOV (H) 4.3 to 129mm 2.6°-68.7° HFOV Doptical Char Built-in IR Yes - Up to 200m (656 ft.) Profile S/G Edge Storage Support Audio Support Audio Support Ingress Rating / Operating Temperature Power Inputs Audio Support Audio Support INTRO Upper / IK8 Lower IP66 Overall -45° to 50° C (-49° to 122° F) Power Inputs Audio Support PoE++802.3bt 60W, 12VDC, 24VAC Optical Char Visible Light Sensor Type Max Frame Fill White Balan Aspect Ratio Wide Dynam Day Night M		20V Cantinuas Zaam Lans	Max Frame F	
ONVIF Conformance Profile S/G Profile S/G Edge Storage Support Audio Support Ingress Rating / Operating Temperature Power Inputs Profile S/G Sensor Type Max Frame Four Profile S/G Max Frame Four Profile S/G Profile S/G Sensor Type Max Frame Four Profile S/G Max Frame Four Profile S/G Poest Profile S/G Sensor Type Max Frame Four Profile S/G White Balan Aspect Ration Wide Dynam Poest Profile S/G Poest Profile S/G Poest Profile S/G Sensor Type	.	4.3 to 129mm	Optical Chara	
Conformance Profile S/G Sensor Type Edge Storage Support Audio Support Ves/Full Duplex Ingress Rating / Operating Temperature Power Inputs Profile S/G MicroSDXC up to 128GB (Class 10) Ikino Upper / Ikin	Built-in IR	Yes — Up to 200m (656 ft.)		
Edge Storage Support microSDXC up to 128GB (Class 10) Audio Support Yes/Full Duplex Max Frame For Ingress Rating / Operating Temperature Power Inputs Poet H 802.3bt 60W, 12VDC, 24VAC Sensor Type Sensor Type Lens Type Max Frame For White Balan Aspect Ration Wide Dynam Poet H 802.3bt 60W, 12VDC, 24VAC Day Night M	ONVIF	Profile S/G	Visible Light	
Support (Class 10) Audio Support Yes/Full Duplex Ingress Rating / Operating Temperature PoE++ 802.3bt 60W, 12VDC, 24VAC Audio Support Yes/Full Duplex Max Frame Found White Balan Aspect Ration Wide Dyname PoE++ 802.3bt 60W, 12VDC, 24VAC Day Night M	Conformance		Sensor Type	
Ingress Rating / Operating Temperature IK10 Upper / IK8 Lower IP66 Overall -45° to 50° C (-49° to 122° F) Power Inputs IK10 Upper / IK8 Lower IP66 Overall -45° to 50° C (-49° to 122° F) PoE++ 802.3bt 60W, 12VDC, 24VAC Day Night M		· ·	Lens Type	
Ingress Rating / Operating P66 Overall -45° to 50° C (-49° to 122° F) Power Inputs PoE++ 802.3bt 60W, 12VDC, 24VAC IF 10 Opper 188 Lower Aspect Ratio Wide Dynam Aspect Ratio Wide Dynam Day Night M	Audio Support	Yes/Full Duplex	Max Frame R	
Operating	Ingress Poting /	IK10 Upper / IK8 Lower	White Balanc	
Temperature	0	-45° to 50° C	Aspect Ratio	
Power Inputs 12VDC, 24VAC Day Night M	Temperature		Wide Dynami	
Warranty Period 2 Years	Power Inputs	' '	Day Night Mo	
	Warranty Period	2 Years		

	DH-390 Dome	
Thermal Camera		
Array Format	320x120 native, 960x360 VividIR	
Pixel Pitch	12 μm	
Max Frame Rate Thermal	10FPS	
Optical Characteristics	2 X Lepton 3.5 HFOV 57° each Min. Stitched HFOV 90°, f/1.1 Thermal sensitivity <50ml	
Visible Light Camera		
Sensor Type	1900 x 1080, 2.1MP, 1/2.8"	
Lens Type	3mm / F1.6, P-Iris with auto-focus	
Max Frame Rate	30 fps	
White Balance	Automatic	
Aspect Ratio	16:9	
Wide Dynamic Range (WDR)	Yes	
Day Night Mode	Automatic with 940nm NIR LEDs for very low light scenes. White light LEDs automatic on event for color detail.	

	TRK-101	TRK-101 P PTZ	
	Video Encoder with built-in analytics with both IP and analog input	Video Encoder with built-in analytics with both IP and analog input Supports PTZ with detection on presets, PTZ tracking and hand-off from fixed camera	
Supported via IP	FLIR – F-Series, FC-Series S, FC-Series R, FC-Series ID, TCX mini-bullet 3rd Party – Axis, Sony, Bosch, Hikvision	Quasar 30X PTZ, PT-Series, A310pt, PT-Series HD, PT-602CZ HD	
IP Input	H.264 main profile, via RTSP	H.264 main profile, via RTSP	
Channels	1	1	
IP Video Streaming	H.264, MPEG-4 SP, MJPEG	H.264, MPEG-4 SP, MJPEG	
Physical Connector	1x BNC 75Ω	1x BNC 75Ω	
Frame Rate	MPEG-4 25/30 fps for all resolutions H.264 D1 half frame-rate, VGA 18 fps	MPEG-4 25/30 fps for all resolutions H.264 D1 half frame-rate, VGA 18 fps	
Bit Rate	CBR (128Kbps-4Mbps), VBR	CBR (128Kbps-4Mbps), VBR	
Network Video Streaming	RTP/RTSP	RTP/RTSP	
Alarms/Commands	TCP/IP, HTTP	TCP/IP, HTTP	
Operating Temperature	0° to 60°C (32° to 140°F)	0° to 60°C (32° to 140°F)	
Alarms	In - 1, Out - 1	In — 1, Out — 1	
Warranty Period	2 Years		

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

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