

# PT-Series

Pan/Tilt Multi-Sensor Thermal Cameras

The next level of security.



FLIR's PT-Series of high-performance, multi-sensor pan/tilt cameras bring thermal and visible-light imaging together in a system that gives you video and control over both IP and analog networks.

The PT-Series' precision pan/tilt mechanism gives you accurate pointing control while providing fully programmable scan patterns, radar slew-to-cue, and slew-to-alarm functions. PT-Series cameras define a new standard of performance with five models that provide full 640 x 480 thermal resolution with full WDR Thermal video.

Designed for high performance, easy installation, and long-term reliability, PT-Series cameras with WDR Thermal give you the image detail needed for optimal threat detection capability and peak analytics performance - even in challenging imaging environments like when the camera is facing the rising or setting sun.

Because FLIR understands that you need cameras for the real world, PT-Series cameras are qualified beyond industry standard for survivability, and are backed by FLIR's unparalleled 3-year system warranty and 10-year detector warranty.

## Highlights of PT-Series Thermal Security Cameras

- Simultaneous IP and analog video outputs – thermal and visible-light – along with IP and serial control interfaces for easy integration into IP or analog networks; use them in an existing analog environment, and migrate easily to a future IP network
- Sun-safe VOx uncooled thermal sensor technology; looking directly at the sun won't damage FLIR uncooled thermal security cameras
- Exchangeable camera cassettes allow for quick upgrade or repair of sensors and optics
- All 640 x 480 resolution products are based on FLIR's 17-micron pixel pitch arrays, the most advanced uncooled detectors available on the commercial market
- Open IP standards for plug-and-play integration; ONVIF compliant
- Multiple simultaneous channels of streaming digital video available in H.264, MPEG-4, or M-JPEG formats



# Specifications

Camera Model	PT-Series		
Camera Platform Type	PTZ Multi-Sensor	PTZ Multi-Sensor	PTZ Multi-Sensor
<b>Thermal Camera Specs</b>			
Array Format (NTSC)	160 x 120	320 x 240	640 x 480
Detector Type	Long-Life, Uncooled VOx Microbolometer	Long-Life, Uncooled VOx Microbolometer	Long-Life, Uncooled VOx Microbolometer
Effective Resolution	19,200	76,800	307,200
Pixel Pitch	25 µm	25 µm	17 µm
Field Of View	24° x 20° (PT-124; 9 mm) 17° x 14° (PT-117; 13 mm) 12° x 10° (PT-112; 19 mm)	48° x 39° (PT-348; 9 mm) 34° x 28° (PT-334; 13 mm) 24° x 19° (PT-324; 19 mm) 13° x 10° (PT-313; 35 mm) 7° x 5° (PT-307; 65 mm) 4.6° x 3.7° (PT-304; 100 mm)	45° x 37° (PT-645; 13 mm) 25° x 20° (PT-625; 25 mm) 18° x 14° (PT-618; 35 mm) 12° x 10° (PT-612; 50 mm) 10° x 8° (PT-610; 65 mm) 6.2° x 5° (PT-606; 100 mm)
Zoom	2x E-zoom	2x & 4x E-zoom	2x & 4x E-zoom
Spectral Range	7.5 µm to 13.5 µm	7.5 µm to 13.5 µm	7.5 µm to 13.5 µm
Focus Range	athermalized, focus-free	athermalized, focus-free	athermalized, focus-free
<b>Outputs</b>			
Composite Video NTSC or PAL	Standard	Standard	Standard
Video over Ethernet	Two independent channels of streaming MPEG-4, H.264, or M-JPEG for each of two cameras	Two independent channels of streaming MPEG-4, H.264, or M-JPEG for each of two cameras	Two independent channels of streaming MPEG-4, H.264, or M-JPEG for each of two cameras
<b>Control</b>			
Point to point (stand alone)	Yes	Yes	Yes
Ethernet	Yes	Yes	Yes
Serial	RS-232/-422; Pelco D, Bosch	RS-232/-422; Pelco D, Bosch	RS-232/-422; Pelco D, Bosch
Network Enabled	Yes	Yes	Yes
Software Developer's Kit	Option	Option	Option
External Analytics Compatible	Yes	Yes	Yes
<b>Pan/Tilt Performance</b>			
Pan Angle/Speed	Continuous 360°; 0.1° to 60°/sec	Continuous 360°; 0.1° to 60°/sec	Continuous 360°; 0.1° to 70°/sec
Tilt Angle/Speed	+90° to -90°; 0.1° to 30°/sec	+90° to -90°; 0.1° to 30°/sec	+90° to -90°; 0.1° to 30°/sec
Programmable presets	128	128	128
<b>General</b>			
Weight	~37 lb (configuration dependent)	~37 lb (configuration dependent)	~37 lb (configuration dependent)
Dimensions (L,W,H)	13.7" x 18.4" x 12.8" (348 mm x 467 mm x 326 mm)	13.7" x 18.4" x 12.8" (348 mm x 467 mm x 326 mm)	13.7" x 18.4" x 12.8" (348 mm x 467 mm x 326 mm)
Input Voltage	24 VAC (21-30 VAC) 24 VDC (21-30 VDC)	24 VAC (21-30 VAC) 24 VDC (21-30 VDC)	24 VAC (21-30 VAC) 24 VDC (21-30 VDC)
Power Consumption (Consult product manuals for details of power requirements)	24 VAC: 85 VA (max w/o heaters) 215 VA (max w/heaters)  24 VDC: 65 W (max w/o heaters) 195 W (max w/heaters)	24 VAC: 85 VA (max w/o heaters) 215 VA (max w/heaters)  24 VDC: 65 W (max w/o heaters) 195 W (max w/heaters)	24 VAC: 85 VA (max w/o heaters) 215 VA (max w/heaters)  24 VDC: 65 W (max w/o heaters) 195 W (max w/heaters)
<b>Visible Light Camera</b>			
Sensor Type	<b>Sony FCB-EX1010</b>	<b>Sony FCB-EX1010</b>	<b>Sony FCB-EX1010</b>
Sensor Type	1/4" Exview HAD CCD	1/4" Exview HAD CCD	1/4" Exview HAD CCD
Lens Field of View	57.8° (h) to 1.7° (h)	57.8° (h) to 1.7° (h)	57.8° (h) to 1.7° (h)
Focal Length	3.4 mm to 122.4 mm	3.4 mm to 122.4 mm	3.4 mm to 122.4 mm
Zoom	36x Optical zoom, 12x E-zoom	36x Optical zoom, 12x E-zoom	36x Optical zoom, 12x E-zoom
F/#	1.6 to 4.5	1.6 to 4.5	1.6 to 4.5
Effective pixels (NTSC)	380,000	380,000	380,000



## SANTA BARBARA

FLIR Systems, Inc.  
70 Castilian Drive  
Goleta, CA 93117  
USA  
PH: +1 805.964.9797  
FX: +1 805.685.2711

## PORTLAND

Corporate Headquarters  
FLIR Systems, Inc.  
27700 SW Parkway Avenue  
Wilsonville, OR 97070  
USA  
PH: +1 877.773.3547  
FX: +1 503.498.3153

## EUROPE

FLIR Systems CVS BV  
Charles Petitweg 21  
4847 NW Teteringen - Breda  
The Netherlands  
PH: +31 (0) 765 79 41 94  
FX: +31 (0) 765 79 41 99

www.flir.com

Equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited.

Imagery used for illustration purposes only.

©2013 FLIR Systems, Inc. Specifications are subject to change without notice, check our website: www.flir.com. 6115 04/13