

# PT-Series

Network-Enabled Pan/Tilt Thermal Security Cameras



## CUTTING EDGE PAN/TILT MULTI-SENSOR THERMAL SECURITY CAMERAS WITH COMPLETE NETWORKING AND INTEGRATION FLEXIBILITY

PT-Series thermal security cameras let you see intruders and other threats to your facility's security clearly in total darkness and in bad weather. The PT-Series precision pan/tilt mechanism gives operators accurate pointing control while providing fully programmable scan patterns, radar slew-to-cue, and slew-to-alarm functionality.

Fully enabled for control and operation over digital and serial networks, PT-Series thermal cameras are available in 160 x 120, 320 x 240, and high-resolution 640 x 480 formats, providing up to four times the image clarity and longer threat detection range performance than lower resolution thermal cameras. Multi-sensor configurations also include a day/night 36x zoom color CCD camera on the same pan/tilt package.

### BENEFITS OF PT-SERIES THERMAL SECURITY CAMERAS:

- High-quality 24/7 thermal video security coverage
- Broad range of lenses available for thermal cameras: 9 mm, 13 mm, 19 mm, 35 mm, 65 mm, and 100 mm for FOVs from 48° to 4.6°
- Exchangeable camera cassettes allow for quick upgrade or repair of sensors and optics
- Day/night 36x zoom color CCD video camera
- Precision pan/tilt mechanism with continuous 360 degree rotation for uninterrupted coverage
- Auto Digital Detail Enhancement (DDE) built in for optimal image quality across all scene conditions
- Open IP standards for plug-and-play integration and configuration in digital networks
- Multiple channels of streaming digital video available in H.264, MPEG-4, or M-JPEG formats
- Simultaneous visible-light and thermal video outputs ensure optimal imaging performance in a wide variety of conditions
- FLIR Sensor Manager single-device version included



Thermal and visible-light cameras work together to provide threat detection and situational awareness

## PT-SERIES

Camera Platform Type PTZ Multi-Sensor PTZ Multi-Sensor PTZ Multi-Sensor

### THERMAL CAMERA SPECS

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	25 µm
Focal Length	13 mm	9 mm, 13 mm, 19 mm, 35 mm, 65 mm, 100 mm	21.5 mm, 35 mm
Field Of View	17° x 14° (13 mm)	48° x 39° (9 mm) 34° x 28° (13 mm) 24° x 19° (19 mm) 13° x 10° (35 mm) 7° x 5° (65 mm) 4.6° x 3.7° (100 mm)	41° x 33° (21.5 mm) 26° x 21° (35 mm)
Zoom	2x E-zoom	2x E-zoom	2x 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

### OUTPUTS

Composite Video NTSC or PAL	Standard	Standard	Standard
Video Over Ethernet	Standard: single channel MPEG-4 Advanced: dual channel streaming MPEG-4, H.264, and M-JPEG. Two channels per camera; Four channels per system	Standard: single channel MPEG-4 Advanced: dual channel streaming MPEG-4, H.264, and M-JPEG. Two channels per camera; Four channels per system	Standard: single channel MPEG-4 Advanced: dual channel streaming MPEG-4, H.264, and M-JPEG. Two channels per camera; Four channels per system

### CONTROL

Point To Point (stand alone)	Standard	Standard	Standard
Ethernet	Standard	Standard	Standard
Serial	RS-232/-422/-485; Pelco D, Bosch	RS-232/-422/-485; Pelco D, Bosch	RS-232/-422/-485; Pelco D, Bosch
Network Enabled	Standard	Standard	Standard

### PAN/TILT PERFORMANCE

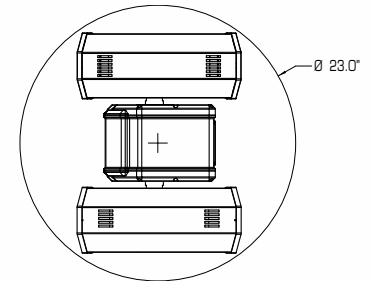
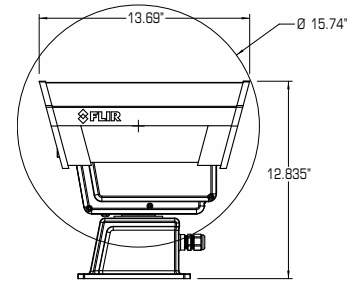
Pan Angle/Speed	Continuous 360°; 0.1° to 100°/sec	Continuous 360°; 0.1° to 100°/sec	Continuous 360°; 0.1° to 100°/sec
Tilt Angle/Speed	+90° to -185°; 0.1° to 30°/sec	+90° to -185°; 0.1° to 30°/sec	+90° to -185°; 0.1° to 30°/sec

### GENERAL

Weight	45 lb	45 lb	45 lb
Dimensions (L,W,H)	13.7" x 18.38" x 12.83" (348 mm x 467 mm x 326 mm)	13.7" x 18.38" x 12.83" (348 mm x 467 mm x 326 mm)	13.7" x 18.38" x 12.83" (348 mm x 467 mm x 326 mm)
Power Requirements	24 VDC or 24 VAC (+/-25%)	24 VDC or 24 VAC (+/-25%)	24 VDC or 24 VAC (+/-25%)
Power Consumption	<100 W w/o heater <190 W w/ heater	<100 W w/o heater <190 W w/ heater	<100 W w/o heater <190 W w/ heater

### DAY/NIGHT CCD CAMERA

	<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**  
**CVS World Headquarters**  
 FLIR Commercial Vision Systems, Inc.  
 70 Castilian Dr.  
 Goleta, CA 93117  
 USA  
 PH: + 1 877 773 3547  
 PH: + 1 805 964 9797  
 FX: + 1 805 685 2711

**EUROPE**  
**CVS Eurasian Headquarters**  
 FLIR Systems CVS BV  
 Charles Petitweg 21  
 4847 NW Teteringen - Breda  
 Netherlands  
 PH: +31 (0) 765 79 41 94  
 FX: +31 (0) 765 79 41 99  
 flir@flir.com

**PORTLAND**  
**Corporate Headquarters**  
 FLIR Systems, Inc.  
 27700 SW Parkway Ave.  
 Wilsonville, OR 97070  
 USA  
 PH: + 1 877 773 3547  
 FX: + 1 503 498 3153  
 sales@flir.com

www.flir.com