



PT-SERIES HD

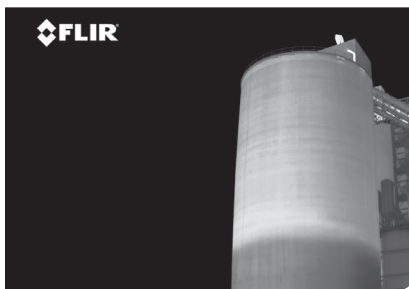
# FLIR *PT-Series HD*

## *High Performance Pan/Tilt Multi-Sensor Thermal Cameras*

The PT-Series HD features a new high-performance 4X optical zoom thermal lens with autofocus. This new lens technology provides a wider zoom range and improved imaging performance compared to previous generation lenses. In addition, FLIR's PT-Series HD introduces new, fixed focal fast lenses options. The camera sees clearly in complete darkness, in bright sunlight, through smoke, dust or even light fog. As a result, the PT-Series HD provides superior perimeter protection, regardless of the lighting and environmental conditions.

In addition to the thermal imaging, the PT-Series HD has high quality, visible-light imaging. Offering 1080p high definition resolution, the camera's visible light sensor introduces outstanding low light performance, shutter WDR and equipped with 30X optical zoom with auto-focus.

The PT-Series HD integrates with FLIR's United VMS (Latitude, Horizon, Meridian), providing a seamless user experience. Users gain a full set of viewing and control options including the all new dual-sensor viewing mode, fully programmable preset tour and alarm functions.



Crisp image detail gives you optimum clarity to identify and address any number of security threats

### KEY FEATURES

- Simultaneous IP and analog video outputs – thermal and visible-light – along with IP and serial control interfaces for easy integration into IP or analog systems; 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
- 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, with optional continuous zoom or fixed focal lens options
- Open IP standards for plug-and-play integration with 3rd party VMSs and devices; ONVIF compliant
- Multiple simultaneous channels of streaming digital video available in H.264, or M-JPEG formats

## Specifications

Thermal Camera Specs			
Array Format (NTSC)	640 x 480		
Detector Type	Long-Life, Uncooled VOx Microbolometer		
Effective Resolution	307,200		
Pixel Pitch	17 µm		
Thermal Frame Rate	NTSC: 30 Hz PAL: 25 Hz / 8.3 Hz		
Optical Characteristics	Model	FOV	Focal Length
	PT-644 HD	44°x36°	13 mm
	PT-625 HD	25°x18°	25 mm
	PT-617 HD	17°x14°	35 mm
	PT-612 HD	12°x10°	50 mm
	PT-608 HD PT-606Z HD	8.6°x6.6° Uncooled continuous zoom 24° to 6°	75 mm 26-105 mm
E-Zoom	Continuous E-Zoom to 4x		
Spectral Range	7.5 µm to 13.5 µm		
Focus Range	Athermalized, Focus-Free		
Sensitivity	<35mK @ 25c F# 1.0		
Video			
Composite Video NTSC or PAL	Yes: Hybrid IP & Analog		
Video Compression	Two independent channels of H.264 & M-JPEG for each sensor		
Streaming Resolution	Thermal: QVGA to VGA Visible: VGA to HD		
Thermal Image Settings	Auto AGC, Dynamic Detail Enhancement (DDE), Sensitivity		
Thermal AGC Region of Interest (ROI)	Default, Presets and User definable to insure optimal image quality on subjects of interest		
Image Uniformity Optimization	Automatic Flat Field Correction (FFC) - Thermal and Temporal Triggers		
System Integration			
Ethernet	Yes		
Serial Control Interfaces	RS-232/-422; Pelco D, Bosch		
External Analytics Compatible	Yes		
Network APIs	FLIR SDK		
	FLIR CGI		
	ONVIF Profile S		
Network			
Supported Protocols	IPV4, HTTP, Bonjour, UPnP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, ICMP, IGMP, DHCP, ARP		
Pan/Tilt Performance			
Pan Angle / Speed	Continuous 360°; 0.1° to 60°/sec		
Tilt Angle / Speed	+90° to -90°; 0.1° to 30°/sec		
Programmable Presets	256		
General			
Operating Temperature Range	-40°C to 70°C		
Weight	36 lbs. (16.4 kg)		
Dimensions (L, W, H)	13.7, 18.4, 12.8" (348, 467, 326 mm)		
Input Voltage	24 VDC (21-30 VDC) 24 VAC (21-30 VAC)		
Power Consumption	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)		

Environmental	
IP Rating (Dust & Water Ingress)	IP66
Operating Temperature Range	-40°C to 70°C cold start
Storage Temperature Range	-55°C to 85°C
Humidity	0-95% relative
Shock	MIL-STD-810F "Transportation"
Vibe	IEC 60068-2-27
De-Icing / Anti-Icing	MIL-STD-810F, Method 521.1; - De-Icing of 3/6mm pending model
Compliance & Certifications	
FCC Part 15 (Subpart B, class A)	
CE Marked	
RoHS	
IP66	
ONVIF Profile S	
WEEE	
Visible Light Camera	
Sensor Type	Full HD 1080p 1/2.8-type Exmor R CMOS
Sensor illumination	Back Light Compensation
Low light sensitivity	Color: 0.01 lx (F1.6, AGC on, 1/30s)
Noise reduction	Yes (6 steps)
WDR	120dB
F/#	F1.6 to F4.7
Lens Field of View	63.7° (wide end) to 2.3° (tele end)
Focal Length	4.3 mm (wide) to 129.0 mm (tele)
Zoom	30X optical zoom with auto- focus and 12X digital zoom

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