

# FLIR PT-SERIES HD

HD Visible and Thermal Pan/Tilt



The FLIR PT-Series HD is our most advanced dual-sensor security system, combining a cooled or uncooled thermal sensor with 640 × 480 resolution, a 1080p HD visible-light imaging sensor, and a high speed, precision pan/tilt system. This camera series integrates easily with FLIR United VMS 8.0 as well as other major third party video management systems, making it an extremely versatile solution for critical infrastructure protection in total darkness, bright sun, and adverse conditions.



## SUPERIOR IMAGE QUALITY

PT-Series HD cameras provide unmatched perimeter protection, regardless of lighting conditions

- 640 × 480 resolution thermal camera sees clearly in complete darkness or bright sunlight, through smoke, dust and light fog
- High-performance thermal lens with 4X optical zoom and auto-focus
- 1080p HD camera with 30X optical zoom and outstanding low light performance

## RUGGED HOUSING

A weather-resistant design withstands harsh environments, reducing maintenance time

- Deicing and de-fogging capabilities
- Sun-safe VOx uncooled thermal sensor technology
- Rated IP66 for dust and water ingress
- Vandal-resistant

## DESIGNED FOR SYSTEM INTEGRATION

Enhanced capabilities are enabled when controlled using FLIR United VMS

- Integrates with FLIR's United VMS for such options as a fully-programmable preset tour, dual-sensor viewing mode, and alarm functions
- Open IP standards for plug-and-play integration with 3rd party VMSs and devices
- Simultaneous IP and analog outputs of thermal and visible-light video
- ONVIF compliant

## SPECIFICATIONS

### Thermal Camera Specs

Array Format (NTSC)	640 × 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, F#
	PT-644 HD	44° × 36°	13 mm, f/1.0
	PT-625 HD	25° × 18°	25 mm, f/1.1
	PT-617 HD	17° × 14°	35 mm, f/1.1
	PT-612 HD	12° × 10°	50 mm, f/1.2
	PT-608 HD	8.6° × 6.6°	75 mm, f/1.1
	PT-606Z HD	Uncooled continuous zoom, 24° to 6°	26-105 mm, f/1.6
E-Zoom	Continuous E-Zoom to 4x		
Spectral Range	7.5 μm to 13.5 μm		
Focus Range	Athermalized, Focus-Free		
Sensitivity	<35 mK @ 25°C, 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	<10 mins for operator; 1 hour for advanced user
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, RTP, TCP, UDP, ICMP, IGMP, DHCP, ARP, HTTPS
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Specifications are subject to change without notice.

### 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 Temp. Range	-40°C to 70°C
Weight	~37 lb (16.8 kg); configuration dependent
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

### Cyber Security

IEEE 802.1x  
TLS/HTTPS  
User authentication  
Access control via firewall

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Revised on 02/19/22  
PT-Series HD\_Datasheet-LTR