FLIR PT-Series ITS

Multi-Sensor For Traffic Monitoring Applications

PT-Series ITS thermal imaging cameras allow you to monitor traffic clearly in total darkness, in bad weather and over a long range. Combined with FLIR's video detection analytics, the FLIR PT-Series ITS offers an advanced incident detection and data collection system. The PT-Series ITS precision pan/tilt mechanism gives operators accurate pointing control while providing fully programmable scan patterns. Fully enabled for control and operation over digital and serial networks, PT-Series ITS thermal cameras are available in high-resolution 640 × 480 formats, providing up to sixteen times the image clarity and longer threat detection range performance than lower resolution thermal cameras. Multi-sensor configurations also include a day/night 36× zoom color CCD camera on the same pan/tilt package.

PRECISE PAN/TILT MECHANISM

All PT-Series ITS thermal imaging cameras are installed on a precision pan/tilt mechanism. It allows the user to rotate the camera 360° continuously and to tilt it +90° or -90°. The Pan/Tilt has 128 preset postions. Ideal if you want to scan an area continuously.

DAYLIGHT CAMERA

All versions are equipped with a long range daylight/low light camera. The video output of the thermal imaging and daylight/low light camera are simultaneously available. The daylight camera offers an 36x optical zoom.

EXCHANGEABLE CAMERA CASSETTES

Exchangeable camera cassettes allow for quick upgrade or repair of sensors and optics. There is no need to send your camera back to the factory if you want to upgrade to better image quality or more range performance. This can easily be done in the field.

IP CONTROL

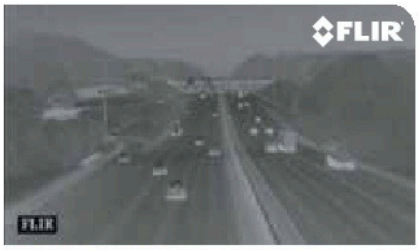
The PT-Series ITS can be integrated in any existing TCP/ IP network and controlled over a PC. No additional cables are required. Using this configuration, you can monitor all activity over the network, even when you are thousands of kilometers away. Multiple channels of streaming digital video are available in H.264, MPEG-4, or M-JPEG formats. Simultaneous digital and composite video output is standard.

CONTINUOUS E-ZOOM

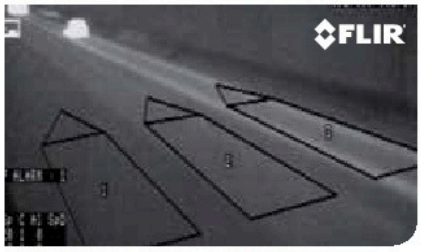
Provides enhanced alarm assessment and optimization of camera field of view. Optionally available on all 640 x 480 pixel models.IP66

DESIGNED FOR USE IN HARSH ENVIRONMENTS

Extremely rugged systems. Their vital core is well protected, meeting IP66 requirements, against dust and water ingress. FLIR PT-Series ITS can be installed in the harshest environments.



Traffic monitoring



Automatic Incident Detection

ONVIF

Imaging Specifications

System Overview	FLIR PT-Series ITS
Thermal:	
Detector type	Focal Plane Array (FPA), uncooled Vanadium Oxide microbolometer
Spectral range	7.5 to 13.5 µm
Thermal sensitivity	<50 mK f/1.0
Image frequency	NTSC: 30Hz or 7.5Hz PAL: 25Hz or 8.33Hz
Focus	Focus free, athermal lens
Image processing	Automatic Gain Control (AGC), Digital Detail Enhancement (DDE)
Name/Focal length/ Field of view	PT-645 ITS: 13 mm lens – FOV: 45°(H) × 37° (V) PT-625 ITS: 25 mm lens – FOV: 25° (H) × 20°(V) PT-618 ITS: 35 mm lens – FOV: 18° (H) × 14°(V) PT-612 ITS: 50 mm lens – FOV: 12° (H) × 10°(V) PT-610 ITS: 65 mm lens – FOV: 10° (H) × 8°(V) PT-606 ITS: 100 mm lens – FOV: 6.2° (H) × 5°(V)
Electronic zoom	2x and 4x Up to 4x continuous E-zoom optional available
Visual:	
Built-in digital video	1/4" Exview HAD CCD
Effective pixels	380.000
Standard lens performance	FOV: 57.8° (H) to 1.7° (H) f=3.4mm (wide) to 122.4 mm (tele), F1.6 to F4.5
Optical zoom	36x
Electronic zoom	12x
Pan- Tilt	
Az Range; Az velocity	360° continuous, 0.1 to 60°/sec max.
El Range; El velocity	+/- 90°, 0.1 to 30°/sec. Max.
Programmable presets	128
System features	
Automatic heater	Clears ice from windows Automatic deicing, tested according to MIL-STD-810F Method 521.1
Image presentation	
Video output	PAL thermal and visible - NTSC thermal and visible. Hybrid IP and analog
Video over Ethernet	Two independent channels for each camera (4 total) of streaming MPEG-4, H.264, or M-JPEG
Streaming Resolutions	NTSC: D1 (720x480), 4SIF (704x480), VGA (640x480), SIF (352x240) and QVGA (320x240) PAL: D1 (720x576), 4CIF (704x576), CIF (352x288)
Thermal AGC Modes	Auto AGC, Manual AGC, Plateau Equalization AGC, Linear AGC, Auto Dynamic Detail Enhancement (DDE), Max Gain Setting
Thermal AGC Region of Interest (ROI)	Default, Presets and User definable to insure optimal image quality for subjects of interest
Image Uniformity Optimization	Automatic Flat Field Correction (FFC) - Thermal and Temporal Triggers
Requirements	24 VAC (21-30 VAC) 24 VDC (21-30 VDC)
Consumption	24 VAC: 85 VA max without heaters 215 VA max w/heater 24 VDC: 195 W max w/heater
Environmental specifications	
Operating temp. range	-40°C to +70°C
Storage temperature range	-55°C to +85°C
Encapsulation	IP66 (IEC 60529)
Shock	Mil-Std-810F transportation
Vibration	IEC 60068-2-27

Physical characteristics	
Camera Weight	16.8 kg
Camera Size (L x W x H)	348 mm x 467 mm x 326 mm
Shipping weight (camera + packaging)	20.1 kg
Shipping size (camera + packaging) (L x W x H)	572 mm x 375 mm x 381 mm
Interfaces	
TCP/IP	Yes
RS-422	Yes
RS-232	Yes
Pelco D	Yes
Bosch	Yes
Network	
Supported Protocols	IPV4, HTTP, Bonjour, UPnP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, ICMP, IGMP, DHCP, ARP, SCP
Network Application Programming Interfaces (APIs)	Nexus SDK for comprehensive system control and integration Nexus CGI for http command interfaces ONVIF Compatible
Approvals	
EN 61000-6-4: 2007 Class A/CISPR 22: 2005 Class A	
EN 61000-3-3: 1995+A1:2001+A2:2005	
EN 61000-3-2: 2006	
EN 50130-4: 1996+A1:1998+A2:2003	
FCC Part 15, Subpart B, Class A	
IP 66 (IEC 60529)	
IEC 60068-2-27	
Standard package	
Thermal imaging camera, operator manual, FLIR Sensors Manager single sensor CD	

PORTLAND
Corporate Headquarters
FLIR Systems, Inc.
27700 SW Parkway Ave.
Wilsonville, OR 97070
USA
PH: +1 866.477.3687

SANTA BARBARA
FLIR Systems, Inc.
70 Castilian Drive.
Goleta, CA 93117
USA
PH: +1 866.477.3687

BELGIUM
FLIR Systems Trading Belgium BVBA
Luxemburgstraat 2
2321 Meer
Belgium
PH: +32 (0) 3665 5100

FLIR ITS
Hospitaalweg 1B
B-8510 Marke
Belgium
PH: +32 (0)56 37 22 00

UK
FLIR Systems UK
2 Kings Hill Avenue
Kings Hill
West Malling - Kent
ME19 4AQ
United Kingdom
PH: +44 (0)1732 220 011

www.flir.com
NASDAQ: FLIR