

Thermal Analytics Processing System

24/7 Video Intrusion Detection for Automated Perimeter Security



Detect. Alarm. Record. Notify.





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Thermal security cameras are the most powerful tools in any video security arsenal. Add in the Thermal Analytics Processor and they're just about unbeatable.

By combining our thermal security cameras with the Thermal Analytics Processor, we've created the first all-in-one solution to join thermal night vision with edge NVR storage, IP video encoding, and adaptive analytics optimized for FLIR's range of high-performance thermal cameras.

Pre-integrated with many common enterprise Video Management Software products including, Milestone, Genetec, OnSSI, and Lenel, this is the most effective, affordable off-the-shelf solution available for thermal security.

Detect with Thermal Cameras

Thermal cameras solve many common video imaging challenges. Darkness and sun glare; smoke, dust, and smog; FLIR sees clearly through them all, so you can rest assured that your facility is as safe as you can make it. FLIR cameras give you:

- Clear video in daylight, darkness, and bad weather
- Video that isn't affected by shadows and backlight; they can even look directly at the sun
- The power to tell the difference between objects like humans, animals, cars, and bicycles

Alarm with Adaptive Thermal Analytics

The Thermal Analytics Processing System features adaptive analytics algorithms that are specially designed to work with FLIR thermal video, virtually eliminating nuisance alarms so you can respond more efficiently and cost-effectively. The Thermal Analytics Processing System features:

- Self-calibrating, Adaptive Video Analytics specially tuned for FLIR thermal video
- Classifies objects as people, automobiles, or boats and only alarms on the classified threats you specify – not just on video motion
- Adaptive Analytics that work on all video resolutions including megapixel, not just 320 x 240 like most other analytics
- Analytics that are self-calibrating, requiring little or no set-up
- Flexible installation for "edge based" or "central server based" architecture
- Visual Alarm presentation; unique colored box around objects based on classification
- Analytic behaviors that include fence-line perimeter crossing, area alert, direction of travel alert, crowd detection, and more.

Record to a Built-In Hard Drive

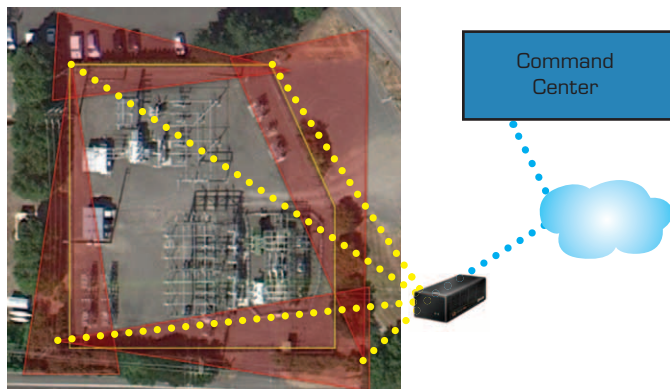
This is a cost-effective system that maximizes network bandwidth conservation while enabling wireless deployments. The Thermal Analytics Processing System gives you all of the benefits of edge-based architecture without suffering the vulnerability of typical “all-in-one” components.

- Zero Bandwidth “edge” recording
- 160 GB on-board hard drive for weeks of video storage
- IP video encoding: input analogue video and output H.264 compressed video at up to 30 frames per second in all resolutions
- Dual stream encoding selection: alarm events in high resolution and full frame rate, running video in lower resolution and slower frame rate
- Ideal for wireless deployments

Notify with Automated Software or Alarm Relays

The Thermal Analytics Processing System gives you fast notification for rapid response. It will automatically send a visual alarm assessment to as many as 32 mobile devices keeping the people who need to know in the know.

- E-mail alarm video clips (selectable pre/post alarm times) to remote devices or central monitoring station for easy and rapid assessment
- Optical relay alarm outputs



Typical Installation

With FLIR thermal cameras positioned around the facility as shown, each video signal is sent via wired connection or wireless stream to a local control cabinet containing one Thermal Analytics Processor for each stream. The Processor then sends low-bandwidth alarm data and short video clips to mobile devices or a central monitoring center. Relay alarm outputs can also be used to trigger local counter-measures.

Thermal Analytics Processing System Selection Guide

This chart can help you determine which cameras meet your requirements based on the object-classification distance of the Thermal Analytics Processor.

Thermal Analytics Object-Classification Distance	Applicable FLIR Camera
0' to 500'	SR-348, F-348 SR-645, F-645 SR-334, F-334 SR-625, F-625 SR-324, F-324
500' to 1,000'	SR-618; F-618 SR-313, F-313 SR-612; F-612
1,000' to 1,800'	F-610 SR-309 F-307
1,800' to 3,000'	SR-606; F-606 SR-304; F-304

Thermal Analytics Processor Specifications

Adaptive Video Analytics	Powerful VideoIQ analytic engine with rich library of behaviors: Fence-Line and Perimeter Crossing Detection Area Protection Direction of Travel Alerts Crowd Detection Loitering and Dwell Time Alarms Missing Object Detection Cross Camera Object Search Automatic alarm reporting with highlighted video clip Fully automated calibration and tuning delivers greatest accuracy while reducing installation time and maintenance
Available Accessories	19" Rack-mount kit
Encoder Specifications	Protocol pass-through to PTZ cameras — RS485 Pelco P or D protocol Software PTZ control from View software Video input: NTSC or PAL via BNC connector
Storage Specifications	Internal storage: 1 GB solid state memory Hard drive: 160 GB (2-4 months typical storage time) Optional 500 GB (6-12 months typical storage time)
Video Compression Specifications	H.264 compression Frame Rate: Up to 30 frames per second in all resolutions Dual Stream Encoding: Alarm events at high quality, resolution and frame rate. Continuous recording at lower quality, resolution and frame rate. (selectable) Visual alarm indicators (colored boxes around objects detected) can be turned on or off at the display Programmable pre-alarm video recording
Networking and Communications	Ethernet 10/100 BaseT — RJ45 connector Protocols: HTTP, HTTPS, TCP, RTSP, UDP, RTCP, DHCP, NTP, DNS ZeroConf auto IP discovery of cameras Security: Multiple user access levels with password protection, IP address filtering, and HTTPS encryption Serial communications: RS-232 and RS-485 — terminal block Web browser access to camera via built-in web server
Alarm and Audio Inputs and Outputs	Two alarm inputs — TTL Alarm output — Optical relay, 250 mA max., programmable normally open or normally closed
Diagnostics	Loss of communications trouble alert Hard drive failure alert Scene change trouble alert Built-in self-diagnostics
Power	Power over Ethernet (IEEE 802.3af) class 3 12 VDC: 10 W max 24 VAC: 10 W max 6 Watts typical
Environmental	Operating Temp: 32°F to 122°F (0°C to 50°C) Extreme Temp models: -22°F to 140°F (-30°C to 60°C) Storage Temp: -22°F to 158°F (-30°C to 70°C) Humidity: 20-80% RH (non-condensing)
Enclosure	Dimensions: 7.60" x 3.45" x 2.45" (L x W x H) (19.30 x 8.75 x 6.20 cm) Weight: 1.4 lb (620 grams)
Warranty	2 Years (parts and repair labor)



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