

Evolution of thermal imaging

Sarix TI

Integrated thermal imaging security cameras

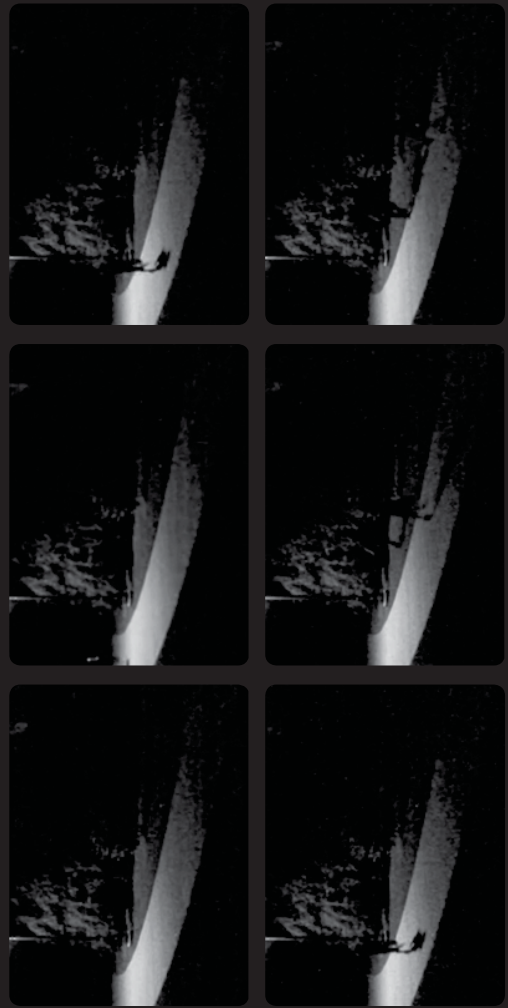


Discover the power of integrated security.

PELCO
by Schneider Electric



Sarix TI vs. visible light camera



Sarix TI

Pelco by Schneider Electric introduces Sarix TI – a first-of-its-kind, fully integrated thermal imaging security camera. Designed specifically for video security applications, Sarix TI propels surveillance to a new level with the most powerful selection of models ideally suited for a wide array of low-light and no-light environments.

The evolution of thermal imaging

The time when high-tech thermal imaging was reserved only for specialized military applications at a premium price is behind us. Now, any business or infrastructure has access to affordable thermal protection from a trusted security company with dependable customer support.

How it works

Thermal imaging cameras see emitted thermal energy (temperature and emissivity variations in a scene). Sarix™ TI recognizes even the slightest change in temperature or emissivity, providing immediate recognition of intruders or threats. The thermal contrast among objects in low-visible-light conditions provides the information necessary to quickly make informed decisions – information that standard visible light cameras cannot deliver. Thanks to its thermal energy technology, Sarix TI is also a powerful tool for applications beyond security – providing the capability to instantly spot leaks, ruptures, or hot spots across bridges, dams, refineries, and power plants.

Security powered by thermal imaging

The beauty of Sarix TI is its ability to apply the power of thermal imaging to any application that presents challenging lighting conditions. Even in total darkness, Sarix TI allows you to see potential threats that may not be captured by a standard visible light camera. For any high-risk area where lighting is minimal, Sarix TI arms you with a powerful solution to recognize the presence of both humans and vehicles to keep your property secure.



From borders and building perimeters to industrial pipelines, Sarix TI can discover potential safety threats in any lighting condition, maximizing the time you have to respond.



Wide-ranging thermal applications

Many places demand video security but are challenged by a lack of ambient light. From critical infrastructure, ports, and extended perimeters to industrial and even non-security applications, thermal imaging is the answer. When external lighting is not an option, or when you simply do not want to light the very assets you are looking to secure, Sarix TI delivers the detailed image quality necessary to make immediate, informed decisions — critical for today's security professionals.

- | | | | |
|---|---|--|--|
| Infrastructure | Government | Industry | Corrections |
| <ul style="list-style-type: none"> • Airports • Seaports • Power plants • Dams • Bridges • Rail transit | <ul style="list-style-type: none"> • Borders/perimeters • Military bases • National security | <ul style="list-style-type: none"> • Storage yards • Pipelines • Refineries | <ul style="list-style-type: none"> • Prisons • Courthouses |



IP or analog applications

The Sarix TI Series offers a broad range of resolutions and lenses to fit your security needs, whether your installation calls for fixed or pan/tilt cameras with IP or analog capability. Whatever the need, Pelco has a thermal offering to fit your application, with three resolution models to choose from.

640x480 model

For the most demanding security applications, such as international borders, military installations, and airports, the 640x480 resolution Sarix TI model is the ideal solution. Available in fixed or pan/tilt enclosures, this model offers unprecedented protection beyond four miles when outfitted with a 100 mm lens.

384x288 model

Making thermal imaging more affordable for a wide range of standard applications such as ports and perimeters is the 384x288 model of Sarix TI. This option is available in fixed or pan/tilt enclosures. This model is recommended for extreme low-light conditions where it's difficult or economically unfeasible to artificially light, such as subway platforms and tunnels; highway and transportation infrastructure; borders; marine; industrial; and other traditional thermal imaging applications.

240x184 model

An economical offer for customers who are new to thermal technology, the 240x184 Sarix TI model provides thermal imaging with 50 percent more pixels (higher resolution and greater video detail) than other similarly priced entry-level options. This unique solution is perfect for storage yards or building perimeters with challenging lighting conditions. When outfitted with a 6.3 mm lens, this fixed model can detect a person in a 35-degree field of view out to 140 meters.

110

With three resolution models to choose from and a variety of enclosures, mounts, and lenses, Sarix TI provides 110 options to integrate seamlessly into your video security system.

Resolution models

For immediate and reliable recognition of potential security threats, nothing compares to the image quality and advanced analytics of Sarix TI. Recognition of a vehicle or human target is possible from as far away as:

- 1.2 miles (1.9 km)
- 0.9 miles (1.5 km)
- 264 feet (80 m)



- 2,692 feet (790 m)
- 1,773 feet (540 m)
- 114 feet (35 m)

Resolution models:

640x480 - 100 mm lens

384x288 - 100 mm lens

240x184 - 6.33 mm lens

Visit www.pelco.com/sarixti to download a specification sheet with more details on detection, recognition, and identification distances.



Standard visible light camera



Sarix TI camera

IP and analog in the same package

Sarix TI is an all-encompassing camera system featuring IP and analog thermal technology all in the same package. This versatility allows dealers and integrators the unique opportunity to deliver a thermal solution to any customer they've ever worked with.

Leverage existing applications

With analog control and viewing, Sarix TI helps customers leverage their existing video security investments and get the most out of their money. Existing customers can add thermal to their existing end-to-end solution without having to overhaul or update their entire system.

State-of-the-art IP capability

For customers wishing to apply the latest and highest-quality technology to their security solutions, Sarix TI provides easy-to-integrate IP capability. Ensure that your video security solution stays ahead of the curve with full-featured, drop-in IP connectivity based upon the award-winning Sarix platform.

Built-in thermal analytics

Sarix TI comes standard with a suite of built-in video analytics that enhance the flexibility and performance of your IP system, and can even be configured for analog applications. The ability of thermal imaging to immediately detect threats — sometimes before even the human eye can — coupled with the automatic notification of suspicious activity, makes customers more prepared than ever to keep their property secure. Since thermal images are based on the thermal emission from objects, they are much less susceptible to changes in lighting or environmental conditions than visible analytics. This means more accurate analytics with fewer false alarms.

A security design by security specialists

Designed by security professionals for security professionals, Sarix TI exceeds today's video security needs with all the user-friendly features security professionals are accustomed to and the performance they desire. Sarix TI was developed by Pelco engineers known for their industry-leading expertise in the science of thermal imaging.

Plug and play

Sarix TI is the first thermal camera specifically designed to be an integrated part of any end-to-end video security solution. As easy to install and use as any traditional pan/tilt camera, Sarix TI brings advanced thermal imaging capabilities to mainstream video security applications. The result is an affordable, powerful, and versatile camera system that delivers high-quality video in zero-light conditions.

Combining Sarix technology with thermal imaging

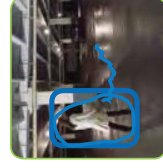
Sarix is a powerful image-processing engine that allows us to implement advanced algorithms to vastly improve the thermal image quality compared to other thermal cameras. Built upon the three pillars of innovative imaging science, sophisticated industrial design, and advanced processing power, Sarix set a new standard in the industry. Combining this new thermal imaging system with the Sarix platform equips customers with a configurable, flexible networking solution with built-in video analytics capability.

Reliable, sun-safe technology

Pelco™ by Schneider Electric™ engineers have developed unique algorithms that provide automatic correction to eliminate the effects of direct, prolonged sun exposure, overcoming the challenges sometimes associated with thermal imaging cameras. At the core of the Sarix TI Series is an uncooled, sun-safe microbolometer, long-wavelength infrared camera that is engineered to be more durable than ever before. Microbolometers, the specialized image sensors used to detect an object's thermal emission (temperature and emissivity) and create a thermal image, feature either vanadium oxide or amorphous silicon coatings. Amorphous silicon is used in Sarix TI because it delivers several benefits — including lower cost and less fixed pattern noise — that make thermal imaging a possibility for any application.

Analytics behaviors

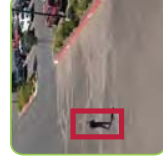
Sarix TI cameras come fully loaded with intelligent video analytics capability, triggering an alarm to notify users of potential threats caught on camera.



Adaptive motion
Detects and tracks objects entering a scene.



Camera sabotage
Reports any attempt to reposition or obstruct the camera.



Loitering detection
Identifies when people or vehicles remain in a defined zone longer than allowed.

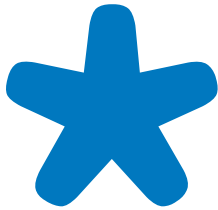


Object counting
Counts the number of objects entering a defined zone.



Stopped vehicle
Detects vehicles stopped near a sensitive area longer than the user-defined time allows.

Features



Performance features

- > PTZ and fixed models
- > IP or analog models
- > 640x480, 384x288, or 240x184 resolution options
- > H.264 and MJPEG compression
- > Up to two simultaneous video streams
- > Built-in analytics
- > Designed for maximum environmental protection
- > Compact, lightweight aluminum construction
- > Meets NEMA® Type 4X and IP66 standards
- > Complete with sun shroud and heater/defroster
- > Long wave infrared (LWIR), uncooled, “sun-safe” amorphous silicon microbolometer
- > 17 micron pixel size (640x480 model)
- > 25 micron pixel size (384x288 and 240x184 models)
- > Sensitivity below 50 mK at f/1.0
- > User-definable/programmable camera settings
- > 24 VAC or 24 VDC power
- > Various lens options



For more information, please visit www.pelco.com or call **(800) 289-9100** (United States and Canada) or **+1 (559) 292-1981** (international).

For pricing information or to purchase Pelco products, please contact your manufacturer's representative or the Pelco office in your area.

Pelco by Schneider Electric

3500 Pelco Way Clovis, California 93612 USA
(800) 289-9100 (800) 289-9150 Fax +1
(559) 292-1981 International +1 (559) 348-1120 International Fax

Schneider Electric

1415 South Roselle
Palatine, Illinois 60067 USA