Advantages of Thermal Cameras for Fire Prevention

Early detection and warning

Temperature visualization

VCA3.0
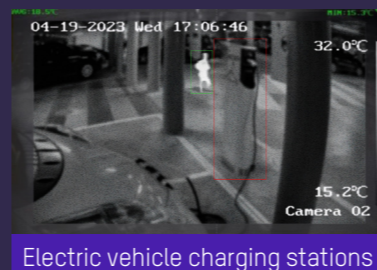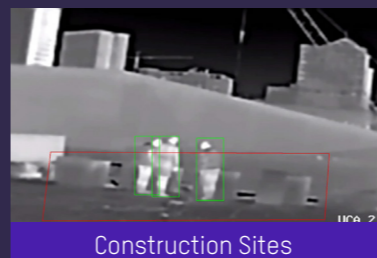
Support for flexible rules & alarms

Hikvision's Thermography Cameras are being used in various applications around the world to detect temperature anomalies before a fire starts, finding hot spots and invisible defects on machinery or electrical systems that could lead to critical failures. These advanced cameras are also used for surveying areas that are hard to reach with conventional measurement tools.

In one example application, Hikvision's thermography cameras effectively monitor temperature changes at a series of electric vehicle (EV) charging stations and send alerts to first responders, reducing time between detection and response. These cameras detect fires before they spread, vastly minimizing safety risks or catastrophic losses.

Other common applications include office buildings, warehouses and villas. Find out how these amazing cameras can work for you!

Application Scenarios

Villas/Communities

Office Buildings

Construction Sites

Parking Lots

Electric vehicle charging stations

Warehouses

Product Showcase

	Thermal cameras	Thermography cameras
256 x 192	DS-2TD1228-2/3/7 QA DS-2TD2628-3/7/10 QA	DS-2TD1228T-2/3/7 QA DS-2TD2628T-3/7/10 QA
160 x 120	DS-2TD1217-2/3/6 QA DS-2TD2617-3/6/10 QA	

Dedicated to bringing professional protection solutions to the mass market, Hikvision's HeatPro Series Thermal Cameras provide perimeter protection with unparalleled accuracy, and fire detection with superlative sensitivity.
The cameras hit the target for cost and performance in a variety of residential, commercial and industrial applications.
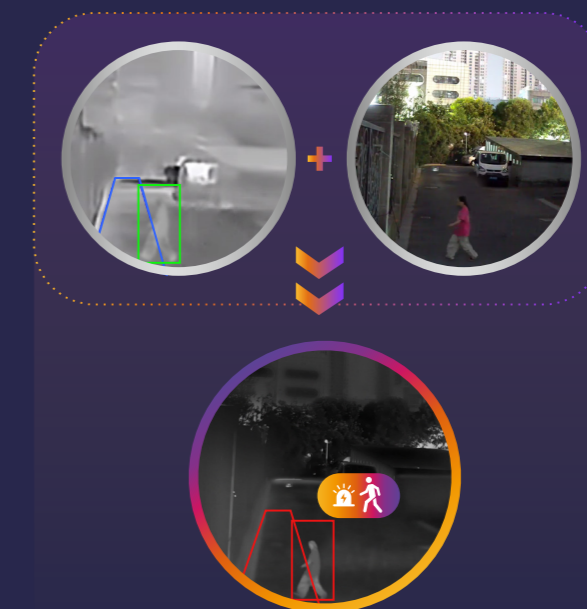
HeatPro

HeatPro Series Thermal Cameras Upgrade VCA3.0
Professional Protection Made Simple

Enhanced algorithms

All-weather detection

Intelligent VCA setup

Accurate alarms

Distillation Model

Bi-spectrum Analysis

Self-Learning Calibration

Combined Event Alarm

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Improved Target Identification

Persons and vehicles are accurately distinguished and classified.
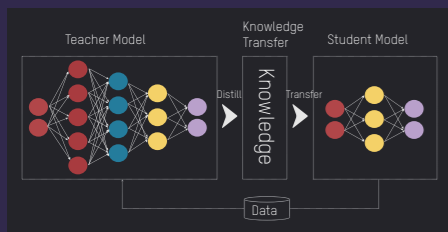

06-02-2022 16:13:27
Camera 02

Classified Object Detection

Conventional cameras may fail to detect the overlapping of person and vehicle targets. Hikvision's HeatPro Series Thermal Cameras excel with classified object detection, distinguishing persons and vehicles. This advanced capability ensures that users can focus their attention and respond only to targets that truly matter.

06-02-2022 12:17:39
Camera 02

Grouping Detection

Even when people gather in groups, HeatPro Series Thermal Cameras can accurately identify and classify each individual with precision.

Teacher Model | Knowledge Transfer | Student Model
Knowledge
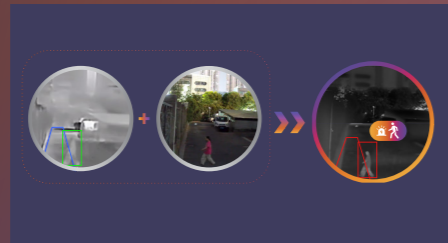Data

Algorithm Optimization

Hikvision enhances VCA performance by training a large model (teacher model) to drive a small model (student model). This distillation model has resulted in an impressive 80% reduction in false alarms compared to previous deep learning algorithms.

Higher Agility and Adaptability

Objects are quickly detected, even in challenging conditions.

Challenging Temperature Conditions

With the upgraded VCA3.0, Hikvision's HeatPro series Thermal Cameras enable bi-spectrum analysis, delivering superb precision even in face of minimal temperature differences. This capability allows for agile all-weather detection.

Challenging Viewing Angles

HeatPro Series Thermal Cameras detect targets moving right at the camera with comparatively minute perceivable displacement.

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Camera 02

Self-Learning Calibration

Simple and fast deployment of multiple cameras with one-key activation.

HeatPro Series Thermal Cameras automatically identify object types (person or vehicle) and perform calibration without requiring specific configuration rules for each camera. This streamlined process enhances detection accuracy and significantly reduces setup time for large quantities of cameras.
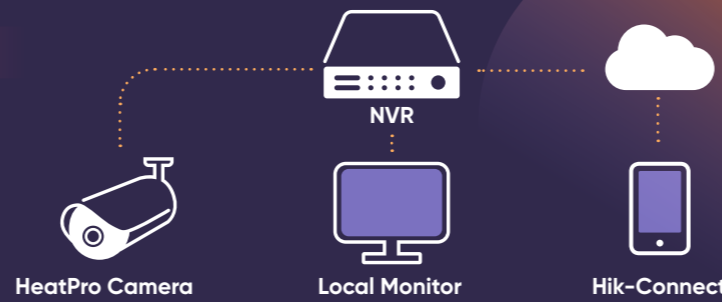
1 Enable VCA

2 Draw a detection area

3 Enable self-learning calibration

Demand-based Product Applications

Integrate with a range of Hikvision products to meet varied needs.
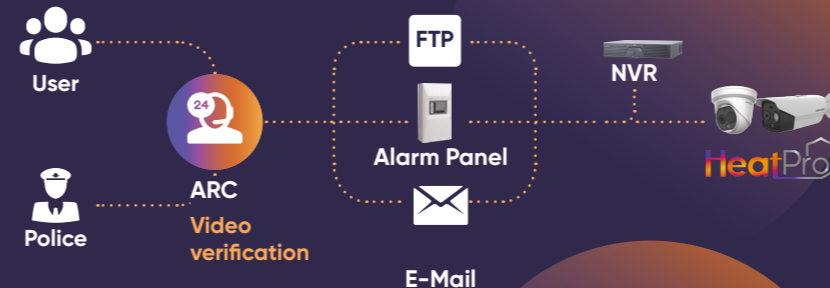
Essential Security

Deploying HeatPro cameras is made simple with Hikvision's NVR and Hik-Connect software. This setup ensures highly-efficient security protection, including alarm notifications on Hik-Connect for video verification.

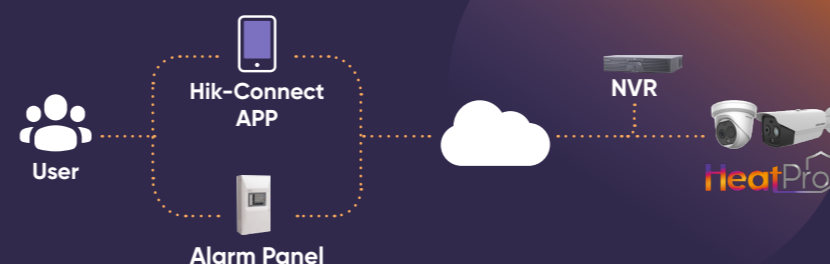HeatPro Camera | NVR | Local Monitor | Hik-Connect

Enhanced Protection with ARC Integration

Integrate HeatPro cameras with ARC for enhanced security measures. Receive alarm notifications from alarm panels and verify with video. Users can opt for different types of notifications based on their subscription.

User | Police | ARC Video verification | FTP | Alarm Panel | E-Mail | NVR | HeatPro

Flexible Security Solutions

Users have the flexibility to combine alarm systems with HeatPro cameras. They receive alarm notifications on both alarm apps and Hik-Connect, enabling double confirmation.

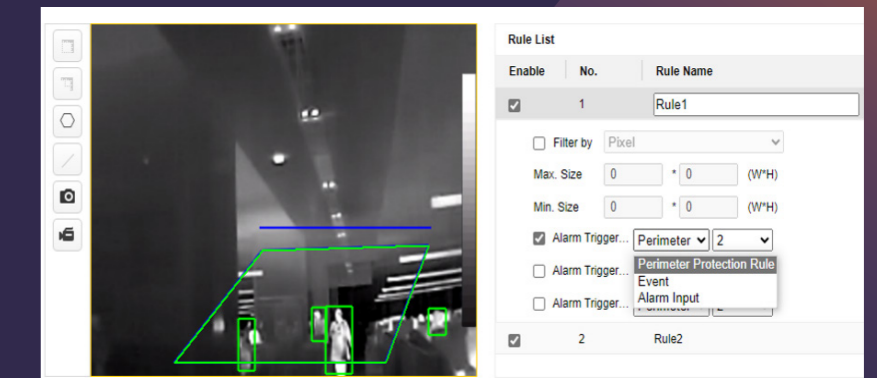User | Hik-Connect APP | Alarm Panel | NVR | HeatPro

Combined Event Alarms

Reduce unwanted alarms by combining multiple event-trigger rules.

Streamline users' security system by combining events such as perimeter protection, motion detection, and two alarm inputs. Each combined event rule allows up to 3 pre-events, satisfying specific needs. (Supports 1 rule for HeatPro 160 resolution, and 2 rules for 256 resolution).
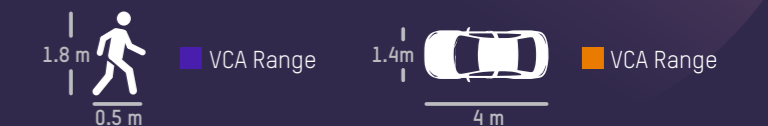
Conditions Triggered → Within Preset Alarm Interval → Rules Activated → Alarm Triggered

Note: When the combined event rule is configured, each single event will not trigger an alarm.

VCA Performance

1.8 m / 0.5 m ▮ VCA Range   1.4m / 4 m ▮ VCA Range

Person or Vehicle VCA Detection Distance

DS-2TD2617-10/QA FOV: 16°×12°
48 m
133 m

DS-2TD2628-10/QA FOV: 18°×135°
78 m
204 m

DS-2TDxx17-6/QA FOV: 25°×19°
30 m
85 m

DS-2TDxx28-7/QA FOV: 25°×19°
55 m
145 m

DS-2TDxx17-3/QA FOV: 50°×37°
15 m
43 m

DS-2TDxx28-3/QA FOV: 50°×37°
29 m
76 m

DS-2TDxx17-2/QA FOV: 90°×66°
9 m
25 m

DS-2TD1228-2/QA FOV: 90°×66°
17 m
50 m

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