

# Therma

See what your eyes cannot!

### ALL DAY, ALL WEATHER Provision-ISR's Thermal cameras are now available.

Provision-ISR introduces the new *Thermal Camera*.

Provision-ISR Thermal cameras are your all-weather, all-area, round-the-clock heat detector.

#### **Technology overview**

Thermal cameras do not depend on light conditions and provide constant imaging at any time of day, *especially at night*, by capturing and creating an image of an object using infrared radiation emitted from that object.

Every material on the planet, even ice, radiates infrared energy, and the thermal camera creates an image representing the object's temperature. So, how does it work, you say?

The thermal camera is **2-in-1**! It incorporates an optic lens and a thermal module, producing a **dual-image display**. One is the standard optical image, and the other is the thermal image which has several displays of choice like 'White Hot', 'Black Hot', 'Rainbow', and 'Iron Oxide'. The thermal camera shows the temperature of what it sees, which varies between  $-20^{\circ}\text{C} \sim 150^{\circ}\text{C}$ .



WHITE HOT



RAINBOW



**BLACK HOT** 



IRON OXIDE

#### And when you think it can't get any better than this...

Alongside the thermal imaging capabilities, we have strengthened our thermal imaging with the following:



#### DDA™ Video Analytics

The Provision-ISR's DDA<sup>TM</sup> Video Analytics technology distinguishes between humans, 2-wheeled, and 4-wheeled vehicles. The analytics is on either the regular or the thermal image displays.

The DDA<sup>TM</sup> capabilities on the optic lens are *line crossing, sterile* area, object counting, and face detection. In contrast, under thermal view, only two DDA<sup>TM</sup> capabilities are possible: crossing a virtual perimeter line and invading a pre-defined sterile area. You can set up 4 areas/4 lines for the optic and thermal displays.



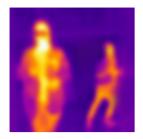
#### **Smart Alert**

Integrated Flash and sound act as active deterrence mechanisms (white strobe light and speaker.)

When the camera captures a DDA<sup>TM</sup> Analytics event or a temperature event, you can get, by choice, an on-site physical alert through strobe lighting or a pre-recorded message, or both. Provision-ISR's thermal cameras are developed with state-of-theart technology that provides the user with an advanced tool for fire detection, temperature monitoring, and security surveillance.



#### **Applications**



**Security** - Thermal image technology is ideal for high-performance applications where constant situational awareness and threat detection is needed.

It is perfect for fence perimeter surveillance, sterile area breaches, and high-value asset monitoring due to the camera's **actual recognition** distance of:

- ~33m for humans and ~102m for vehicles on the BMH-THERMAL-3
- ~73m for humans and ~224m for vehicles on the BMH-THERMAL-7

The thermal camera can uncover hotspots even on pitch-black nights, like spotting intruders hiding behind bushes.



**Fire Detection** - A thermal camera is an indispensable non-contact tool for early fire detection. Fires that start and develop unnoticed can harm people, equipment, and goods.

Both Provision-ISR thermal camera models can detect a flame at the size of 0.1x0.1 meters:

- From ~11m for the BMH-THERMAL-3
- From ~24m for the BMH-THERMAL-7

\*Heads up: A doubled-size flame will double the detection distance!!

For example, a flame size of 0.2x0.2 meters will be detected from 22 or 48 meters, respectively. In other words, the thermal camera helps to see beyond the thick cloud of smoke and reveal what's behind it.



**Temperature detection** – It is imperative to monitor the temperature to ensure safety and protect systems and people from harm. This can be used for research facilities, server room temperature monitoring, warehouses, cold rooms, engine temperature monitoring, etc.

There are 3 measuring methods to monitor the temperature with our thermal cameras:

- Point gives the temperature at a specific point in the image
- · Line provides the temperature across a virtual line (can be used on an electrical fence, for example)
- Area which covers the all marked area

All the measuring methods display the minimum – average – maximum temperature.

You can set the allowed temperature value in Celsius or Fahrenheit and the distance in Meters or Foot. It is essential to set the distance since it establishes the radiation ratio emitted from the object, which influences the temperature value.

For both fire and temperature detection, you can set up to 10 measuring methods in the scene with each one having a rule setting (under/above specific temperature) of its own.

How does the camera alert, or in the words of Whitney Houston: "How will I know?"

#### **Triggers/ Alerts**

The camera can trigger the system when temperature drops below or rises above a given setting, when fire is detected, and when a person crosses a line or breaches a sterile area.

- · Alarm Out (dry contact output) Audio Alarm (physical sound) Lighting Alarm (strobe light) SD Snap (Photo saved to memory card)
- · SD Recording (video recorded into memory card) Email (send an e-mail to chosen recipients) FTP (save photo to memory server)
- · Push notification (NVR side)

Provision-ISR Thermal cameras are compatible with all Provision-ISR's devices and platforms: Ossia NVRs, Ossia VMS, and Provision Cam2 Mobile App.

Enjoy both worlds: a clear AI video in the daytime and an AI thermal image at night. Let our thermal camera help you see what your eyes cannot!





## Discover more about Provision ISR Thermal Cameras

