

# WEOM<sup>®</sup> Thermal Camera core for Security and Search Operations



## WEOM<sup>®</sup> THERMAL CAMERA CORE

The WEOM<sup>®</sup> thermal imaging core is an excellent tool for security, search and rescue operations in various situations, including natural disasters, lost hikers, or accidents. Its high sensitivity and resolution allow for the rapid and accurate detection of heat emitted by the human body, which is crucial during nighttime operations or in poor lighting conditions. Advanced image processing and the option to use different lenses enable capturing wide or narrow fields of view according to the mission's needs. WEOM<sup>®</sup> is also lightweight and compact, making it easy to integrate into portable devices or drones that can quickly scan large areas, increasing the chances of a successful rescue.



### Disaster Response

In the aftermath of natural disasters such as earthquakes, floods, and hurricanes, quick and efficient search and rescue operations are critical. WEOM<sup>®</sup> thermal imaging cores can be integrated into drones and handheld devices, allowing responders to locate survivors trapped under rubble or debris by detecting their body heat. This technology significantly improves the speed and accuracy of rescue efforts, saving lives in critical situations.

### Firefighting and Emergency Response

WEOM<sup>®</sup> thermal imaging cores are essential tools for firefighting and emergency response operations. Integrated into handheld devices or mounted on drones, these thermal cameras allow firefighters to see through smoke and darkness, locating trapped individuals and identifying hotspots. The high sensitivity and resolution of the thermal imaging core enable rapid detection of human body heat and fire sources, significantly improving the efficiency and safety of rescue missions.

## BENEFITS OF THE WEOM<sup>®</sup> THERMAL CORE IN MARITIME APPLICATIONS

### Enhanced Detection Capability

The WEOM<sup>®</sup> thermal imaging core's high sensitivity and resolution enable the rapid detection of heat emitted by the human body, even in poor lighting conditions. This is crucial for nighttime operations and low-visibility environments, ensuring that search and rescue teams can quickly locate individuals in distress.

### Advanced Image Processing

With advanced image processing capabilities, the WEOM<sup>®</sup> core can capture and display clear thermal images, allowing users to accurately identify targets and assess situations. This technology supports various lens options, providing flexibility in capturing wide or narrow fields of view as needed for specific missions.

### Lightweight and Compact Design

The compact and lightweight design of the WEOM<sup>®</sup> thermal imaging core makes it easy to integrate into portable devices and drones. This mobility allows for rapid deployment and efficient scanning of large areas, increasing the chances of a successful rescue operation or security monitoring.

### Versatile Applications

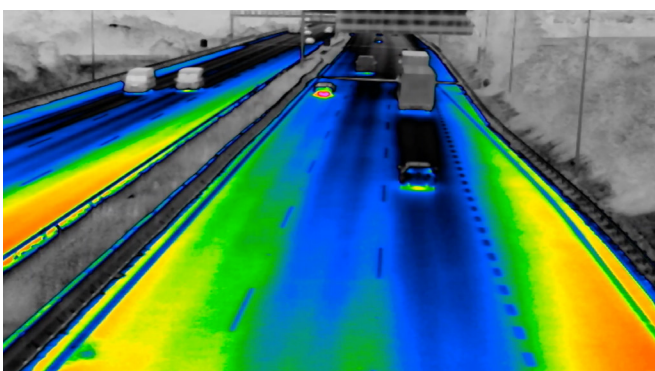
The versatility of the WEOM<sup>®</sup> thermal imaging core makes it suitable for a wide range of applications, from search and rescue missions in natural disasters to security operations in border control. Its ability to operate effectively in various conditions makes it an invaluable tool for enhancing safety and security in diverse environments.

## Wildlife Monitoring

In addition to its use in security and search operations, the WEOM® thermal imaging core is also beneficial for wildlife monitoring. Researchers and conservationists can use thermal imaging to track animal movements and behavior in their natural habitats, even in low-light conditions. This application helps in studying and protecting endangered species without disturbing their natural environment.

## Modular and Flexible Solution

The WEOM® thermal core offers a range of output formats and control interfaces, including HDMI, CVBS, USB3, CMOS, and GigE. This modularity provides integrators with the flexibility to tailor the system to specific application requirements. The ability to choose from various lenses with focal lengths ranging from 7.5 mm to 35 mm and different fields of view further enhances the core's adaptability. This feature is particularly beneficial in applications requiring customized imaging solutions, such as surveillance drones that need a wide field of view for area monitoring or industrial inspection robots that require a narrow focus for detailed examination.



### Superior Image Quality

The WEOM® thermal imaging core offers high-resolution thermal imaging, providing clear and detailed images essential for accurate identification and assessment in various conditions.

### Advanced Sensitivity

With high sensitivity, the WEOM® thermal cameras can detect even slight temperature variations, making it possible to see objects and individuals that would otherwise be invisible in low-light or obscured conditions.

### Lightweight and Compact Design

The compact size and light weight of the WEOM® thermal core make it ideal for integration into portable devices. This ensures that the devices remain easy to carry and handle during extended use.

### Versatile Output Options

WEOM® thermal cameras support various output formats and interfaces, including HDMI, CVBS, USB3, CMOS, and GigE. This flexibility allows for easy integration into different systems and applications, enhancing their adaptability.

### Wide Operating Temperature Range

The WEOM® thermal camera core operates effectively in temperatures ranging from  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ . This wide range ensures reliable performance in diverse climates, from arctic cold to tropical heat.

The WEOM® thermal imaging core is an invaluable tool for security and search operations, providing enhanced detection capabilities, advanced image processing, and a compact, lightweight design. Its versatility and durability make it suitable for a wide range of applications, from disaster response and border security to wildlife monitoring. With superior image quality and reliable performance in various conditions, the WEOM® thermal imaging core is essential for enhancing safety and security in diverse environments.