WORKSWELL®
INFRARED CAMERAS AND SYSTEMS

WEOM® Thermal Camera core for Monoculars and Binoculars

WEOM® THERMAL CAMERA CORE

WEOM® thermal cameras can be seamlessly integrated into portable thermal monoculars and binoculars, providing users with the ability to see in complete darkness, smoke, or fog. This integration is especially useful for a range of applications including military operations, hunting, rescue missions, and various outdoor activities. The high resolution and sensitivity of the WEOM® thermal cameras deliver detailed and sharp images, ensuring exceptional performance in diverse environments.

Firefighting and Emergency Response

In firefighting and emergency response situations, the ability to see through smoke and darkness is critical. WEOM® thermal cameras in monoculars and binoculars enable firefighters and emergency responders to locate victims, assess the spread of fire, and navigate safely through smoke-filled environments. This technology significantly enhances the effectiveness of emergency operations, improving response times and increasing the chances of saving lives.

Urban Search and Rescue

In urban search and rescue operations, WEOM® thermal cameras are vital tools for locating survivors trapped in buildings or under rubble after disasters such as earthquakes or explosions. The thermal imaging capability allows rescue teams to see through smoke, dust, and darkness, quickly identifying heat signatures of individuals in need of help. This significantly speeds up rescue efforts and increases the chances of saving lives in critical situations.

BENEFITS OF THE WEOM® THERMAL CORE IN MARITIME APPLICATIONS

Enhanced Vision in Adverse Conditions

WEOM® thermal cameras enable users to see in complete darkness, smoke, or fog. This is crucial for military operations, hunting, and rescue missions where visibility is often compromised. The high-resolution thermal imaging ensures that users can detect objects and individuals clearly, enhancing situational awareness and safety.

High Resolution and Sensitivity

The high resolution and sensitivity of the WEOM® thermal camera core provide detailed and sharp images. This level of detail is essential for accurately identifying targets and assessing environments. Whether used for outdoor activities, surveillance, or wildlife observation, the superior image quality enhances the overall experience and effectiveness of these portable devices.

Versatile Applications

The integration of WEOM® thermal cameras into monoculars and binoculars makes them highly versatile. They are invaluable tools for military personnel, hunters, rescue teams, and outdoor enthusiasts. This versatility makes these devices ideal for a wide range of applications, from tactical operations to camping and hiking.

Portable and User-Friendly

The compact and lightweight design of the WEOM® thermal core makes it perfect for portable devices like monoculars and binoculars. These devices are easy to carry and use, providing users with the flexibility to operate in various environments. The user-friendly interface ensures that both professionals and amateurs can quickly learn to use the thermal imaging features effectively.

Rescue Operations

In search and rescue missions, especially in challenging environments such as dense forests or disaster-stricken areas, having the ability to detect heat signatures can be life-saving. WEOM® thermal cameras in monoculars and binoculars allow rescue teams to locate missing persons or survivors quickly, even in low visibility conditions, significantly increasing the chances of a successful rescue.

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 camera core offers high-resolution thermal imaging, providing clear and detailed images that are 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 monoculars and binoculars 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 °C to +80 °C. This wide range ensures reliable performance in diverse climates, from arctic cold to tropical heat.

The integration of WEOM® thermal cameras into monoculars and binoculars provides significant advantages across various applications, from military operations and hunting to rescue missions and outdoor activities. With superior image quality, high sensitivity, and a durable, user-friendly design, these devices offer unparalleled performance in challenging conditions.