Optimized
ELECTROTECH

MAKE IN INDIA

Security &Surveillance

Vigilance for a better tomorrow

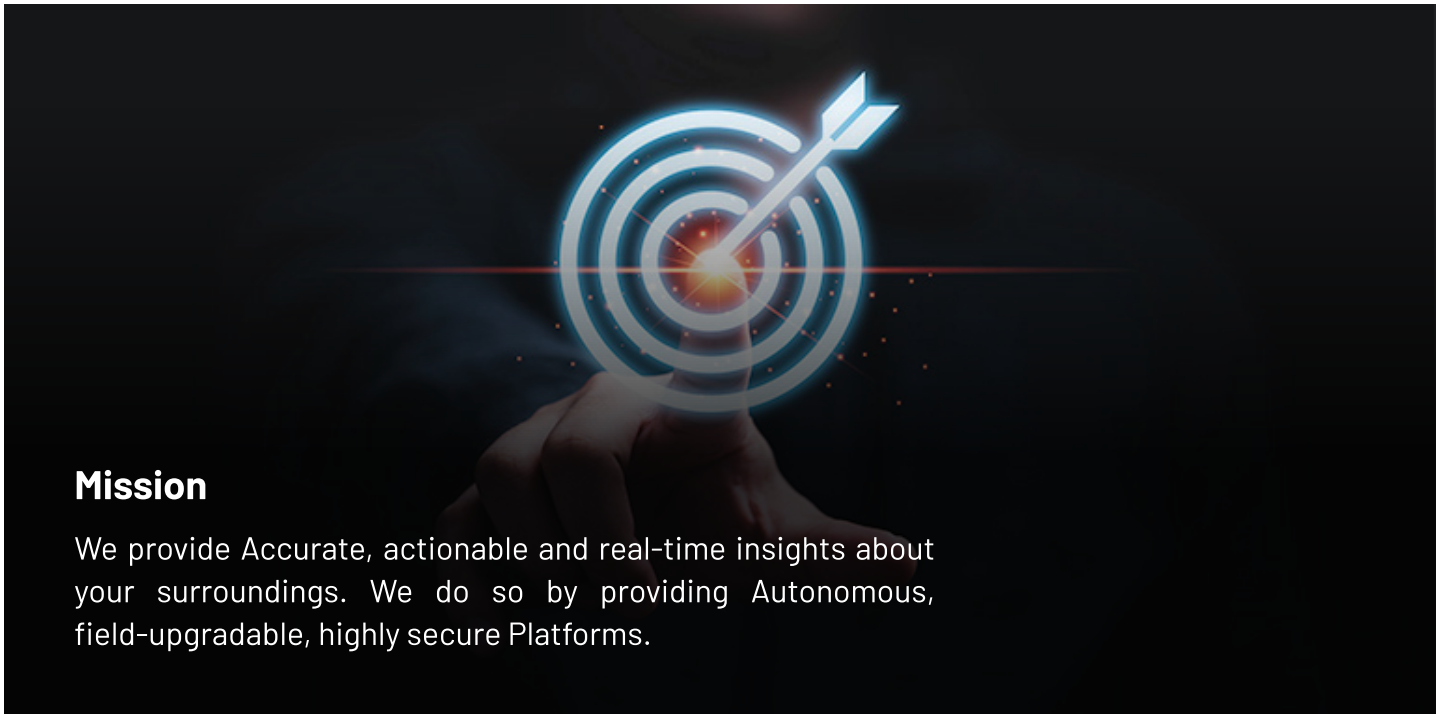
ABOUT US

Optimized Electrotech envisages to become a global leader of Imaging Surveillance with Artificial Intelligence at its core. Indigenously designed technology for Electro-Optics and Infra-red imaging has been embedded in various Military and Civilin products by the organization.

The company since its incorporation has received various awards from multiple organizations including Ministry of Defence, TIE50 of the US, and ELCINA. The company is extremely focused on embedding Edge Analytics on Multi-Spectral Fusion imaging.

Vision

By 2030, Optimized Electrotech shall be amongst the Global leaders in all Imaging Surveillance applications by virtue of its Platforms across Land, Sea, Air and Space.



Mission

We provide Accurate, actionable and real-time insights about your surroundings. We do so by providing Autonomous, field-upgradable, highly secure Platforms.

Infrastructure

Our products are manufactured for the most discerning clients. we have ensured that our facility met the nessarsary standards.

We have an ISO Class 7 clean room equipped with state of the art optical and electronics manufacturing equipment. The products are manufactured and tested with utmost precision.

100+ Man-years of Design Experience

20+ R&D Engineers

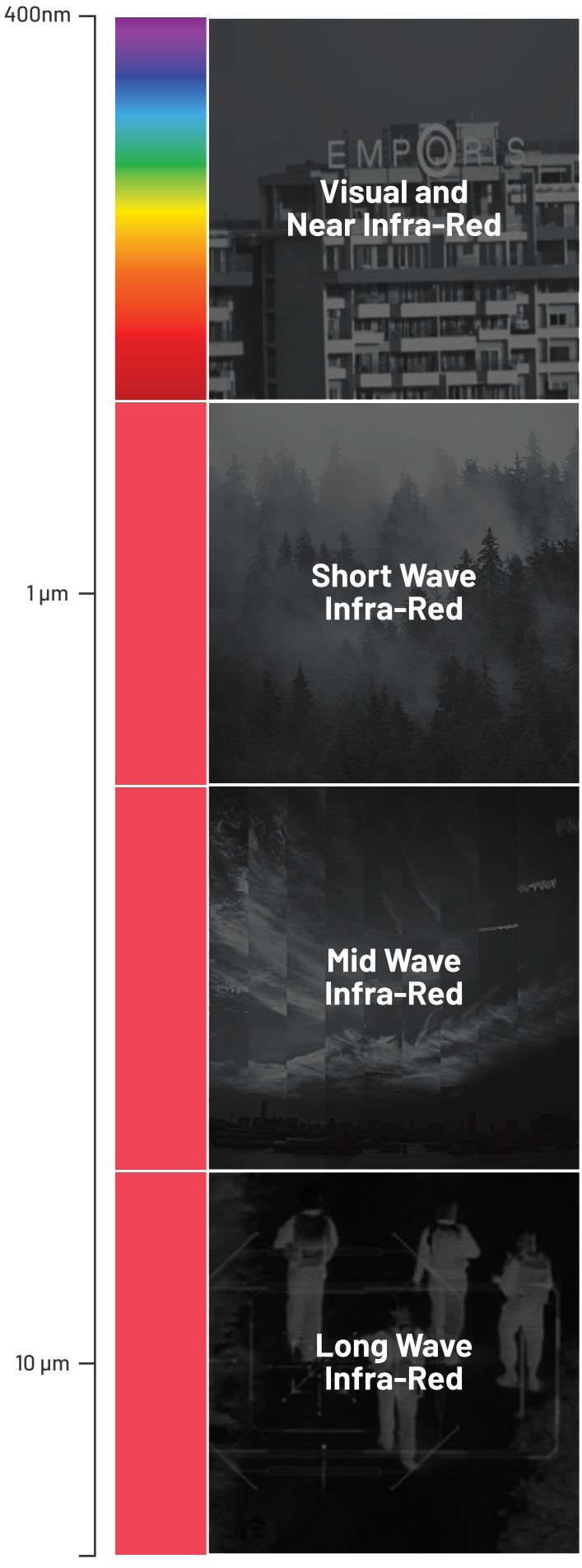
20+ Research Papers

2 Patents Granted
Multiple applied

OUR ADVANTAGES

- Multi-Spectral Day-Night Imaging
- AI Enabled Edge Intelligence
- Indigenously Designed Made In India
- Facial Recognition Automated Alerts
- Adaptable to Civilian Use Industrial Imaging

TECHNOLOGIES WE USE



Near Infra-Red Spectrum (NIR)

The near infra-red spectrum is a subset of the IR spectrum. NIR offers sharper images with less noise and better contrast for long distance imaging.

Things like printed information on signs, vessels & vehicles, facial features, trees, plants and clothing can be more easily identifiable by NIR than in thermal. The detail and visibility of objects are improved at long ranges through NIR.

Short Wave Infra-Red Spectrum (SWIR)

Short Wave IR deals with electromagnetic radiation between the wavelengths of 0.9 to 2.6 microns. This wavelength is not visible to the human eye; hence it offers more details than any VIS camera system. SWIR cameras and systems are immensely sensitive to light, with discrete pixels of the focal plane array identifying, capturing and detecting individual set of photons.

SWIR systems are effective for Identification and Friend or Foe Detection as their wavelengths can travel through glass. SWIR offers superior images as it can penetrate heavy fog, smoke and other atmospheric conditions. When blended with night sky radiance, emitting up to 700% more illumination than starlight, SWIR cameras can view objects with detail, even on moonless and starless nights.

Medium Wave Infra-Red Spectrum (MWIR)

MWIR systems come with a high spectral range. MWIR technology can help view objects in all types of weather conditions and visible light.

The MWIR is a very sensitive region with respect to temperature, therefore temperature radiation detected on farther distances can also be relied upon. MWIR systems come with a high focal length, backs camouflaging foliage detection, offers crisp images and delivers exceptional performance in diverse conditions. The spectral range of MWIR systems is 3µ - 5µ

Thermal Infra-Red Spectrum (LWIR)

TIR systems offer higher contrast images for post-processing and analysis with comprehensive abilities. The thermal infra-red spectrum with its thermal capabilities enables to capture the images even in zero light conditions.

The thermal remote sensing sensor calculates the radiation of the thermal infrared areas across the explicit electromagnetic spectrum. The spectral range of TIR systems is 8µ to 14µ. By leveraging TIR technology and using high-sensitivity thermal detectors, one can spot and swiftly identify even the slightest range of involved faults.

Optimized Electrotech provides industry driven products that support homeland security and other mission critical situations

INDUSTRIES WE SERVE

The extensive range of products makes Optimized Electrotech a remarkable place in the tech oriented world.

Defence

Original equipment manufacturers of Land systems such as artillery guns, anti-aircraft guns, missile defence systems, and infantry vehicle manufacturers can use our long-distance imaging systems to either activate fire control systems or to intimate the man in the loop.

Homeland Security

Survillance to safegaurd a sovereign nation from infiltration or unauthorized access requires smart recognition systems that can work under different weather conditions

Critical Infrastructure

Facilities that require continues protection due to their sensitive nature need multiple layers of security perimeter intrusion systems, face recognition systems and long-distance threat detection systems that can support the security personnel in better protection of critical infrastructure

Transportation

All Public transportation hubs such as Railway stations, Bus stations, Airports, and Ports need to be on constant vigilance and these are the most vunarable locations for any country. Ai-enabled threat detection crowd monitoring and advanced enunciation systems can make public transport safer

Airports

Long, open spaces in and around the runway such as the runway and the space around it need to be clear at all times movement of unauthorized people vehicles or even animals can cost mortality. Long-distance imaging systems along with people monitoring systems can help make the airports safer

Aerospace

HALE UAVs, MALE UAVs, AeroStats, and Surveillance Aircrafts are some of the best ways to conduct surveillance of a large portion of land. Our multi-spectral imaging systems with varying footprints can help aerospace manufacturers

Satellite Manufacturers

Low earth orbit aleo satellites for imaging require low swap payloads our experience of working with space and customizing payloads to the need can come in handy for all satellite manufacturing

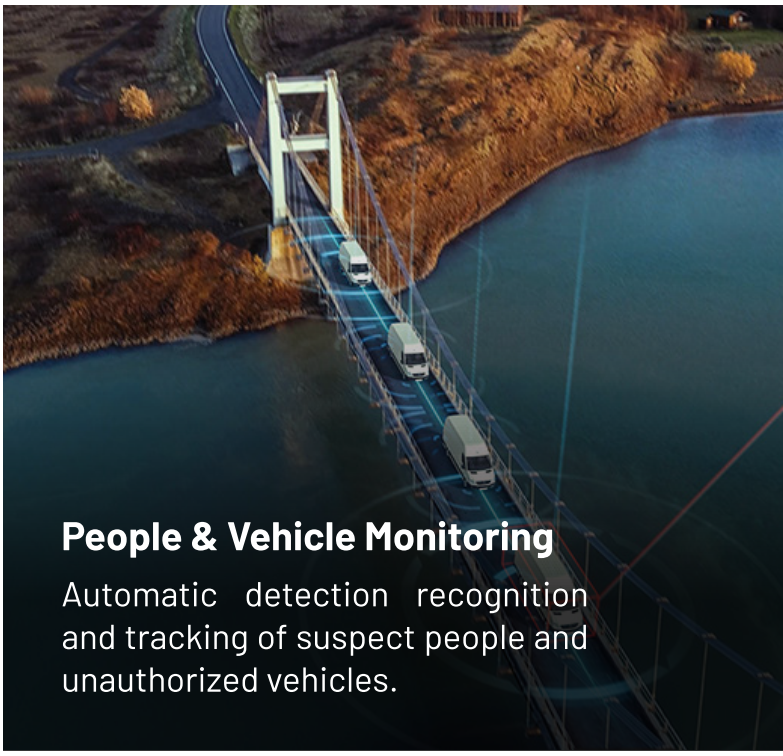
Optimized Electrotech's security solutions enable accurate mitigation of threats across applications

Border Surveillance

24X7 365 days Automated Surveillance Platforms for various terrain conditions.

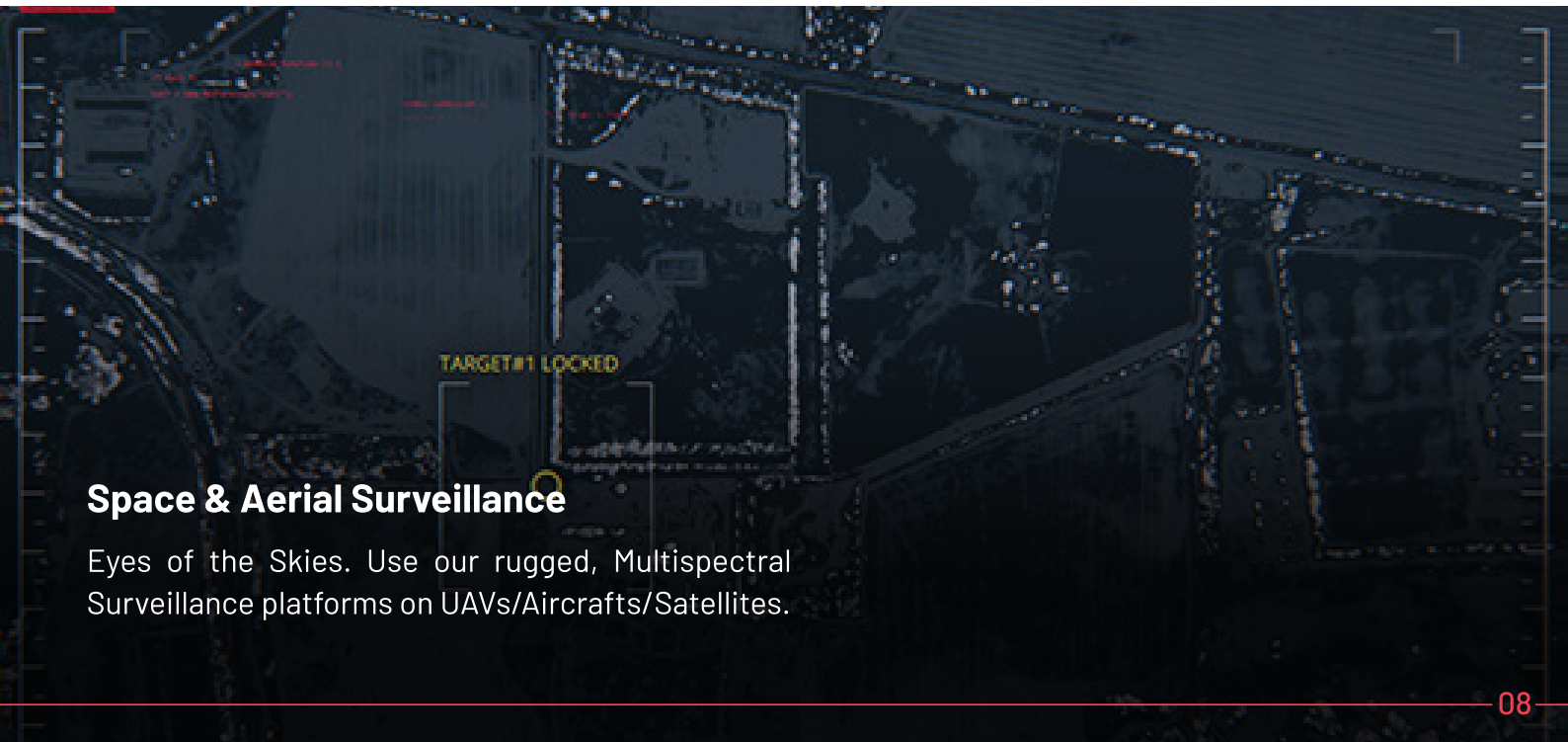
Perimeter Surveillance

Artificial Intelligence based Suite of products to guard perimeter without human intervention.



People & Vehicle Monitoring

Automatic detection recognition and tracking of suspect people and unauthorized vehicles.

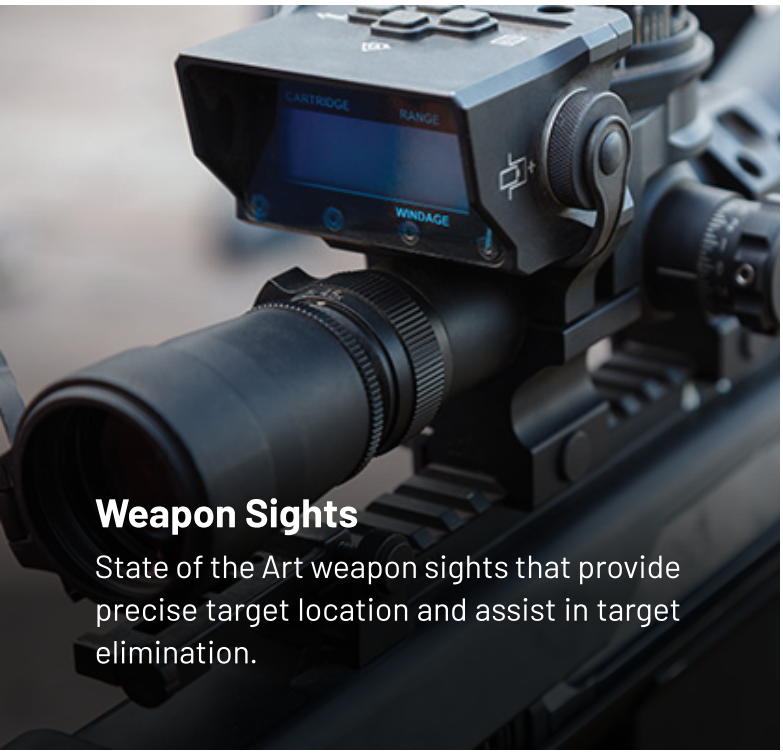


Space & Aerial Surveillance

Eyes of the Skies. Use our rugged, Multispectral Surveillance platforms on UAVs/Aircrafts/Satellites.

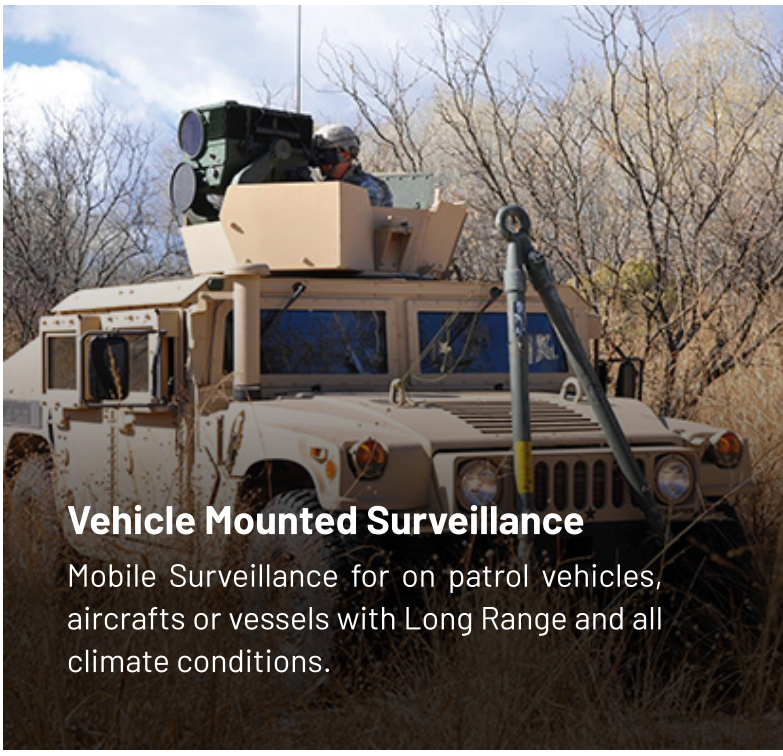
Access Control

AI enabled Face recognition based access control systems with Thermal Imaging capabilities.



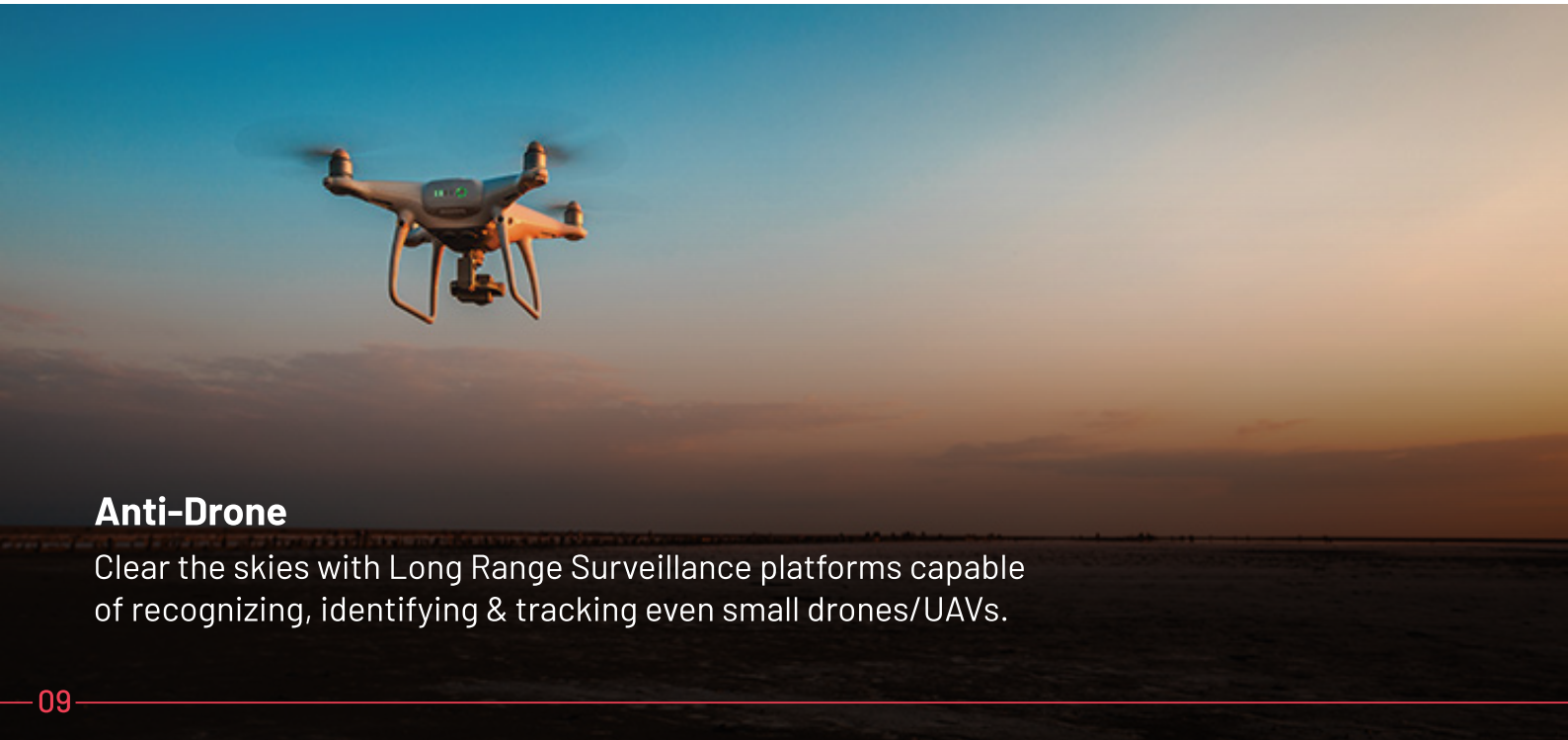
Weapon Sights

State of the Art weapon sights that provide precise target location and assist in target elimination.



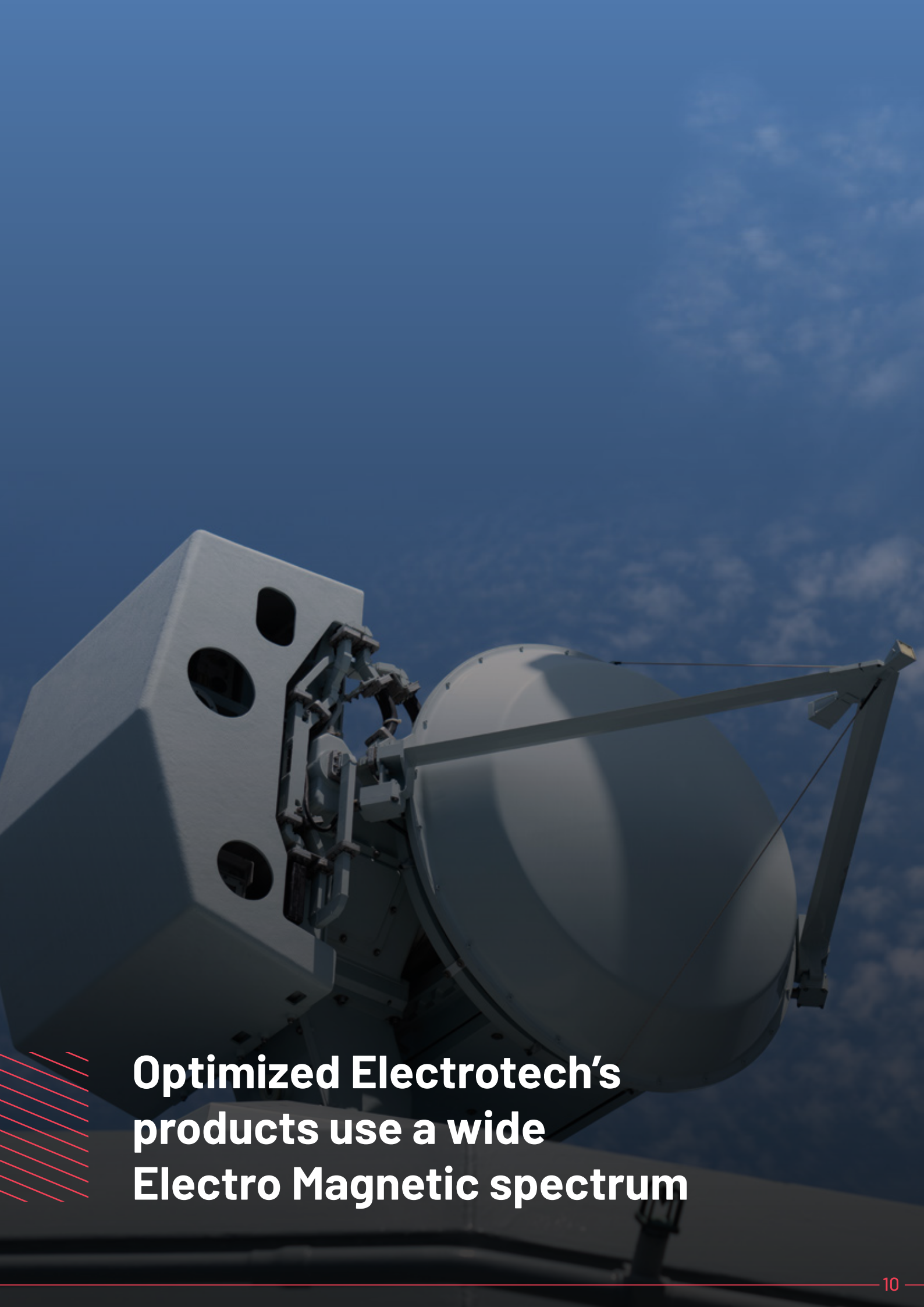
Vehicle Mounted Surveillance

Mobile Surveillance for on patrol vehicles, aircrafts or vessels with Long Range and all climate conditions.



Anti-Drone

Clear the skies with Long Range Surveillance platforms capable of recognizing, identifying & tracking even small drones/UAVs.



Optimized Electrotech's products use a wide Electro Magnetic spectrum

Infi Vision

Key Features

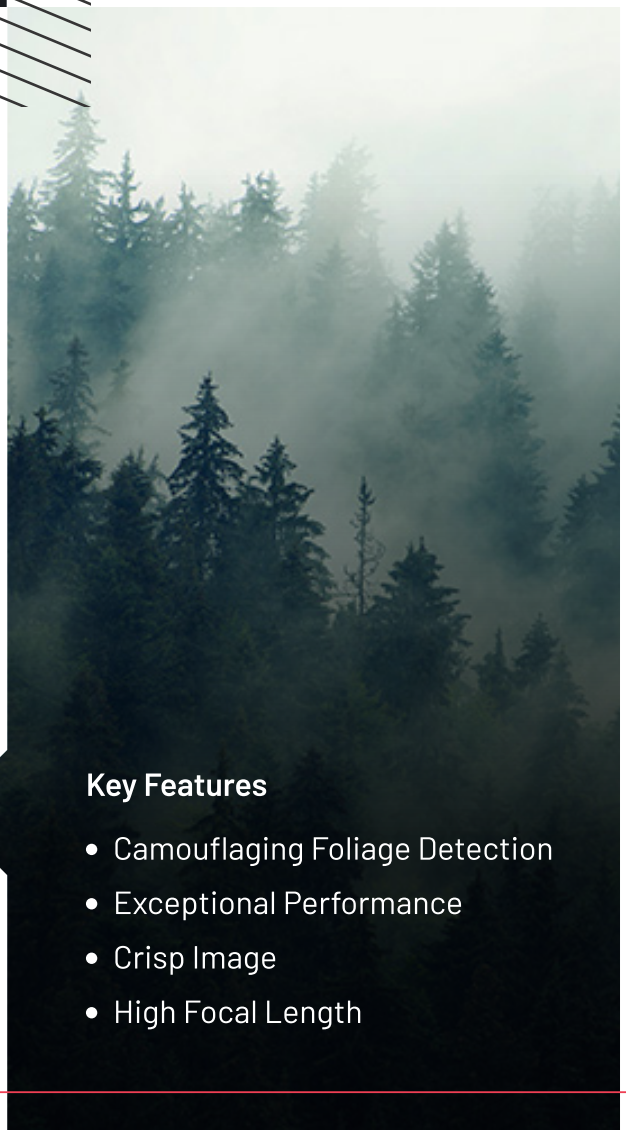
- Automatic People Recognition
- HD Video Capture
- Motion Detection

VISION SERIES

A VIS + NIR long-range electro optics system indigenously designed for low footprint applications in visible light. It delivers clear images in dawn, dusk, and moonlight and optimally fits the client's requirements.

Spectral Range: 0.4µ - 0.9µ

Daylight Surveillance | Vehicle Detection at 30 Kms



Key Features

- Camouflaging Foliage Detection
- Exceptional Performance
- Crisp Image
- High Focal Length

A SWIR long-range electro optics system indigenously designed for observing cross-border traffic, fog penetration and enabling critical infrastructure surveillance, providing close-up pictures of people and vehicles from afar.

Spectral Range: 0.9µ - 1.7µ & 0.4µ - 0.9µ

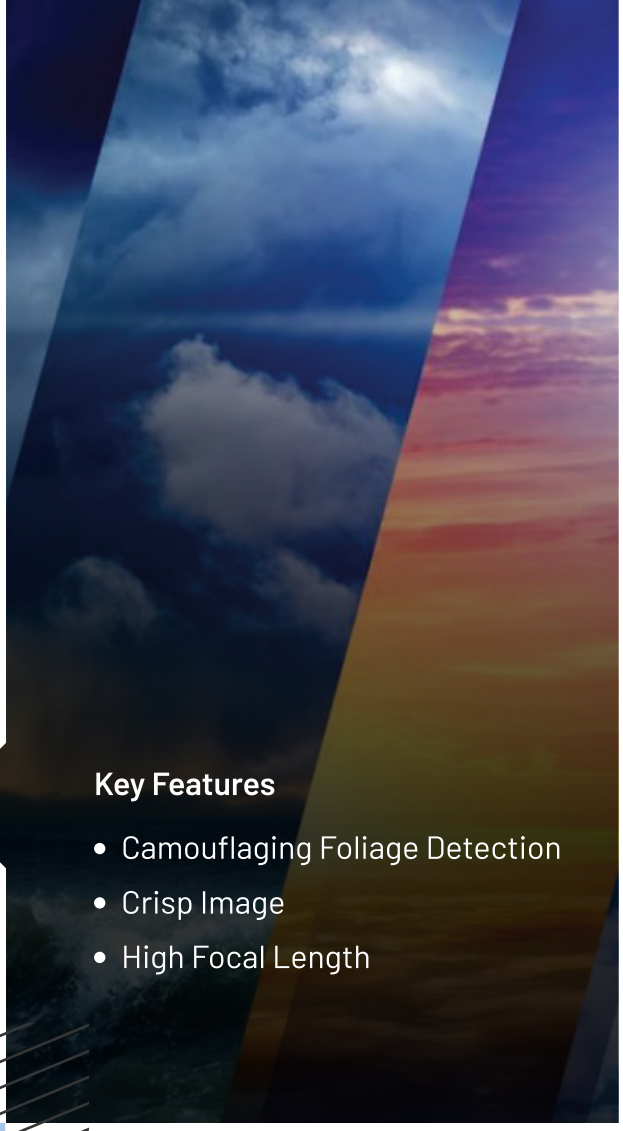
Fog Penetration

Mist Vision

Clear Vision

A VIS NIR + MWIR electro optics system with a high spectral range. It is indigenously designed for all weather conditions and visible light, providing close-up pictures of people and vehicles from afar.

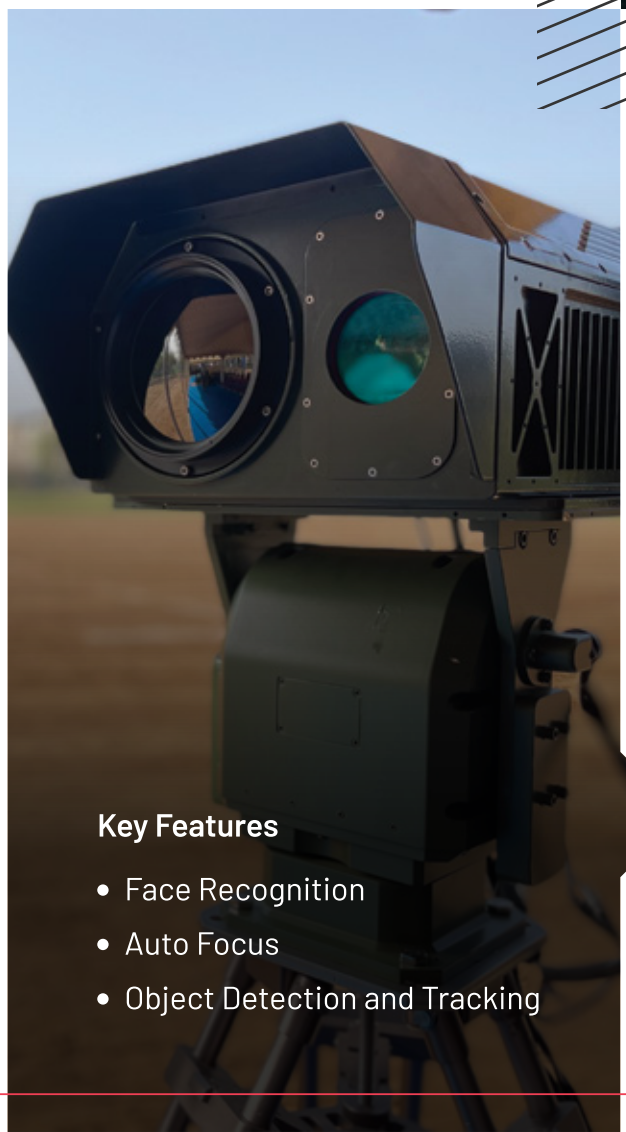
Spectral Range: 3µ - 5µ & 0.4µ - 0.9µ
All weather application



Key Features

- Camouflaging Foliage Detection
- Crisp Image
- High Focal Length

Noct Vision



Key Features

- Face Recognition
- Auto Focus
- Object Detection and Tracking

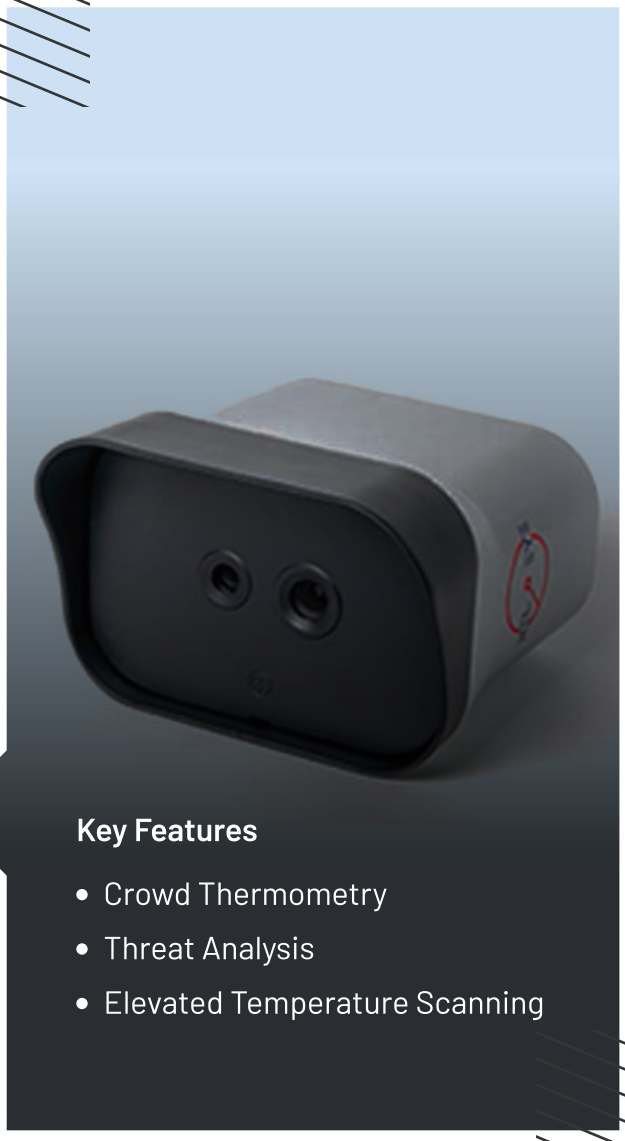
A VIS NIR + LWIR electro optics system for night vision. It is used to detect threats in visible light, night conditions and enables zero light imaging. It applies Thermal (TIR) Imaging cameras and enables Visible (VIS) light spectrum technologies.

Spectral Range: 8µ - 14 µ & 0.4µ - 0.9µ
Day/Night 24X7 Surveillance

EYE SERIES

An optimally engineered product aligned to steer access control, thermal screening, organization compliances, event counter, and automated attendance report generation.

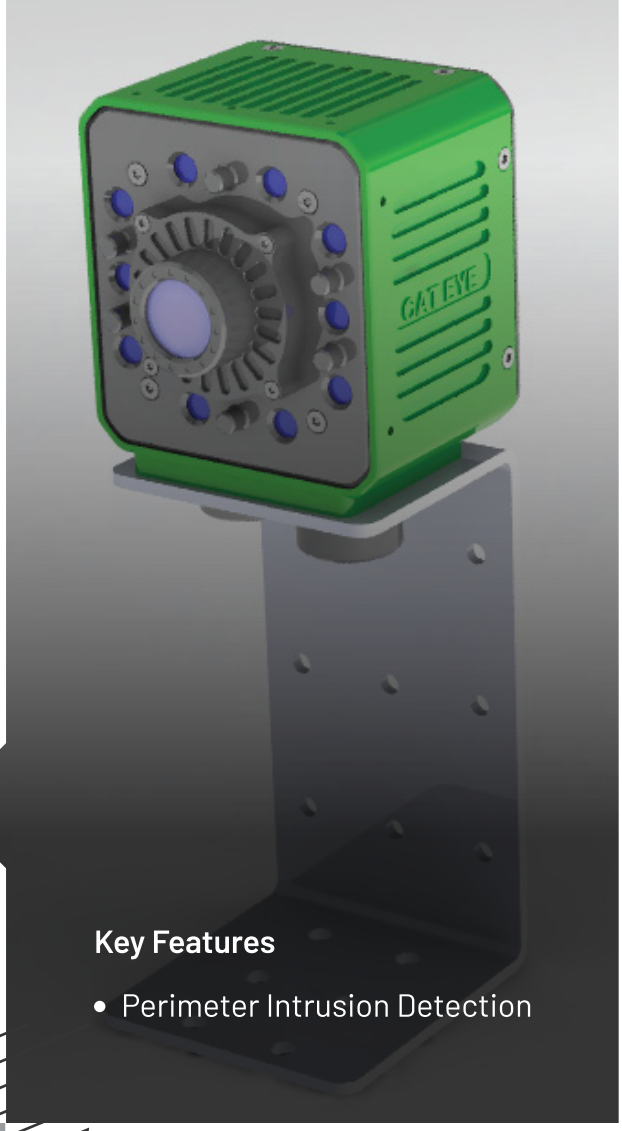
Crowd Thermometry
Facial Recognition



Key Features

- Crowd Thermometry
- Threat Analysis
- Elevated Temperature Scanning

Rel Eye



Cat Eye

A perimeter/motion activated Intelligent Optical Sensor that assists you in keeping an eye on intruders or malicious activities 24*7 and spot intervention of people both day and night.

Clandestine Perimeter Intrusion Detection

Key Features

- Perimeter Intrusion Detection

AlphaSight - 75

Sights

A long range thermal imaging sight for LMG, MMG, Granade Launchers with day time colour images and night time B&W images.

Spectral Range: 8µ - 14µ & 0.4µ - 0.9µ

AlphaSight - 100

A thermal sight to be mounted on LMG and MMGs.

Spectral Range: 8µ - 14µ

Tango Sight - 100

A hand-held thermal binocular designed for law enforcement professionals for extended observation and reconnaissance.

Spectral Range: 8µ - 14µ

FEATURED IN

The Economic Times | NEWS | INDIA TODAY TELEVISION | YOUR STORY INSPIRE INNOVATE IGNITE

WION | NEWS18 इंडिया | दिव्य भास्कर

RECOGNIZED BY

iDEX Innovations for Defence Excellence

Approved for Field Trials

Shortlisted by CRPF

OUR ACHIEVEMENTS

Winners of IDEX Awards

Winners IDEX Awards

Optimized
ELECTROTECH

marketing@optimizedelectrotech.com
www.optimizedelectrotech.com

Corporate HQ

B-505, The First,
Vastrapur, Ahmedabad,
Gujarat, India-380015

Prototyping Facility

107, Brigade IRV Center,
Nallurhalli Road, Whitefield,
Bengaluru, Karnataka, India-560066

Registered Office

310, ATMA House,
Ashram Road, Ahmedabad,
Gujarat, India-380009