HGH

Enlighten the Unseen

GAIA Artificial Intelligence Module
for Automatic Classification of any Kind of Threats

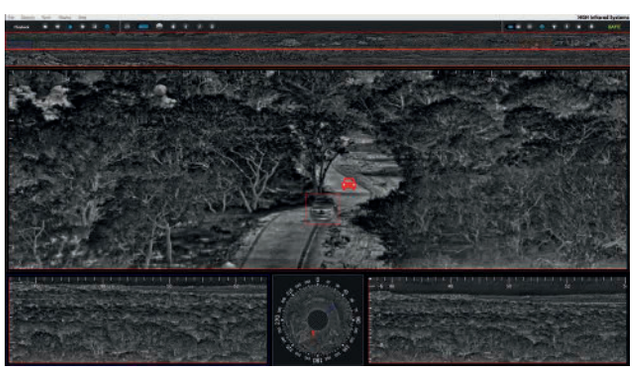
IMPROVE DETECTION EFFECTIVENESS AND STREAMLINE SURVEILLANCE OPERATIONS

Integrated into the SPYNEL long-distance surveillance solutions, the newest GAIA Artificial Intelligence processing features unique capabilities in the market in terms of **automatic classification of objects within panoramic thermal images.** The AI module makes use of three patent-pending neuronal networks designed to recognize patterns for **maritime, land and air surveillance applications.** The automatic classification is operational at long-distance, on a very wide range of land and sea targets, from just a few pixels to very large objects.

The unique combination of GAIA Artificial Intelligence with Cyclope video analytics provides advanced detection, tracking and classification of any kind of threats. Whilst the use of Artificial Intelligence drastically **lowers false alarm rate** for wide area surveillance applications, it improves **human decision efficiency** and decreases the use of operational means.

KEY FEATURES

- Automatic classification performed on thermal panoramic videos
- Operational on a very wide range of threats, from just a few pixels to very large objects
- Detection of both stationnary and/or moving objects
- Maritime/Ground/Air intrusion classification capabilities
- Very low false alarm rate in complex conditions
- Scalable customizable on-demand neuronal networks trained for specific customer applications

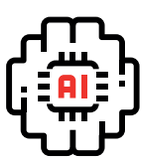


HOW DOES IT WORK?

1. DETECT

2. TRACK

3. ANALYZE



4. CLASSIFY

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GAIA Artificial Intelligence
with SPYNEL® Panoramic Thermal Solutions

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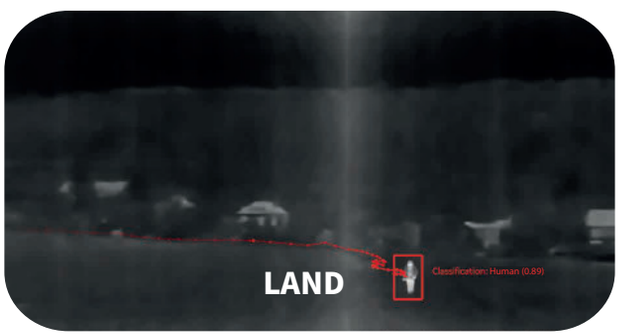
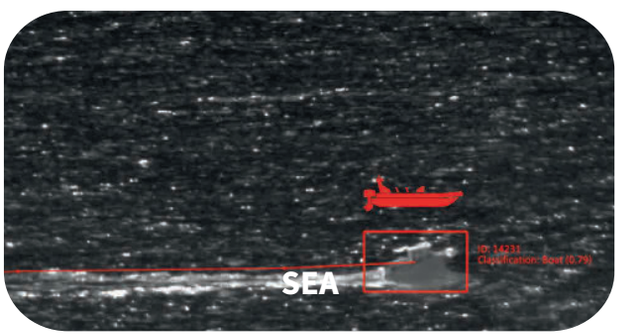
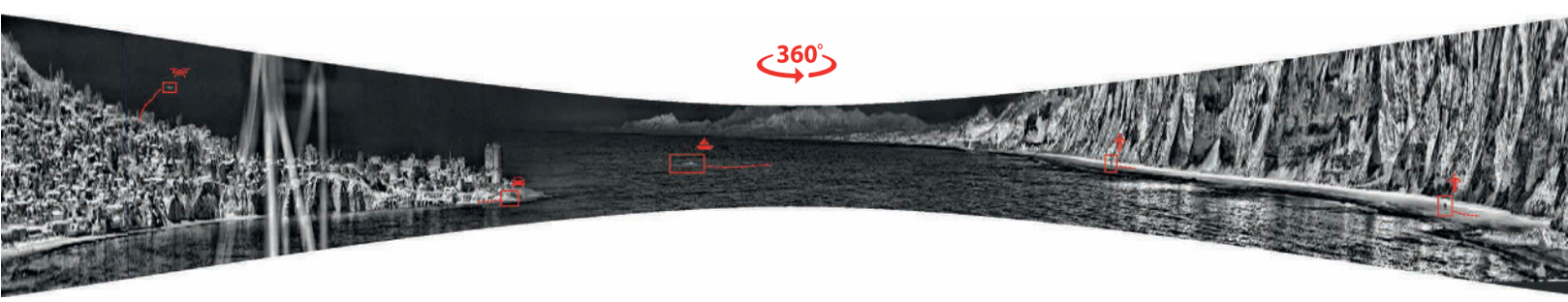
DETECT, TRACK AND CLASSIFY ANY KIND OF THREATS



Ground Surveillance : Type of objects classified
- Human
- Car
- Truck
- Two wheels

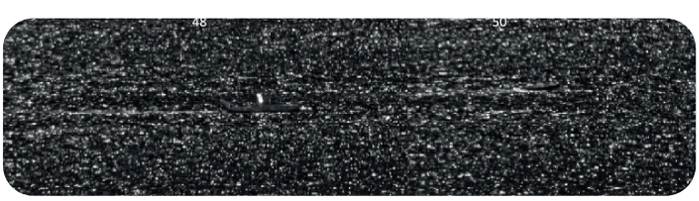


Maritime Surveillance : Type of objects classified
- R.H.I.B
- Boat
- Sailing Boat
- Buoy
- Tanker



I²Q: IMAGE PROCESSING LIBRARY

GAIA Artificial Intelligence is boosted by the I²Q™ image processing library allowing to achieve superior day/night image quality whatever the environmental conditions. I²Q™ image processing includes multiple algorithms to improve user experience such as sun glint reduction, smart denoising, local contrast image enhancement and more.



Sun glints on the sea surface makes it impossible to detect any objects.

Image processed by artificial intelligence and sun glints reduction makes it possible to detect and classify ships.

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Contact us : hgh@hgh-infrared.com | hgh-infrared.com

EUROPE
10 rue Maryse Bastié
91430 Igny, FRANCE
Phone: +33 1 69 35 47 70

USA
1240 E Campbell Rd Ste. 200,
Richardson, TX 75081, USA
Tel: +1 805 965 6701

ASIA
1 Paya Lebar Link, Unit 04-01
Singapore 408533
Phone: +65 6955 8585