



CYCLOPE

Video Analytics Software Suite

INTRUSION DETECTION, TRACKING and CLASSIFICATION OVER 360°

CYCLOPE is an advanced software suite processing thermal panoramic images captured by the SPYNEL® Wide Area Surveillance sensors in real-time. It consists of software modules (Server, Client, Hypervisor) enabling to process the SPYNEL panoramic videos for a wide range of ground based or embarked applications, for any type of temporary or permanent installations, and from the simplest up to the most complex network architectures.

Designed to automatically detect, track and classify an unlimited number of ground/air/maritime intruders simultaneously, including hardly detectable threats, such as crawling men, RHIBs, jet-skis, stealth or low altitude aircrafts (like UAVs), CYCLOPE provides advanced data analysis and classification based on GAIA™ Artificial Intelligence to guarantee a very low false alarm rate. ONVIF compliant, CYCLOPE can also be fully integrated in a Third Party software (VMS, CMS, C2, PSIM platform...).

The screenshot displays the CYCLOPE software interface with the following components:

- 360° Strip View:** A horizontal strip at the top showing a panoramic view of a runway with a small aircraft detected.
- Main View:** A large central window showing a thermal image of a body of water. A green rectangular area is labeled "detection zone 1". A small boat is detected within this zone, with a red bounding box and a data label: "199.40° -2.00m 10.17m".
- Zoom Window 1:** A window at the bottom left showing a zoomed-in view of a helicopter. A red bounding box highlights the helicopter, with a data label: "246.10° -0.30m 21.77m".
- 360° Annular View:** A circular radar view at the bottom right showing a 360-degree scan of the environment.
- 360° Radar View:** A circular radar view at the bottom right showing a 360-degree scan with a 2-D map overlay and geolocation of detected threats.

Three red callout boxes provide additional information:

- User-defined detection zones according to the missions and potential threats**
- Unlimited number of windows to display multiple intruders simultaneously**
- Radar view with 2-D map overlay and geolocation of detected threats**

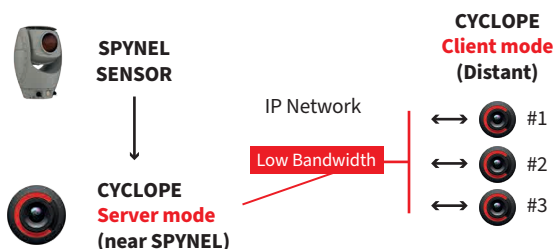
The Graphical User Interface is fully customizable: preset or user-defined layouts of an unlimited number of zoom windows, panoramic, annular or radar views can be displayed on multiple screens.

CYCLOPE

Video Analytics Software Suite

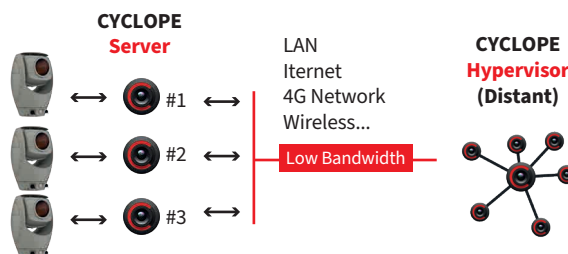
SOFTWARE ARCHITECTURE BEYOND CYCLOPE SERVER

CYCLOPE CLIENT/SERVER One Sensor - Multi Operator



Connected to the CYCLOPE Server, the CYCLOPE Client workstations enable to display the Spynel day/night videos and the alarms to multiple remote operators with unparalleled ease-of-use and low bandwidth.

CYCLOPE HYPERVISOR Multi Sensor - Multi Operator



CYCLOPE Hypervisor centralizes all data from security sensors over a common network to offer a global geolocation of all tracked events by multiple SPYNEL sensors located on one or several sites.

CONTROL AND DISPLAY SOFTWARE



Advanced video processing

GAIA™ Artificial Intelligence for automatic detection and classification of ground/sea/air threats, I²Q™ library for smart image enhancements, very low false alarm rate.



Multi-layer display

Real-time panoramic or zoom display, geolocation of threats, recording & replay of panoramic videos, timeshift function.



High integration capabilities ONVIF®

ONVIF, H264, XML, MIME, TCP/IP, Client/Server, fusion of thermal images with external devices (ARPA radars, AIS, ADS-B...), external PTZ camera video display with automatic slew-to-cue.

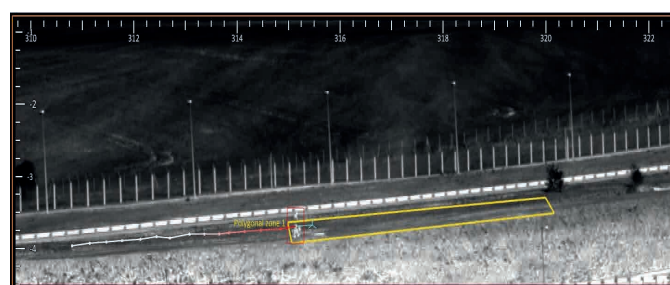


Advanced Alarm Management

Tracking of any ground/air/maritime threats, smart analysis to trigger alarms and customized security actions.



Automatic classification of maritime ships with GAIA™ Artificial Intelligence



Zones with smart alarm conditions for human intrusion detection and tracking



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

EUROPE

HGH SYSTEMES INFRAROUGES
10 rue Maryse Bastié
91430 Igny, France
Phone: +33 1 69 35 47 70

USA

ELECTRO OPTICAL INDUSTRIES
1240 E Campbell Rd Ste. 200,
Richardson, TX 75081
Tel : +1 805 964 6701

ASIA

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