HGH

→ Automatic detection of all targets

> # CYCLOPE

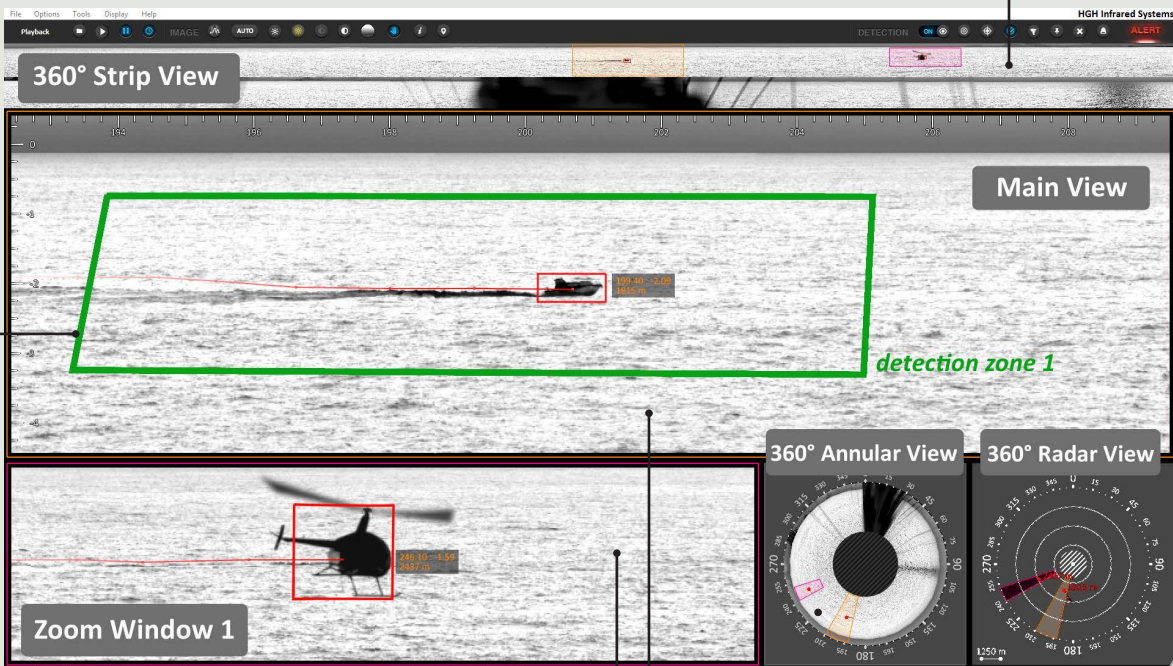## AUTOMATIC | INTRUSION DETECTION & TRACKING SOFTWARE

> UNLIMITED NUMBER OF INTRUSIONS DETECTED OVER 360°

CYCLOPE is an advanced image processing software analysing panoramic images captured by the SPYNEL Wide Area Surveillance sensors in real-time. CYCLOPE automatically detects and tracks an unlimited number of ground/air/maritime targets simultaneously, including hardly detectable threats, such as crawling men, RHIBs, low altitude air targets, UAVs and stealth aircrafts. CYCLOPE's latest version takes advantage of 15 years of experience in data processing applied to critical infrastructure protection and InfraRed Search & Track applications, with the development of unique detecting and tracking algorithms with ultra-low FAR (False Alarm Rate).

> POWERFUL, FLEXIBLE AND EASY TO USE

Embedded in an indoor or ruggedized processing unit, CYCLOPE provides unsurpassed real-time 360-degree surveillance with unparalleled ease-of-use. 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 features an automatic **detection & tracking mode** for fully autonomous surveillance. It delivers a comprehensive threat **identification and classification**. In addition, Cyclope includes an integrated sensor calibration assistant and hardware diagnostic utilities to aid in system installation and preventive maintenance.

Real-time panoramic display

File Options Tools Display Help

Playback   IMAGE   AUTO   HGH Infrared Systems

DETECTION ON   ALERT

360° Strip View

Main View

detection zone 1

360° Annular View   **360° Radar View**
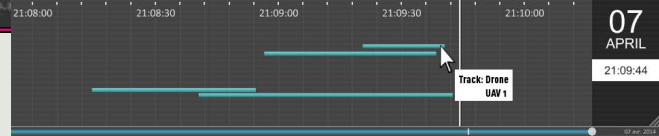
Zoom Window 1

User-defined detection zones according
to the missions and potential threats

Unlimited number of windows
to display multiple targets simultaneously

Radar view with 2-D map overlay
and geolocation of detected targets

www.hgh-infrared.com

CYCLOPE

AUTOMATIC | INTRUSION DETECTION & TRACKING SOFTWARE

→ Time shifting: replay of events spotted by classification bookmarks

→ Unlimited number of zoom windows for threat recognition

FEATURES ➤

Ease of Use
- Real time panoramic display with unlimited number of views (strips, zooms, annular)
- Compatible with multiple screens/consoles/joystick
- Ability to recognize several threats simultaneously
- Advanced image enhancement algorithms
- Recording & replay of panoramic videos, timeshift function
- Visual, sound or pre-recorded message alerts

Detection & Tracking
- 360° Search & Track refreshed within a second
- Unique algorithm and data processing for very low False Alarm Rate
- Full automatic mode with no operator adjustment required
- Automatic detection and tracking of all ground/air/maritime targets
- 3D detection capabilities in polygonal zones defined by the user

Analysis & Classification
- Unlimited number of zoom windows, for target identification
- Bookmarks for automatic classification of threats and post-analysis
- Easy timeshift function to replay a recent event
- Site map with GPS position of detected targets
- Advanced alarm management module to customize the intrusion confirmation
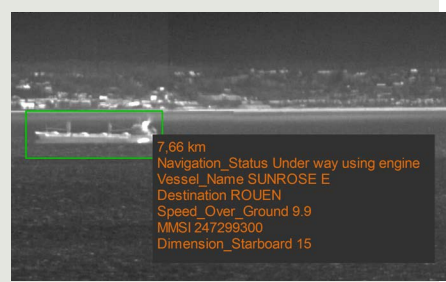
Communication
- Fully ONVIF compliant for easy integration into Video Management Systems
- Relay outputs or email notification in case of alarms
- Transmission of metadata and compressed videos to external hypervisor (VMS, CMS)
- PTZ camera video display in Cyclope GUI with automatic slew-to-cue function
- Infrared and other Sensors Data Fusion (acoustic gunshot detection, radars, AIS, ADS-B, seismic/magnetic sensors, fence vibration sensors...) and display into thermal video to tag and filter threats
- Interface with ECDIS (Electronic Charts Display Information System)
- Control of effectors for immediate reaction (search lights, long range acoustic devices, laser glaring systems...)

Cyclope Hypervisor
- Automatic connection to all Spynel sensors on a private network
- Geolocation of all threats and sensors on one or more situation maps
- Global monitoring of threats, alarms and videos
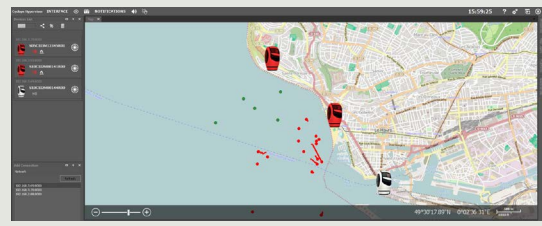
Special features
- 3D target position with passive triangulation or Digital Elevation Model
- Advanced image processing for fire detection, counter UAV application, naval onboard installations
- Automatic tracking in staring mode with management of:
  › Visible full HD camera with continuous optical zoom (V- option)
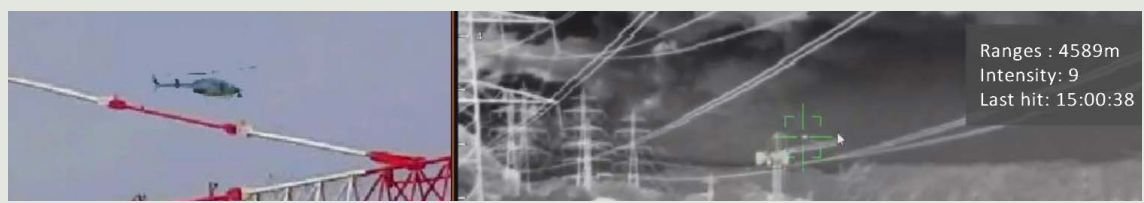 › Laser Range Finder (LRF option)

→ Fusion and display of AIS and radar data

→ Automatic slew-to-cue of identification camera

→ Multiple sensors/site monitoring on Cyclope Hypervisor

→ Automatic tracking in staring mode with V-LRF option on Cyclope

Ranges : 4589m
Intensity: 9
Last hit: 15:00:38

Above information is subject to changes without notice