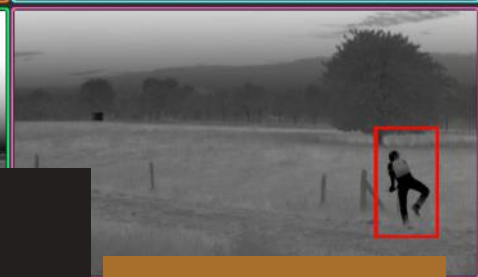


→ Automatic detection of all targets



# 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

Running on standard laptops or servers, 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. In addition, Cyclope includes an integrated sensor calibration assistant and hardware diagnostic utilities to aid in system installation and preventative maintenance.

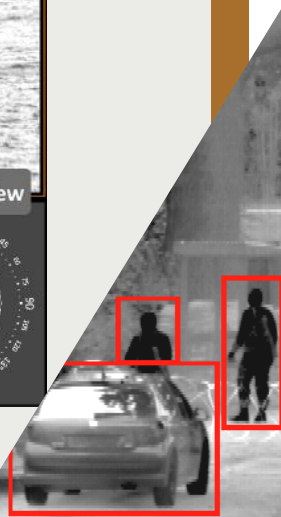
Real-time panoramic display

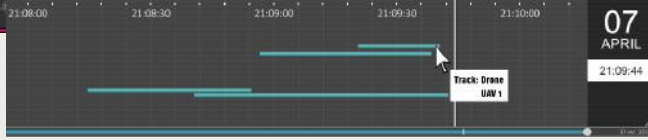


User-defined detection zones according to the missions and potential threats

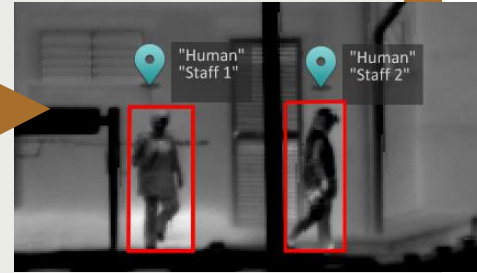
Unlimited number of windows to display multiple targets simultaneously

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





→ Time shifting: replay of events spotted by classification bookmarks



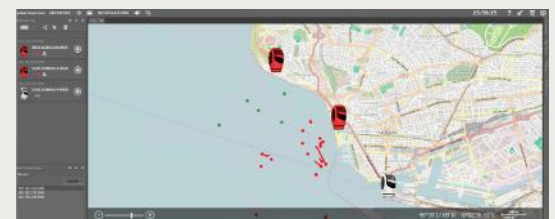
→ Unlimited number of zoom windows for threat recognition



→ Fusion and display of AIS and radar data



→ Automatic slew-to-cue of identification camera



→ Multiple sensors/site monitoring on Cyclope Hypervisor



→ Staring mode with V-LRF option on Cyclope

## FEATURES

### Ease of Use

- Real time panoramic display with unlimited number of views (strips, zooms, annular)
- Radar view with geolocation of detected targets
- Compatible with multiple screens and/or consoles (Touch screen compatible)
- Ability to recognize several threats simultaneously
- Brightness/contrast adjustment (manual/automatic)
- Recording & Replay of videos, Timeshift function
- Screenshot pictures & videos in jpg/avi format
- Access protection with user rights
- 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
- Detection zones defined by the user, according to the missions and potential threats
- Automatic visualization of new threats with no operator action

### Analysis

- Bookmarks for manual classification of threats and post-analysis
- Easy timeshift function to replay a recent event
- GPS position of detected targets
- Instantaneous display of intrusion position on site map
- Accurate elevation/azimuth position of air targets
- Unlimited number of zoom windows, for target identification

### Communication

- Alarm data & videos available for transmission to external hypervisor (VMS, CMS)
- Automatic slew-to-cue of identification camera
- Infrared and other Sensors Data Fusion (acoustic gunshot detection, radars, AIS, 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 and alarms

### Staring mode management (for Spynel-S/-X)

- Thermal sectorial video @50Hz
- Visible full HD camera with continuous optical zoom (V- option)
- Laser Range Finder (LRF option)

