



GROUND-BASED PASSIVE AIR DEFENSE

WITH 360 THERMAL IMAGING TECHNOLOGY

SPYNEL



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13 km* 6 km* 1 km* Class 1 micro UAS Helo Fighter

SPECIFICATION

SPYNEL X 3500

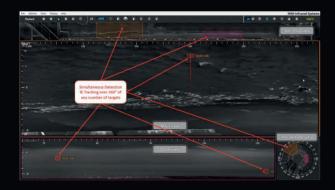
Vertical FOV	20°
Horizontal FOV	360°
Scanning speed	2 Hz
Infrared detector type	Megapixels MWIR FPA (1280 px vertically)
Spatial resolution of infrared channel	0.30mrad x 0.30mrad
Thermal Image Resolution	23 000 (H) x 1280 (V)
Dimensions (Dia x H)	385mm x 580mm
Weight	<40kg
Operating Temperature	-40°C to +71°C
Power Supply	24V DC/ 10 Amps

^{*}Based on model calculation & according to weather conditions

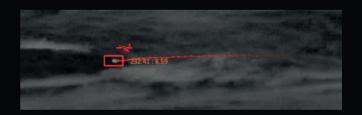
CYCLOPE SOFTWARE



CYCLOPE video analytics software includes complex algorithms that perform detection and tracking of an unlimited number of targets (aircraft, helicopter, UAV, etc...) while eliminating false alarms induced by random movements in the scene, such as clouds. Automatic Detection and Tracking combine heat contrast changes, trajectory analysis, and Artificial Intelligence algorithms. Spynel sensors provide very accurate 2D target location: bearing and elevation (1-pixel precision: 0.30 mrad for Spynel-X 3500). This 2D location can be used to cue another system, manually or automatically, in the direction of the target of interest.



Detection of aircraft and small drone



2D location of detected air target

CYCLOPE includes a powerful Alarm Editor allowing the User to implement multiple sets of rules and conditions to define automatic alarms but also to filter out potential false alarms and implement a first level of target recognition. Cyclope offers several functionalities such as time stamping, timeline window for video post-analysis, playback capability while active detection & recording and bookmarks for manual/automatic classification of threats.

CYCLOPE is running on a rugged processing unit (MIL/SPEC) suitable for field deployment.



Panoramic 360° multi target detection & tracking