




# SPYNEL-X

## Wide Area Surveillance Solution

120Mpix day/night panoramic video



Cooled MWIR thermal sensor



Human detection range up to 9km

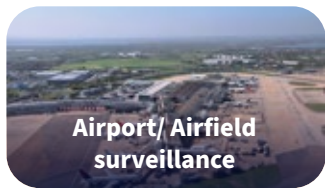
### 360° PANORAMIC DETECTION, ANYWHERE, ANYTIME

SPYNEL® are proven wide-area surveillance solutions, acquiring real-time panoramic thermal images with automatic detection, tracking and classification capabilities thanks to the integrated CYCLOPE software.

SPYNEL®-X integrates a MWIR Megapixel focal plane array and is the InfraRed Search&Track sensor (IRST) offering the highest resolution on the market.



### APPLICATIONS
























### BENEFITS

- Day & night panoramic imaging in total darkness in any weather conditions
- Human, vehicle, RHIB or UAV detection capabilities
- Automatic tracking and classification of any ground/sea/air threats
- Passive operation unlike radars (undetected, no EM disturbance)
- Proven, reliable and COTS technology
- Robust and rapidly deployable
- Motorized tilt for fine-tuned installations
- All events recorded over 360°

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## Wide Area Surveillance Solution

### TECHNICAL SPECIFICATIONS

	SPYNEL-X 3500	SPYNEL-X 6000	SPYNEL-X 8000																								
Horizontal FOV	360°	360°	360°																								
Vertical FOV	20°	10°	5°																								
Vertical motorized tilt	± 45°	± 45°	± 45°																								
IFOV	0.3 x 0.3 mrad x mrad	0.15 x 0.15 mrad x mrad	0.08 x 0.08 mrad x mrad																								
Scanning speed	2 rps (360°/0.5sec)	1 rps (360°/ sec)	0.5 rps (360°/2sec)																								
Detector type	MWIR megapixel FPA	MWIR megapixel FPA	MWIR megapixel FPA																								
Cooling	Stirling microcooler	Stirling microcooler	Stirling microcooler																								
Image resolution	23 000 (H) x 1280 (V)	46 000 (H) x 1280 (V)	92 000 (H) x 1280 (V)																								
Video output and control	IP	IP	IP																								
Dimensions (Dia x H)	385 mm x 580 mm	385 mm x 580 mm	385 mm x 580 mm																								
Weight	< 40 kg	< 40 kg	< 40 kg																								
Operating temperature	-40°C to +71°C	-40°C to +71°C	-40°C to +71°C																								
Protection standard	IP 66	IP 66	IP 66																								
Power supply	24V DC / 10 Amps	24V DC / 10 Amps	24V DC / 10 Amps																								
Detection/Recognition ranges for Human:  Vehicle:  RHIB: 	<table border="0"> <tr> <td> <b>Detection</b></td> <td> <b>Recognition</b></td> </tr> <tr> <td>Up to 2.5 km</td> <td>Up to 900 m</td> </tr> <tr> <td>Up to 5 km</td> <td>Up to 1.7 km</td> </tr> <tr> <td>Up to 5 km</td> <td>Up to 1.7 km</td> </tr> </table>	 <b>Detection</b>	 <b>Recognition</b>	Up to 2.5 km	Up to 900 m	Up to 5 km	Up to 1.7 km	Up to 5 km	Up to 1.7 km	<table border="0"> <tr> <td> <b>Detection</b></td> <td> <b>Recognition</b></td> </tr> <tr> <td>Up to 5 km</td> <td>Up to 1.8 km</td> </tr> <tr> <td>Up to 9 km</td> <td>Up to 3.3 km</td> </tr> <tr> <td>Up to 9 km</td> <td>Up to 3.3 km</td> </tr> </table>	 <b>Detection</b>	 <b>Recognition</b>	Up to 5 km	Up to 1.8 km	Up to 9 km	Up to 3.3 km	Up to 9 km	Up to 3.3 km	<table border="0"> <tr> <td> <b>Detection</b></td> <td> <b>Recognition</b></td> </tr> <tr> <td>Up to 9 km</td> <td>Up to 3.3 km</td> </tr> <tr> <td>Up to 12.5 km</td> <td>Up to 6 km</td> </tr> <tr> <td>Up to 12.5 km</td> <td>Up to 6 km</td> </tr> </table>	 <b>Detection</b>	 <b>Recognition</b>	Up to 9 km	Up to 3.3 km	Up to 12.5 km	Up to 6 km	Up to 12.5 km	Up to 6 km
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### CONTROL AND DISPLAY SOFTWARE



#### Advanced video processing

Artificial Intelligence, smart image enhancements, detection/classification algorithms, data fusion



#### Multi-layer display

Real-time panoramic or zoom display, geolocation of threats



#### High integration capabilities

ONVIF, H264, XML, MIME, TCP/IP, Client/Server



#### Advanced Alarm Management

Track analysis to trigger alarms and customized security actions

DRI ranges according to Johnson criterium and STANAG standards

Range values represent optimal performance, which will vary depending on target size, clutter environment, atmospheric conditions and sensor operational settings

Above information is subject to changes without notice



Enlighten the Unseen

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