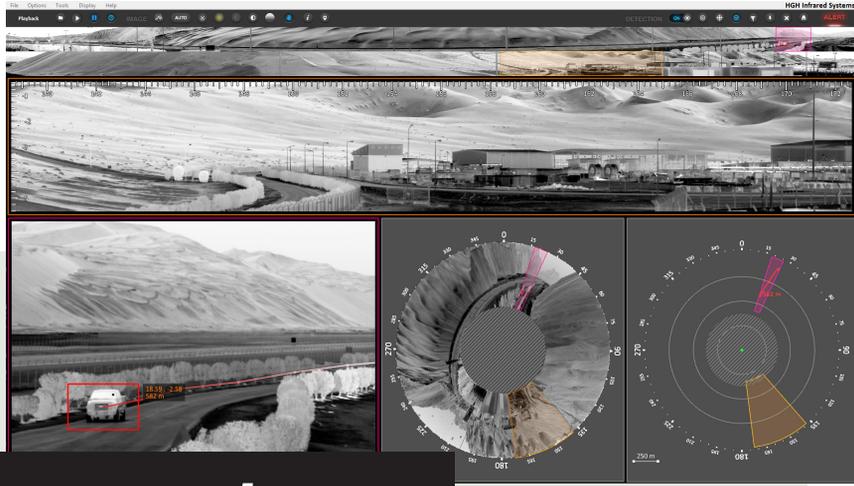




SPYNEL

→ SPYNEL Critical Infrastructure Surveillance



Spynel-M

INFRARED RADAR for WIDE AREA SURVEILLANCE



→ SPYNEL-M INFRARED RADAR

➤ LIGHTWEIGHT PANORAMIC THERMAL SURVEILLANCE SYSTEM

SPYNEL-M is the latest in the SPYNEL series and benefits from HGHI's 15-year expertise in automatic intrusion detection and tracking systems, for wide area surveillance applications. SPYNEL-M is a high-resolution panoramic thermal camera, acting as an infrared radar. Robust, lightweight, transportable, SPYNEL-M is easily carried in a backpack. It can be fixed on top of a building, or quickly and discreetly deployed on a light mast, to perform multi-event detection over extremely large areas in total darkness. Consuming only 8 watts of power, it can be operated with solar or alternate power supply systems to allow remote, disconnected operation. Requiring no maintenance, SPYNEL-M brings the highest technology at a fair cost for the surveillance of critical infrastructures.

➤ HIGH-END SITE PROTECTION DEPLOYED IN MINUTES

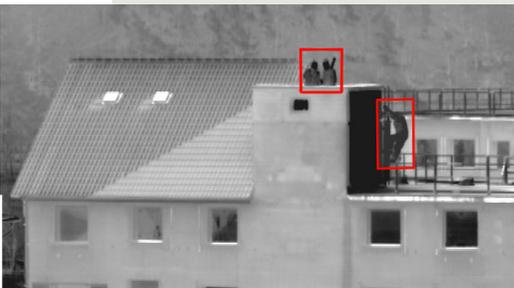
SPYNEL-M continuously captures full panoramic images every second, or can perform sector scanning at a higher rate, to bring real-time security against conventional and asymmetrical threats. A single SPYNEL-M sensor can perform 24/7 early human intrusion alerts over a 1.5km-diameter area and can be quickly deployed and configured. Any threat will be tracked at any time from any direction, including hardly detectable targets such as crawling men or RHIBs. SPYNEL-M can replace up to 16 traditional thermal cameras in one single sensor head. As a completely passive system, the SPYNEL-M is invisible to intruders, requires no additional illumination and cannot be tricked by camouflage nor jamming.

➤ APPLICATIONS

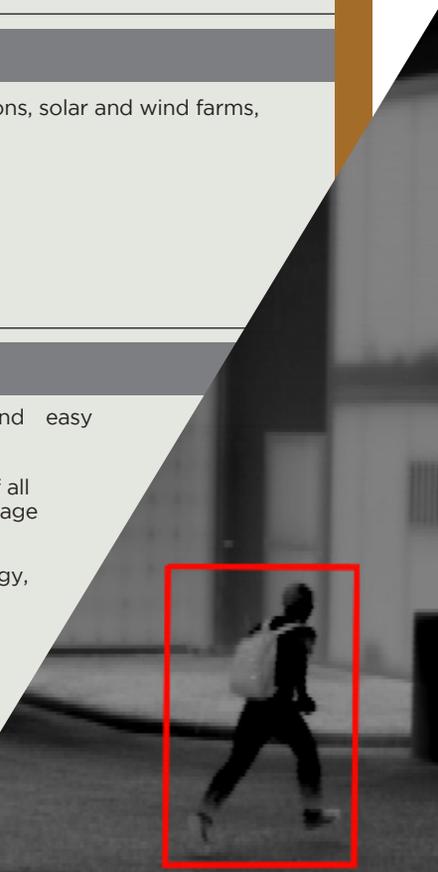
- Critical infrastructure protection: nuclear plants, data centers, dams, prisons, water treatment stations, solar and wind farms, oil depots, ammunition dumps...
- 24/7 perimeter security (electrical or gas substations, logistic warehouses, outdoor parking ...)
- 360° detection of asymmetrical threats
- Airport / Port surveillance
- Special Operation Forces
- VIP and event security
- Fire detection

➤ BENEFITS

- Cost effective, low power consumption and reliable
- Full 360° panoramic coverage with a single sensor
- Day and night scrutiny even in adverse weather conditions
- Fully passive system, totally undetectable unlike radar
- Fast deployment and easy installation
- Automatic tracking of all threats with superior image quality
- Uncooled IR technology, maintenance-free.



→ Infrared panoramic detection and tracking



Spynel-M

INFRARED RADAR

for WIDE AREA SURVEILLANCE



→ SPYNEL-M's Mobile Deployment Kit (battery, wireless link, rugged laptop)



Fixed installation at the top of a mast →



TECHNICAL

SENSOR

Spynel-M 600 W

Spynel-M 600 N

Horizontal Field of View	360°	360°
Vertical Field of View	35.5° (-24° to +11.5°)	18°
Vertical Adjustable Tilt	-18°/+18°	-18°/+18°
Scanning Rate	1 Hz (360° / 1sec)	0.5 Hz (360° / 2sec)
Sector Scan Rate	1.5 Hz on 180-degree sector 2.5 Hz on 90-degree sector ...	0.8 Hz on 180-degree sector 1.5 Hz on 90-degree sector ...
Detector Format (Horizontal)	>600 pixels	>600 pixels
Image Resolution	2.6 Mpixels	5.2 Mpixels
Video Output and Control	TCP/IP	TCP/IP
Optional Communication	Wireless	Wireless
Dimensions (Diam. x Height)	125 mm x 200 mm	125 mm x 200 mm
Optional visible camera	Panoramic 2x180°	Panoramic 2x180°
Weight	1.8 kg	1.8 kg
Power Supply	24 V / Power over Ethernet	24 V / Power over Ethernet
Power Consumption	8 W	8 W
Operating Temperature Range	-40°C / +60°C	-40°C / +60°C
Protection Standard	IP 66	IP 66
Detection Ranges :	<p> Up to 400 m</p> <p> Up to 900 m</p> <p> Up to 900 m</p>	<p>Up to 700 m</p> <p>Up to 1,500 m</p> <p>Up to 1,500 m</p>

CONTROL AND DISPLAY SOFTWARE

Detection ranges according to Johnson criterium and STANAG standards

Software functions: Get full advantage of Spynel sensor with Cyclope software appliance. Cyclope provides, at a glance, real time panoramic display (360° strip, annular, radar & zoom views), multiple screen capabilities, unlimited targets designation/tracking/classification, alarm triggering, immediate threat location (azimuth, elevation, distance), GPS, AIS and radar data integration, automatic control of PTZ systems for target identification, forensic capabilities (timeline, panoramic video recording and playback), spatial and temporal bookmarks, multiple threats displayed on situation map, fine image stabilization and more...

Above information is subject to changes without notice



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