



Multi-sensor optronic solution for observation, identification and optional automatic tracking of maritime vectors, land and aerial targets.

Integrated optronic block on an accurate Pan & Tilt, state-of-the-art HD visible camera, HD cooled band II thermal camera and optional eye-safe laser rangefinder.

MOS LR-HD allows long-range observation and surveillance, for land vehicle and offshore patrol vessels.

- Civil and military applications
- Solution designed and manufactured in France, no export restrictions linked to a third country
- Optional Laser Range Finder
- Optional Automatic video tracking
- Optional gyrostabilisation
- Adapted solution from qualified and field proven equipment

TECHNICAL SPECIFICATIONS – MOS LR-HD

HD Cooled thermal camera

Sensor	Cooled thermal camera, pitch 10µm
Spectral Band	MWIR
Resolution	1280 x 720 pixels
Continuous optical zoom	20x: F= 15 - 300 mm
Aperture F/#	F/4
Horizontal Field of View	46° to 2.44° (+/- 5%)
Focus control	Auto / Manual
Cooler MTBF	22 000 hours (24/7, ground fix, 50 ON/OFF cycles/year, temperature to hot region)

Colour Daylight Camera

Sensor	CMOS
Resolution	1920 x 1080 pixels
Minimum illumination (sensor)	5 mLux
Horizontal Field of View	Continuous optical zoom - 66° to 1.4° (+/- 5%)
Spectrum Selection	NIR (Defog), Visible

Laser Range Finder (option)

Eye safe	Class 1, IEC 60825-1 :2014, Ed. 3 norm
Maximum Range	15 000 m

Pan & Tilt Platform

Pan & Tilt range	N x 360° (Pan) / +90° / -45° (Tilt)
Speed	100°/s Pan & Tilt
Position accuracy	175 µrad Pan & Tilt
Resolution	12 µrad
Line of sight stabilization	Option

Advanced functions

Special features – IR camera	NUC, Polarity, 3D Noise Reduction, VDE, image stabilization
Special features – Daylight camera	WDR, image stabilization
Video Tracking (option)	Automatic target detection and tracking

User Interface

Web client	VIGISENS™ GUI independent from OS
Communication	WebSocket
Ergonomy	Touch screen compliant

Physical characteristics

Sealing	IP67
Operating Temperature	-20°C to +55°C (C2 & A1 climates according to MIL-STD-810G)
Storage Temperature	-32°C to +71°C
Environment	Compliant to standard MIL-STD-810
Dimensions	500 x 460 x 600 (h) mm
Total Weight	< 50 kg
Power Supply	24 Vdc nominal
Connectors	D38999 (Power supply) – Optical fiber (com + video)

Theoretical DRI (thermal camera)

NATO target (2.3m x 2.3m)	Detection (1 pl)	21.2 km
	Recognition (3 pl)	10.7 km
	Identification (6 pl)	5.8 km
Human Being target (1.8m x 0.5m)	Detection (1 pl)	12.7 km
	Recognition (3 pl)	4.9 km
	Identification (6 pl)	2.5 km

DRI according to STANAG 4347 / TRM4 Software / 50% Probability / $\Delta T = 2 K / \sigma = 0.18$ per km