

NEMOSYS-SR SOLUTION





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**NEMOSYS-SR based on
LWIR PRODUCT RANGE
Uncooled thermal cameras
with continuous zoom**

NEMOSYS-SR – GENERAL OVERVIEW

A modular range of optronic solutions embedded on a precise and dynamic two-axis Pan & Tilt, including analog or full HD colour camera, and uncooled (Band III, LWIR) thermal camera.

Specially hardened in harsh environments, NEMOSYS SR™ is resistant to water, shocks, extreme temperatures and intense electromagnetic radiation.

It allows short range surveillance, effective day and night, for protection and security of your sensitive sites:

- Short distance all-weather observation
- Monitoring of sensitive infrastructures (Oil and chemical industries, nuclear power plants)
- Monitoring of borders and coastal areas
- Ports and airports surveillance

NEMOSYS-SR – TECHNICAL SPECIFICATIONS

- **Full HD CAMEZOOM-FHD-Z30 camera**

Sensor	1/2.8" Exmor CMOS – 2.38 Mpixel
Active Pixels	1920 (H) x 1080 (V)
Standard	PAL 50 Hz
Sensitivity	< 0.1 lux @ f 1.6, 30 i/s
Signal/Noise Relation	50 dB
Dynamic Range	130 dB
Electronical Shutter	1/1 to 1/10000 s in 22 pas
Day/Night and WDR	Auto.
Shutter	Auto. (1/1 - 1/1000 sec)
Iris Control	Auto. / Manu.
Gain	Auto / Manu
White balance	Auto, ATW, Indoor, Outdoor, Outdoor Auto, One-push, Manu
HD Video Output	IP (H264, ONVIF Profile S transcription)

Continuous Optical Zoom

Iris Auto	30x - F= 4.3 to F=129 mm
Digital Zoom	F1.6 to F4.7
Horizontal Field of View	Up to x 12
Minimum focus distance	2.3° to 63.8° approx.
	100mm (wide angle) et 1500mm (tele)

NEMOSYS-SR – TECHNICAL SPECIFICATIONS

- **CAMIR-UC/Z4-105 uncooled thermal camera**

Sensor	Micro Silicon Bolometer
Pixels	640 x 512 pixels
Pitch	12 μm
Image frequency	25 Hz
Spectral Response Band	8-14 μm (LWIR Band)
NETD	≤ 40 mK (@ 25°C at F1.0)
Digital Zoom	Continuous, up to x4
Gain control	Automatic or manual
Continuous Optical Zoom	4x: F= 26 – 105 mm
Aperture	F1.6
Horizontal Field of View	25.3 to 5.9°
Minimum focus distance	15m to infinite
Focus	Autofocus

NEMOSYS-SR – TECHNICAL SPECIFICATIONS

- CAMIR-UC/Z4-105 uncooled thermal camera



<u>NEMOSYS-SR (12μm pitch, F=105mm)</u>			
NATO (2.3 x 2.3 m)	D	km	7,3
	R		3,1
	I		1,6
HUMAN BEING (1.8 x 0.5 m)	D	km	3,8
	R		1,3
	I		0,6

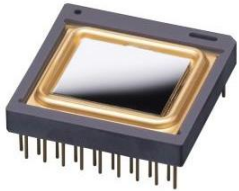
In agreement with STANAG 4347, 50% probability to achieve target, Delta T = 2, s = 0.2 km⁻¹

NEMOSYS-SR – TECHNICAL SPECIFICATIONS

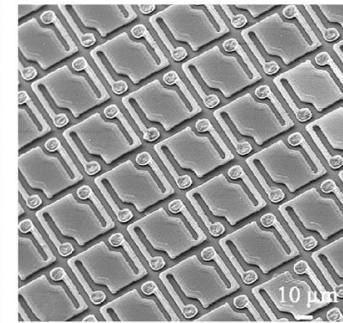
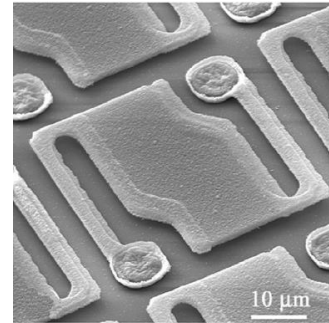
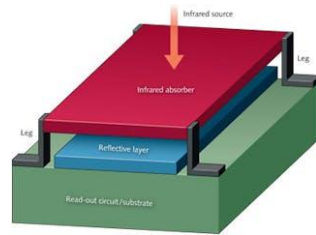
- **XVB204 Pan&Tilt turret**

Tilt range	-90 to +90°
Azimuth range	360° continuous
Azimuth rotation speed	0.6°/sec to 40°/sec
Site rotation speed	0.3°/sec to 15°/sec
Repositioning position (on PRESET)	Error \leq 0.1°

LWIR SENSOR - SPECIFICATIONS



- **Micro-bolometer** technology
- Resolution 640 x 512, 12 μ m pitch
- **Maintenance free**: very low **TCO** compared to MWIR sensor
- Shock proof
- NETD ~ 40 Mk
- Life time : 15 Years





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SYSTEM CHARACTERISTICS

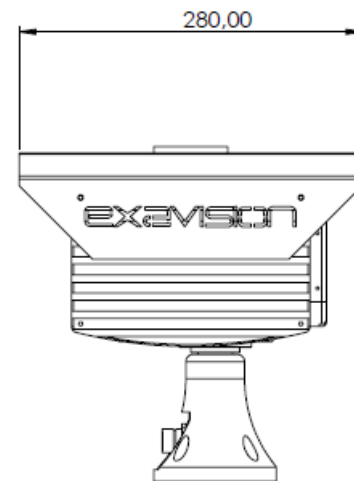
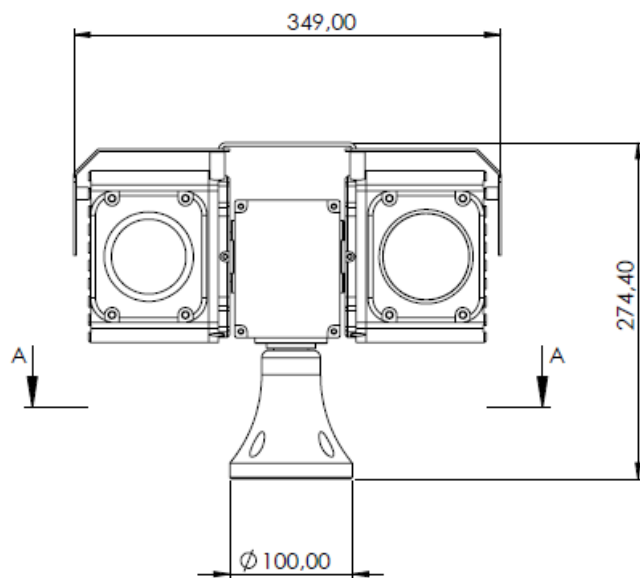
NEMOSYS-SR

Field proven solutions in harsh environments

Material / Surface coating / Painting	Aluminum, white painting
Sealing	IP67
Operating Temperature	-20°C to +55°C (except solar radiation)

Power supply	12 VDC
Power consumption	3 A maximum
Control	IP, ONVIF Profile S protocol

NEMOSYS-SR



Dimensions (L) 350 x (P) 280 x (H) 275 mm

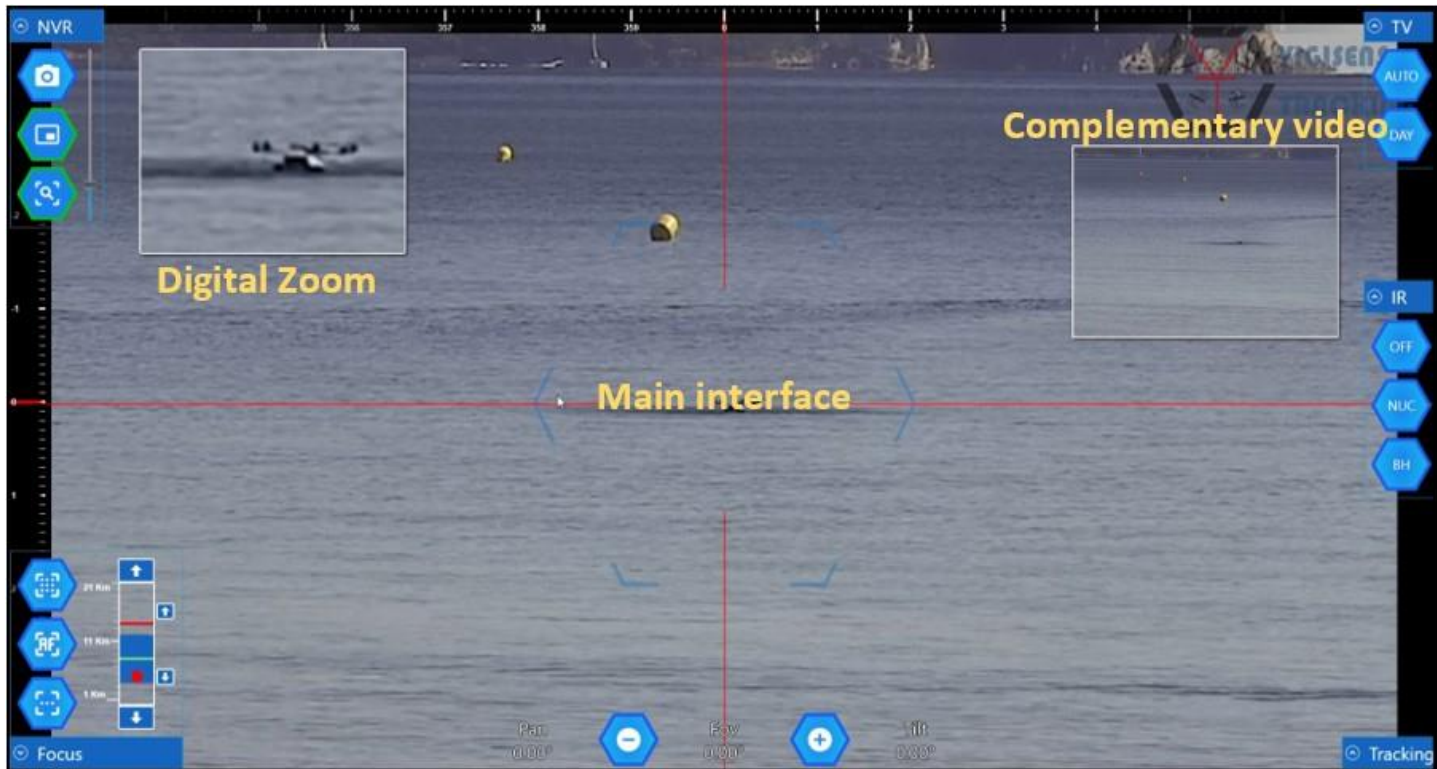
Weight 12 kg



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VIGISENS SOFTWARE

VIGISENS™





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