



SELEX GALILEO

A Finmeccanica Company



JANUS - STABILISED ELECTRO-OPTICAL EQUIPMENT

JANUS is a new Electro-Optical (EO) solution for medium and long range day/ night surveillance. JANUS characteristics and performance make it suitable to equip both fixed and mobile observation sites.

JANUS increases day-time and night-time capabilities to detect, recognise and follow targets located in the area of responsibility of the observation site.

JANUS incorporates a stabilised platform supporting an optical head unit with InfraRed (IR) and video cameras with provisions for an Eye-Safe Laser Range Finder (ES-LRF) for more demanding applications.

APPLICATIONS

At sea

Situation awareness for operations room, Search and Rescue, navigation aid, coast guard operations, counter terrorism.

On land

24-hour surveillance of sensitive areas, detection of moving vehicles and tanks, remote control of human activities and intruders, detection of air threats.

For surveillance tasks, JANUS is integrated in a system with an electronic control unit and a console with display, joystick and commands. The Operator can remotely control the head orientation with the joystick or may activate the automatic scan of a sector.

The platform can rotate 360 degrees in azimuth and 90 degrees in elevation, with a range suitable for detecting and engaging air targets. The speed and acceleration characteristics of the platform allow the equipment to follow fast air, ground and naval targets.

JANUS has a modular configuration with high growth potential in order to match the complex operational requirements of the Customer.



JANUS-N for naval applications



A typical ground application

TECHNICAL SPECIFICATIONS

Thermal Imager

Spectral Band	3-5 μm
Detector	3rd Gen. MWIR Staring FPA
Video Output	CCIR-625 lines / 50 HzFOV Wide 10°x7.5° Narrow 2.4°x1.8°

TV Camera type

Colour	
Resolution	768 x 494 pixels
CCD Sensitivity	Typical 3 Lux, colour - max 0.02 Lux, B/W
Output	PAL (NTSC optional)
Field Of View (FOV)	60° - 1.7° (Motorised Zoom)

Laser Range Finder (option)

Wavelength	1.54 μm (eye-safe)
Pulse Rate	12 ppm or 1 Hz (Ground application) 1 Hz/3Hz burst (Anti aircraft)
Cooling System	Air
Processing Range	200 m to 10000 m

Platform Unit

Speed	1.5 rad/s (R) / 1.0 rad/s (E)
Acceleration	2 rad/s ²
Range	360° continuous (R) (Traverse) 20° / +70° (E)
Stabilisation:	0.2 mrad RMS

Optical Head

Diameter (std):	300 mm
Weight (std):	< 30 kg