



SELEX GALILEO



JANUS - STABILISED ELECTRO-OPTICAL EQUIPMENT

JANUS is a new Electro optical 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 will increase the day-time and night-time capabilities to detect, recognize and follow targets located in the area of responsibility of the observation site.

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

APPLICATIONS

on the sea:

Situation awareness for operations room, search and rescue, navigation aid, coastguard operations, counter terrorism;

on the ground:

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

For the surveillance tasks, JANUS is integrated in a system with a Control Electronic Unit and a Console with display, Joystick and Commands. The operator can remotely control the head orientation by means of the joystick or may activate the automatic scan of a sector.

The Platform can rotate 360 degrees in azimuth and 90 degrees in elevation, range suitable to detect and engage air targets. The speed and acceleration characteristics of the platform allow the equipment to follow fast air, ground or naval targets.

JANUS has a modular configuration with high growth potential, in order to match operational requirements of Customer's installation.

JANUS - Stabilised electro-optical equipment



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)
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



JANUS-N for Naval applications



A typical Ground application