



## HIGH PERFORMANCE STABILISED MULTI-SENSOR FOR LAND APPLICATIONS

JANUS-T is a high performance, stabilised, day/night, all weather multi-sensor designed specifically for Land Vehicle application. It combines both medium and long range panoramic sights in a rugged, self-contained, compact package. It is an upgraded version of the field-proven JANUS multi-sensor selected by the Italian Army to equip the Freccia multirole Armoured Vehicle (VBM).

JANUS-T incorporates the company's high performance infrared staring focal plane array sensor technology (with colour CCD TV) for high resolution night vision. In order to deliver a hunter-killer capability, it also includes an eye-safe laser range finder.

### APPLICATIONS

- Land situation awareness
- Day and night surveillance
- Law enforcement
- Search and rescue
- Border and coastal surveillance.

### KEY BENEFITS

- Air, ground and sea target tracking
- Ease of operation
- Detects stationary and moving targets
- Capable of stand-alone or integrated operations.

## TECHNICAL SPECIFICATION

USER INTERFACE	
Interfaces	RS/422, Ethernet 10/100, S-Video, CCIR, XGA
Controls	Manual via joystick or by host system

SYSTEM PERFORMANCE	
Elevation	-20° to +70°
Azimuth coverage	360° continuous
Stabilisation	2 axes gyro stabilised
Stabilisation accuracy	< 0.2mrad RMS
Maximum acceleration	2rad/s <sup>2</sup>
Rotation speed	Elevation 1.0rad/s Traverse 1.5rad/s

THERMAL IMAGER (FULL FORMAT)	
Detector type	HgCdTe (MCT) Staring focal plane array
Size	640 x 512
Pitch	16µm
Operating temperature	-32° to +49°
Operating voltage	28V DC (MIL STD 1275 B)
Resolution	MCT
Sensitivity	10mK typical

FIELDS OF VIEW	
WFOV	≥ 10°(H) x 8°(V)
NFOV	≤ 2.4°(H) x 1.92°(V)
Digital zoom	2x, 4x
Digital Video Processing *	GLACETM
Video output	European standard CCIR (or American standard RS170, on demand)
Cooling system	IDCA (Integrated Detector Cooler Assembly)

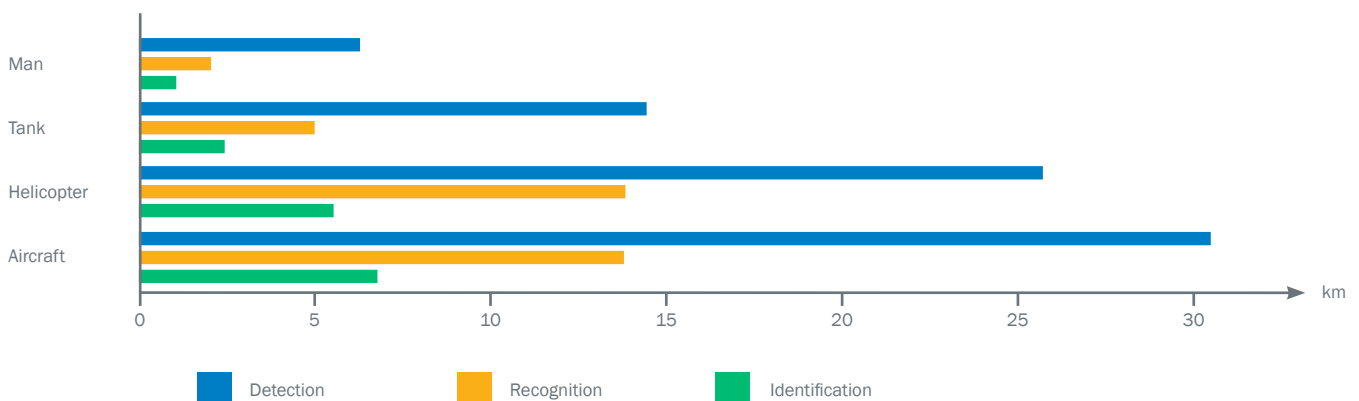
CCD TV	
Horizontal resolution	530 TV lines

ZOOM	
Optical	Continuous ≤ 1.7° to ≥ 42°
Digital	Up to 12X
Video Output	Standard PAL

LASER RANGEFINDER	
Eyesafe	1.54µm
Range	100m - 20,000m
Resolution	+/- 5m

CONTROL UNIT FUNCTIONS	
Picture in picture	
Automatic video tracker	
Digital zoom	
Image enhancement	
Image stabilisation refinement	
Built-in test equipment	Autocalibration and functional test at start up / on demand
Optional user console	
Tripod mountable	

## RANGE PERFORMANCE (KM)



(\* ) GLACE™ trademark, is a digital processing suite operating on the raw, uncompressed data of the detector, that locally analyzes the image to obtain the best level of contrast and brightness for each area, avoiding saturation and restoring the missing details that are usually lost during video compression.