

# Janus Dual Head

Janus Dual Head system is an advanced Electro/Optical Sensor designed to operate in complex naval scenarios, offering superior multispectral surveillance and tracking capabilities.

Janus DH is a Digital EOS System comprising two Compact, Rugged and Sealed Panoramic Sensor Units (PSU) that can be set in automatic synchronised rotation. This allows the system to provide a 360° panoramic view, minimising blind angle sectors due to the ship superstructures.

In the Video Tracking Mode, Janus DH can automatically track targets across the entire 360° sector surrounding the ship, coordinating each PSUs engaged in target tracking. For each tracked target, Janus DH can send to the CMS the relevant coordinates: azimuth, elevation, and distance.

The PSUs are dual-axis gyro-stabilised sights that house higher-resolution IR sensors, Laser Range Finder and HD TV technologies, for night- and day-time vision and target distance measurement.

## APPLICATIONS

- Naval Situational Awareness
- Day and Night Surveillance
- Search and Rescue.

## KEY BENEFITS

- Automatic 360° panoramic view, with the two synchronised PSUs
- 360° Automatic Target Tracking
- 3rd Generation MWIR Thermal Imager
- ITAR-free.



## TECHNICAL SPECIFICATIONS

<b>PSUs</b>	Elevation Range:	-20° + 70°
	Azimuth Range:	360°
	Stabilisation Accuracy AZ/EL:	< 0,1 mrad
	Rotation/Elevation Speed:	2.5 rad/s / 2.0 rad/s
	Maximum Acceleration:	4 rad/s <sup>2</sup>
<b>INFRARED CAMERA</b>	Detector:	CMT 640X512 px
	Bandwidth:	3-5 µm (MWIR)
	Optical zoom (10X):	2.4° to 24°
	Digital zoom:	Continuous
	Digital Video Processing:	GLACE (*)
<b>DAY HDTV</b>	Optical zoom:	Continuous 1.7° to 40°
	Digital zoom:	Continuous up to 12x
	Detector:	1920 X 1080 px
<b>LASER RANGE FINDER</b>	Eyesafe:	1.54 µm (Class 1/1M)
	Range:	up to 30.000m
	Pulse rate:	1, 4, 10, 20 Hz Continuous
	Precision:	0,01-0,5m
<b>USER INTERFACE</b>	Video:	HD-SDI, Gbit Ethernet
	Controls:	RS/232/422, ETHERNET
	Operating Voltage:	28VDC (MIL STD 1275 B)
<b>SYSTEM ADVANCED PROCESSING</b>	Picture-in-Picture (mixing Day TV and IR Camera Images)	
	Automatic Video Tracker	
	Image Enhancement (Edge, Glace, De-Hazing, De-Fog)	
	Advanced Built-in Test Equipment	
	Auto Calibration and functional testing at start-up	

\* Glace™ is a digital processing suite that operates on raw, uncompressed detector data. It locally analyses images to optimise contrast and brightness levels in each area while avoiding saturation, restoring the missing details that are usually lost during video compression.

For more information:  
[infomarketing@leonardo.com](mailto:infomarketing@leonardo.com)

Leonardo Electronics  
 Via Tiburtina, Km 12,400 - 00131 Rome - Italy  
 T +39 06 41501, F +39 06 4131133

This publication is issued to provide outline information only and is supplied without liability for errors or omissions. No part of it may be reproduced or used unless authorised in writing.

We reserve the right to modify or revise all or part of this document without notice.

2025 © Leonardo S.p.A.

EL00036 10-25



[leonardo.com](http://leonardo.com)

