

HENSOLDT ARGOS-15 HDT

Intelligent electro-optical system (ISTAR)

Onboard real-time AI image processing

- Object detection, classification, and tracking
- One-shot object classifier for similar object detection

Latest generation multispectral sensors

- HD thermal imaging camera with continuous optical zoom
- HD colour/low-light camera with continuous optical zoom
- HD SWIR/colour/low-light common-aperture spotter camera
- HD WFOV camera enhancing situational awareness
- Image fusion function for thermal, daylight and SWIR sensors
- All optical sensors simultaneously available

Class-leading 15" gimbal

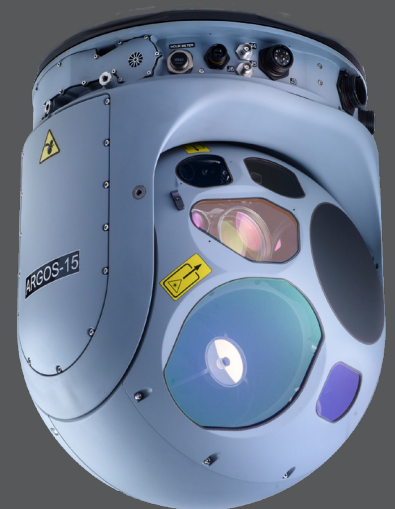
- New-generation 4-axis stabilization architecture
- High-accuracy IMU with auto alignment and GEO functions

Comprehensive laser suite

- High-power laser designator/rangefinder
- Various laser pointer and laser illuminator options
- Laser spot tracker

Enhanced image processing

- Multi-mode autotracker with moving target indicator (MTI)
- Digital zoom, image fusion, haze penetration, pseudo colours, PiP



ARGOS-15 HDT

Payload sensors			
HD thermal imaging camera (TIS)		HD visual low-light zoom camera (VLZ)	
Detector	HD cooled InSb 3 - 5 μ m, 1280 x 1024 px	Detector	4K colour/low-light 435 - 950 nm \leq 40mlux, 3840 x 2160 px
FOV	Continuous optical zoom 1.2° to 36° (1080p)	FOV	Continuous optical zoom 1.6° to 20° (1080p)
Dual FOV SWIR/visual spotter camera (DVS)			
HD visual channel		HD SWIR channel (option)	
Detector	4K Colour/low light, 435-950 nm \leq 40mlux, 3840 x 2160 px	Detector	950 - 1670 nm, 1280 x 1024 px
FOV	Dual 0.43° and 0.87° (1080p)	FOV	Dual 0.43° and 0.87° (1080p)
Laser designator rangefinder (LDR)			
Type	Laser designator 1064 nm (class 4)/eyesafe rangefinder 1570nm (Class 1M)		
Pulse rate	8 - 22 Hz (non-eyesafe), 8 - 12. 5 Hz (eyesafe)		
Functions	100 mJ designator/LRF range up to 30 km (non-eyesafe) and up to 20 km (eyesafe)		
Laser illuminator (option)		Laser pointer (option)	
Wavelength	NIR 808 nm class 4	Wavelength	Red 637 nm or NIR 808 nm Class 3B
Power/divergence	> 1 W, \leq 10 mrad	Power/divergence	\geq 100 mW/ \leq 1 mrad (Red) or \geq 60 mW/ \leq 1 mrad (NIR) Class 3B or >1 W/ \leq 1 mrad (NIR) Class 4
Laser spot tracker (LST) option			
Type	Quadrant detector, 1064 nm		
Code compatibility	User defined		
WFOV camera (option)			
Wide FOV situational awareness colour TV camera > 36° HFOV (1080p)			
System specifications			
Gimbal			
Mass and dimensions	<53 kg, 499 mm (h) x 410 mm (d)		
Stabilisation and steering			
Stabilisation	2 gimbal system with 4-axis active control, \leq 5 μ rad rms stabilisation (platform dependent)		
Damping	6-DOF built-in passive damping (platform adaptable)		
Operational coverage	Elevation +30° to -120°, Azimuth n x 360°, \geq 60°/sec slew rate, Stow +90°		
IMU and GEO functions			
High-accuracy IMU and GPS for GEO pointing, positioning, steering, ranging and location. Typical accuracy 2 - 4 mRad (50% CEP)			
Control and video interfaces			
RS-422, Ethernet, ARINC-429 (option) and MIL-STD-1553 (option)			
6 x Simultaneous HD-SDI digital video outputs. 2 x compressed H. 264/H. 265 Ethernet video outputs (optional)			
Power			
Nominal 22 to 32 V DC, 250 W to 520 W (avg), 1000 W (max)			
Standards/environmental			
RTCA-DO-160, MIL-STD-810, MIL-STD-202F, operational temp -40°C to +55°C, operational altitude \leq 50,000 ft, airspeed \leq 300 KTAS (ASL)			
External interface options			
Mission grip, moving map, searchlight, radar, remote control and datalinks. Embedded and serial metadata to SMPTE/KLV standards			
Enhanced image processing			
Image fusion, picture in picture, pseudo colour, various enhancement functions, layered colour symbology and switchable symbology levels			
Additional functionality and features			
<ul style="list-style-type: none"> AI supported image processing to aid operational efficiency Field of view slaving through zoom range for TIS and VLZ Cameras Selectable focus control (manual, auto and infinity) Ethernet maintenance interface for remote online diagnostics and software updates 		<ul style="list-style-type: none"> Multi-mode auto tracker with moving target indicator (MTI). Target speed and direction indicator while tracking Programmable search pattern scanning All cameras with up to 16x digital zoom Export friendly 	