ARGOS-II HDT

For Intelligence, Surveillance, Targetting and Reconnaissance (ISTAR)

Applications

- Search and Rescue
- Maritime Surveillance and Patrol
- Military Reconnaissance
- Attack Helicopter
- Armed Border Surveillance
- Force Protection

Platforms

- Fixed-Wing
- Rotary-Wing
- UAV (Tactical and MALE)
- Aerostat

Features and Benefits

- Multi-Sensor
- Multi-Spectral
- Single LRU configuration
- Continuous Zoom Optics for enhanced situational awareness
- MWIR Continuous Zoom Thermal Imaging Camera
- HDTV-Zoom and Spotter Cameras with Colour and NIR functions
- Internal IMU and GPS for accurate GEO functions
- All Sensor images simultaneously available
- Real-time, on-board image processing
- Multiple video and communication interfaces supporting various Ancillary equipment
- Automatic In-flight Boresighting (optional)
- High Duty Cycle Laser Designator
- ITAR Free

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ARGOS-II HDT

Proven Airborne Surveillance and Targeting Solutions

Payload Specifications

MWIR Continuous Zoom Thermal Imaging Camera	
Type	Cooled MWIR staring array
Resolution	1280 × 1024 pixels
Wavelength	3 - 5 µm
Field of View	1.2° - 19.5° (16× continuous optical) 0.15° - 19.5° (130× continuous digital)

HDTV-Zoom Camera with Colour, NIR & Low Light functions	
Type	2-Megapixel dual FPA's (Colour & NIR)
Resolution	1920 × 1080 pixels
Field of View	1° to 20° (1080p) 0.67° to 20° (720p)
Digital Zoom	2 × (0.5°), 4 × (0.25°) HFOV
Low Light	10 mlux

HDTV-Spotter Camera with Colour & NIR functions (Optional)	
Type	2-Megapixel dual FPA's (Colour & NIR)
Resolution	1920 × 1080 pixels
Field of View	0.42° (1080p) 0.28° (720p)
Digital Zoom	2 × (0.2°), 4 × (0.1°) HFOV

Laser Designator/Rangefinder	
Type	Diode pumped, Nd:YAG/OPO
Wavelength	1.064 µm (Class 4) 1.57 µm (Class 1M)
Pulse Rate	up to 22 Hz
Output Energy	50 mJ
Code Compatibility	NATO / User defined
LRF Range	20 km
Range Resolution	2 m

NIR Laser Illuminator (Optional)	
Type	Diode, Class 4
Wavelength	808 nm
Beam Power/Divergence	1 W / 10 mrad

Laser Pointer (Optional)	
Type	Diode, Class 3b
Wavelength	637 nm (Red) or 808 nm (NIR)
Beam Power/Divergence	100 mW (Red) or 60 mW (NIR) / 1 mrad

System Specifications

ARGOS-II HD Turret	
<53.5 kg (fully equipped)	
498 mm (H) × 449 mm (D)	

Stabilisation & Steering	
2-Axis Inner, 2-Axis Outer Active Control	
6-Axis Built-in Passive Damping	
Typical	5 - 10 µrad rms
Slew Rates	0 to 60°/s
Elevation Field Coverage	+20° to -120°
Elevation Range Coverage	+100° to -160°
Azimuth Field/Range	n × 360°

Control Interfaces
RS-422 Mission System Interface (STD)
MIL-STD-1553B (Option)
Ethernet (Option)
Universal or Mission Hand Controller (Option)

Video Interfaces
4 Simultaneous Digital and 2 Analog Video Outputs
According to SMPTE-274M/296M (1080/720 50p)
Compressed (Ethernet) Video output (H.264) (Option)

Ancillary Interfaces
5× RS-422/232/485, ARINC-429 (option), Ethernet Maintenance Port

Power
Nominal 22 to 32 V DC, 250 W to 520 W (Ave), 1000 W (Max)

Standards/Environmental	
RTCA-DO-160, MIL-STD-810, MIL-STD-461	
Operating Temperature	-40°C to +55°C
Operational Envelope	≤ 50 000 ft
Airspeed	320 KTAS (Sea level)

Functional Interfaces
Radar, Moving Map, Searchlight, Remote Control, Datalinks, Embedded and Serial Metadata to SMPTE/KLV standards, MTI, Augmented Reality & Moving Map Interfaces

Enhanced Image Processing
Blending, Picture in Picture, Pseudo Colour, Isotherms, various manual/auto image enhancement functions, Layered colour symbology and Switchable symbology levels

Handgrip Controller (Option)	
Weight	< 1.2 kg

Additional Functionality / Capability

On-board IMU and GPS for Geo-functions	Enhanced Multimode Autotracker (Scene, Correlation, Centroid)
Field of View and Focus Slaving through zoom range	Continuous Auto Focus
Search Pattern Scanning	Ethernet Maintenance Port - supporting remote diagnostics

HENSOLDT
Detect and Protect.

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