



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

ARGOS-II HDT

Proven Airborne Surveillance and Targeting Solutions

Payload Specifications		System Specifications	
MWIR Continuous Zoom Thermal Imaging Camera		ARGOS-II HD Turret	
Type	Cooled MWIR staring array	<53.5 kg (fully equipped)	
Resolution	1280 × 1024 pixels	498 mm (H) × 449 mm (D)	
Wavelength	3 - 5 µm	Stabilisation & Steering	
Field of View	1.2° - 19.5° (16× continuous optical) 0.15° - 19.5° (130× continuous digital)	2-Axis Inner, 2-Axis Outer Active Control	
HDTV-Zoom Camera with Colour, NIR & Low Light functions		6-Axis Built-in Passive Damping	
Type	2-Megapixel dual FPA's (Colour & NIR)	Typical	5 - 10 µrad rms
Resolution	1920 × 1080 pixels	Slew Rates	0 to 60°/s
Field of View	1° to 20° (1080p) 0.67° to 20° (720p)	Elevation Field Coverage	+20° to -120°
Digital Zoom	2 × (0.5°), 4 × (0.25°) HFOV	Elevation Range Coverage	+100° to -160°
Low Light	10 mlx	Azimuth Field/Range	n × 360°
HDTV-Spotter Camera with Colour & NIR functions (Optional)		Control Interfaces	
Type	2-Megapixel dual FPA's (Colour & NIR)	RS-422 Mission System Interface (STD)	
Resolution	1920 × 1080 pixels	MIL-STD-1553B (Option)	
Field of View	0.42° (1080p) 0.28° (720p)	Ethernet (Option)	
Digital Zoom	2 × (0.2°), 4 × (0.1°) HFOV	Universal or Mission Hand Controller (Option)	
Laser Designator/Rangefinder		Video Interfaces	
Type	Diode pumped, Nd:YAG/OPO	4 Simultaneous Digital and 2 Analog Video Outputs	
Wavelength	1.064 µm (Class 4) 1.57 µm (Class 1M)	According to SMPTE-274M/296M (1080/720 50p)	
Pulse Rate	up to 22 Hz	Compressed (Ethernet) Video output (H.264) (Option)	
Output Energy	50 mJ	Ancillary Interfaces	
Code Compatibility	NATO / User defined	5× RS-422/232/485, ARINC-429 (option), Ethernet Maintenance Port	
LRF Range	20 km	Power	
Range Resolution	2 m	Nominal 22 to 32 V DC, 250 W to 520 W (Ave), 1000 W (Max)	
NIR Laser Illuminator (Optional)		Standards/Environmental	
Type	Diode, Class 4	RTCA-DO-160, MIL-STD-810, MIL-STD-461	
Wavelength	808 nm	Operating Temperature	-40°C to +55°C
Beam Power/Divergence	1 W / 10 mrad	Operational Envelope	≤ 50 000 ft
Laser Pointer (Optional)		Airspeed	320 KTAS (Sea level)
Type	Diode, Class 3b	Functional Interfaces	
Wavelength	637 nm (Red) or 808 nm (NIR)	Radar, Moving Map, Searchlight, Remote Control, Datalinks, Embedded and Serial Metadata to SMPTE/KLV standards, MTI, Augmented Reality & Moving Map Interfaces	
Beam Power/Divergence	100 mW (Red) or 60 mW (NIR) / 1 mrad	Enhanced Image Processing	
Additional Functionality / Capability		Blending, Picture in Picture, Pseudo Colour, Isotherms, various manual/auto image enhancement functions, Layered colour symbology and Switchable symbology levels	
On-board IMU and GPS for Geo-functions	Enhanced Multimode Autotracker (Scene, Correlation, Centroid)	Handgrip Controller (Option)	
Field of View and Focus Slaving through zoom range	Continuous Auto Focus	Weight	
Search Pattern Scanning	Ethernet Maintenance Port - supporting remote diagnostics	< 1.2 kg	