

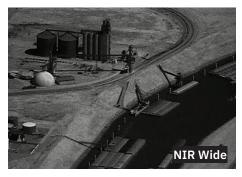
# **ARIES-25 SENSOR SYSTEM**

## The Next Generation of High-Resolution Performance

The Advanced Real-time Imaging and Exploitation System, or ARIES-25 sensor system, provides premiere surveillance capabilities. The system is designed to passively conduct long-standoff, real-time, full motion video and data collection. ARIES-25 provides precise pointing for C2ISR; customs and border patrol; land and maritime search-and-rescue; and special operation mission needs. The turret-based ARIES-25 system is adaptable to various platform configurations and its robust metadata-embedded imagery offers targeting and tracking precision. ARIES-25 is a Technology Readiness Level 9 system that offers image processing in real-time and provides high-resolution performance. ARIES-25 customers can see farther, know more and act first.















# ARIES-25 SENSOR SYSTEM FEATURES:

- > Six simultaneous cameras
- > Advanced image processing for auto-detect and tracking up to 10 targets at once with closed-loop tracking
- > Dual inertial navigation systems provide sub-pixel, frame-to-frame stabilization and precision pointing
- > Features static or dynamic host configuration protocol
- Network-enabled automatic configuration supports transmission control/internet protocol for command and control and video streaming, supporting multi-cast and UDP
- > Optional data recording systems enable the use of either raw or streamed video for post-mission analysis
- ARIES-25 offers packaging flexibility and configurability to meet host platform interfaces



# **ADVANCED FEATURES**

## SYSTEM SPECS

- > Intel® Quad Core Xeon® E3
- > Video outputs UHD Plus 1080p and Analog
- > NVIDIA Quadro P3000 6GB Graphics Card
- > Frame to frame jitter < 5µrad
- > LOS knowledge < 400µrad residual error
- > Co-aligned optics

# > Simultaneous FOVs in all bands

|                        |        | HIGH-RESOLUTION |            |            | SITUATIONAL AWARENESS |             |             |
|------------------------|--------|-----------------|------------|------------|-----------------------|-------------|-------------|
| SENSOR                 |        | 1               | 2          | 3          | 4                     | 5           | 6           |
| CAMERA                 |        | Color           | NIR        | MWIR       | Color                 | NIR         | MWIR        |
| BANDPASS (μM)          |        | .48 to .65      | .7 to 1.0  | 3.5 to 5.1 | .48 to .65            | .7 to 1.0   | 3.5 to 5.1  |
| PIXELS                 |        | 1080p           | 1080p      | 720p       | 720p                  | 720p        | 720p        |
| EFL<br>(MM)            | WIDE   | 1500            | 1500       | 1340       | 18                    | 18          | 50          |
|                        | MODE   | continuous      | continuous | 1340       | continuous            | continuous  | discrete    |
|                        | NARROW | 4500            | 4500       | 1340       | 150                   | 150         | 150         |
| FOV<br>(DEG)           | WIDE   | .19 x .33       | .19 x .33  | .66 x .82  | 10.4 x 18.5           | 10.4 x 18.5 | 10.4 x 18.5 |
|                        | NARROW | .06 x .11       | .06 x .11  | .66 x .82  | 1.2 x 2.2             | 1.2 x 2.2   | 4.9 x 6.1   |
| GSD (IN)<br>40 KFT ALT | WIDE   | 1.44            | 1.44       | 5.38       | 121                   | 121         | 120         |
|                        | NARROW | .48             | .48        | 5.38       | 14                    | 14          | 40          |

# QUALIFIED TO MIL-STD-810, MIL-STD-461

- > Operating temperature: -30°C to 50°C
- > Storage temperature: -40°C to 85°C
- > Shock: operating 6 g
- > Shock: non-operating 20 g
- > Electro Static Discharge per RTCA DO-160 Section 25

## MISP 6.4/6.5 COMPLIANT

> Produces meta data fields required for NITF 2.1 - SENSRB generation

### **COMMAND & CONTROL**

- > Individual camera control (zoom, integration time, and frame rate, etc.)
- > Persistent staring (LLH)
- > Relative LOS control (Slewing)
- > Persistent multi-target detection and tracking
- > Auto-tracking
- > Closed-loop track
- > Enhanced image processing
- > 12 video streams (2 Mbps 40 Mbps)

## L3Harris\_Aries\_SellSheet\_Rev A

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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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