



**L3HARRIS™**  
FAST. FORWARD.

# 2111X™ HIGH-ALTITUDE, LONG-STANDOFF, ELECTRO OPTICAL INFRARED (EO/IR) IMAGING SYSTEM

## PAYLOAD SPECIFICATIONS

### Sensor 1 : HD MWIR Infrared Imager

Lens Type	SAS-11™
Primary Aperture	11" (275 mm)
Sensor	HD MWIR camera
Wavelengths	3.5 µm-to-5.0 µm
Fields of View (h) <sup>1</sup>	WFOV 17.9 ° MFOV 5.0 ° NFOV 0.8 °

### Sensor 2A<sup>2</sup> : HD Visible Continuous Zoom Imager

Lens Type	SAS-11™
Primary Aperture	11" (275 mm)
Sensor	HD visible camera
Field of View (h) <sup>1</sup>	0.12 °-to-0.32 °

### Sensor 2B<sup>2</sup> : HD SWIR Continuous Zoom Imager

Lens Type	SAS-11™
Primary Aperture	11" (275 mm)
Sensor	HD SWIR camera
Wavelengths	1.0 µm-to-1.7 µm
Field of View (h) <sup>1</sup>	0.26 °-to-0.66 °

### Sensor 3: HD Visible WFOV Imager

Lens Type	12:1 continuous zoom
NFOV Aperture	2.75" (70 mm)
Sensor	HD visible camera
Field of View <sup>1</sup>	1.4 °-to-17.0 °

### Sensor 4: Eye-Safe Laser Range Finder

Range Finder Type	Erbium glass
Range Accuracy	< ± 5 m (1 sigma)
Max Range	20 km

### Sensor 5: Laser Illuminator

Wavelength and Power	860 nm, 800 mW
Divergence	0.7 mrad-by-1.3 mrad

<sup>1</sup>Less optional electronic zoom

<sup>2</sup>You may select either sensor 2A or 2B, but not both

## STANDARD INTERFACES WITH VIDEO PROCESSING UNIT (VPU)

Three simultaneous HD video channels via HD-SDI
Four simultaneous HD compressed video channels via H.264/H.265 via Ethernet
Video Metadata per MISB RP 1107
Command and Control per OMS/UCI, STANAG 4586, Sonoma Protocol and/or MX RCS



L3Harris' high-performance EO/IR stabilized imaging systems are optimized for high-altitude, long-range surveillance and reconnaissance on airborne platforms. The 2111X™ combines world-class X-MAST™ stabilization, long focal length and multi-spectral SAS-11™ lens. The 2111X ensures mission success through increased standoff, excellent image clarity and peerless geointelligence.

### APPLICATIONS:

- > High-value target detection and tracking
- > Covert observation - can be used in fully enclosed bays
- > Tactical situational awareness
- > Littoral and maritime surveillance
- > Surveillance and reconnaissance
- > Full-motion video
- > Counter-improvised explosive device/homemade explosive detection with optional optical change detection capability

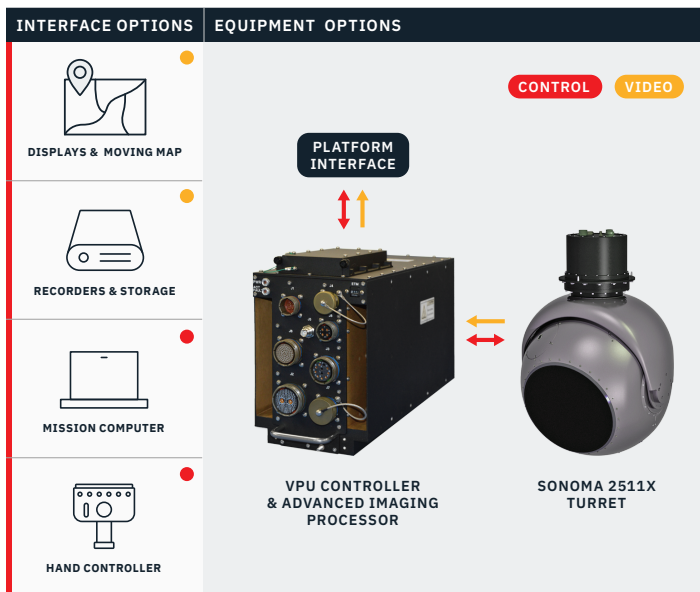
[L3Harris.com](http://L3Harris.com)

## FEATURES:

- > High-definition, multi-spectral imaging with advanced 11-inch multi-spectral telescope (Mid-Wave IR (MWIR)/Short-Wave IR (SWIR) or MWIR/visible)
- > Patented X-MAST™ precision stabilization provides five-axis stabilization to the entire optical bench
- > Integrated shock isolation reduces impact to sensors and systems
- > Inertial Measurement Unit (IMU) technology — IMU Inside™ — with integrated inertial navigation system and global positioning system receiver for precision geolocation and geopointing
- > Integrates with L3Harris' VPX-based next-generation video processing unit
- > Industry-compatible operator interface reduces learning curve
- > Road-following mode to support mosaic generation whether along a curving road or hot spot monitoring

## BENEFITS:

- > Long focal length, multi-spectral telescope features are built on X-MAST to deliver crisp images in all bands at superior standoff ranges
- > Less than two μradians jitter under a variety of conditions
- > Increased reliability as shock loads are reduced to the optical bench
- > World-class precision geopointing and geoestimating, enabling geofocus and advanced step and area scan patterns
- > Simultaneous coverage of visible, SWIR and MWIR channels ensure mission performance under a variety of atmospheric conditions
- > 360° turreted package provides hemispherical coverage, eliminates bow-tie blind spots
- > Shared-aperture sensors are mounted low in the turret minimizing penetration into the airstream for reduced drag and covert operations



SYSTEM SPECIFICATIONS	
<b>Turret</b>	<ul style="list-style-type: none"> <li>&gt; ≤ 210 lb (all sensors), &lt; 20.8" (D) x 29.98" (H)</li> <li>&gt; 28 VDC per MIL-STD-704F, 310 W (typical)</li> </ul>
<b>Video Processor Unit</b>	<ul style="list-style-type: none"> <li>&gt; 35 lb, 6.4" (W) x 9.0" H x 16.0" (D)</li> <li>&gt; 250 W (typical), 350 W (max)</li> </ul>
<b>Hand Controller</b>	<ul style="list-style-type: none"> <li>&gt; 2.2 lb, 4.25" (W) x 8.97" (L) x 3" (D)</li> <li>&gt; 3.5 W (typical), 5.0 W (max)</li> </ul>
<b>Cables</b>	> Consult factory for available variants
<b>Environmental</b>	> MIL-STD-461, MIL-STD-810, RTCA/DO-160
TURRET SPECIFICATIONS	
<b>INS/Geo Capabilities</b>	> Geopointing, geolocation, integrated IMU and GPS
<b>Stabilization</b>	> Typically < 2 μradians RMS
<b>Stabilization and Steering</b>	<ul style="list-style-type: none"> <li>&gt; (3) axis inner (pitch/yaw/roll)</li> <li>&gt; (2) axis outer (azimuth/elevation)</li> </ul>
<b>Vibration and Movement</b>	<ul style="list-style-type: none"> <li>&gt; Vibration isolation: (6) axis passive (x/y/z/pitch/roll/yaw)</li> <li>&gt; AZ/EL slew rate: 0-to-60 degrees/second</li> <li>&gt; LOS pan range: continuous 360 °</li> <li>&gt; LOS tilt range: -85 ° to +30 °</li> </ul>

## 2111X™ High Altitude, Long Standoff, Electro Optical Infrared (EO/IR) Imaging System

© 2021 L3Harris Technologies, Inc. | 06/2021

This document does not contain technical data as defined by the ITAR 22CFR§120.10 or the EAR 15CFR§772. Data, including specifications, contained within this document are summary in nature and subject to change at any time without notice at Sonoma EO, dba L3Harris Technologies' discretion. Call for latest revision. All brand and product names referenced are trademarks, registered trademarks, or trade names of their respective holders. Actual unit performance will depend on customer application.

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.



**L3HARRIS™**  
FAST. FORWARD.

1025 W. NASA Boulevard  
Melbourne, FL 32919  
t 707 568 3000 | f 707 568 3300  
Sales.Sonomaeo@L3Harris.com