

MODULAR IMAGING MAST SEARCH

Versatile, all-weather, day-and-night reconnaissance system for military operations

L3Harris' Modular Imaging Mast Search is a highly reliable, proven system delivering outstanding imaging capabilities for submarines.

DESCRIPTION

The Modular Imaging Mast Search features an electro-optical imaging system that captures, transports and processes a wide array of signals across the electromagnetic spectrum, including:

- Visible light (from low-light to direct-sunlight conditions)
- Shortwave infrared (SWIR)
- Omni electronic surveillance measures
- ESM and direction finding (DF)
- GPS/iridium
- Communications antennas (VHF)

The system incorporates an array of state-of-the-art sensors on a single mast. Designed for replacement or upgrade of its sensors, this system includes an ultra-high-definition continuous zoom color camera, a low-light-level high-definition visual camera, a continuous zoom high-definition SWIR camera, a continuous zoom mid-wave infrared (MWIR) camera, an eye-safe laser rangefinder, and an optional illuminator.

L3Harris has deployed its imaging masts world-wide on a variety of ship types, with proven performance and excellent reliability. L3Harris works with our customers to implement configurable sensor solutions to meet the needs of the fleet.



Display imaging console or software development kit can be provided for multi-function consoles.



Inboard electronics unit



FEATURES

- Multi-band optical performance
- A-focal optical sensor design
- Configurable for hull penetrating or non-hull penetrating
- Flexibility for integration with any combat system
- Adaptable for remote control architecture options
- Quick look mode enables rapid, configurable 360° panoramic view



STANDARD SYSTEM SPECIFICATIONS

Line of Sight

Resolution	3-axis gyro stabilized, roll axis supplied to display system
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Azimuth	n x 360°
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Elevation (V)	>70° range
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Elevation (IR)	>55° range
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HD Color Camera Module

Spectral Response	Visible/SWIR
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Field of View (H x V)	2° x 18° to 1.6° x 0.9°
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Optical Zoom	Yes
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Resolution	3840 x 2160 pixels
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MWIR Module

Spectral Response	3 μm to 5 μm
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Field of View (H x V)	12° x 9° to 2° x 1.5°
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Optical Zoom	Yes
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Resolution	640 x 480 pixels (LWIR optional)
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Low-Light Level Camera Module

Spectral Response	Visible
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Field of View (H x V)	20° x 15° to 1° x 0.8°
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Optical Zoom	Yes
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Resolution	640 x 480 pixels or HD
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Eye-Safe Laser Rangefinder (ELRF) Module

Range	>9 km
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BENEFITS

- Provides imaging under diverse environmental conditions
- Mast exposure in high threat environments is minimized while obtaining 360° view
- Sensor upgrades do not require redesign of the primary optical path
- Combat management system integration costs are minimized
- Mast raising equipment on existing periscopes can be interfaced with this equipment
- Low profile masthead supports stealthy operations

Modular Imaging Mast Search

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