

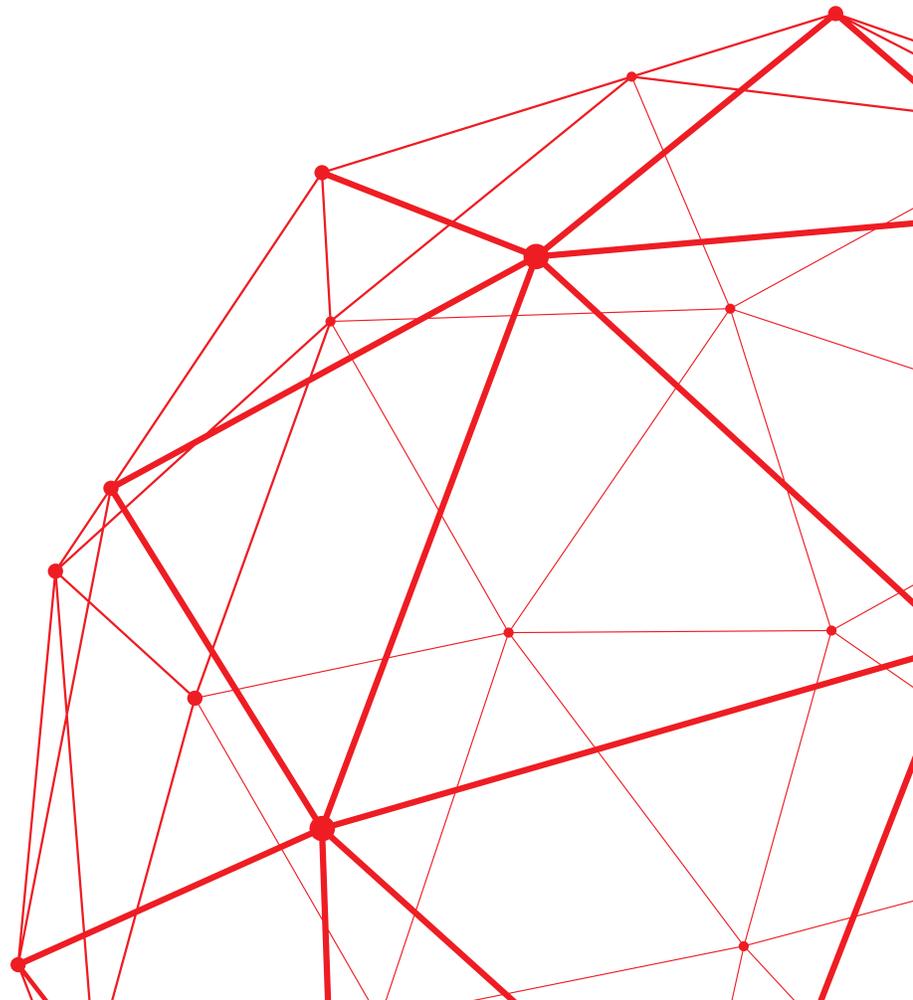


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L3HARRIS - WESCAM MX™-10MS IN MARITIME SPECIAL OPERATIONS

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L3Harris WESCAM MX™-10MS in Maritime Special Operations

INTRODUCTION

Rigid Hull Inflatable Boats (RHIBs) are the platform of choice for Special Operations Forces (SOF) seeking to undertake an extensive list of mission sets in riverine, littoral and blue water environments. RHIBs are used to support the rapid insertion and extraction of small unit teams during maritime counter-terrorism (MCT), anti/counter-piracy (AP/CP) and counter-narcotics (CN) operations around the World. To successfully accomplish these tasks in the most demanding of scenarios, RHIBs require increasingly capable and integrated mission suites including various elements of Command, Control, Communications, Intelligence, Surveillance, Target Acquisition and Reconnaissance and key sensor payloads.

L3Harris' WESCAM MX-10MS Electro Optical Infrared Sensor Solution

Optimized to support the operational requirements of maritime SOF units is L3Harris' WESCAM MX-10MS Electro-Optical (EO) and Forward Looking Infrared (IR) sensor, which can quickly be integrated and operated on board RHIBs in any operational environment. The MX-10MS is also ideal for use during clandestine special operations, including special reconnaissance and offensive action. Examples include covert surveillance ahead of beach landings or the identification of enemy positions ahead of a larger, conventional amphibious attack; as well as Combat Search and Rescue (CSAR) missions where sensor payloads on board RHIBs can be used to scan long distances for debris and survivors.

With the option to mount the payload on board a radar arch, T-top or dedicated mast, the MX-10MS provides small unit teams with a lightweight, small form factor solution that benefits from a 360-degree field-of-view. Providing stabilized and long-range full-motion video, the MX-10MS also has options for the automatic detection and identification of multiple threats thereby reducing the cognitive burdens of SOF operators on board the RHIB or remote intelligence analysts. The MX-10MS provides small unit teams with exceptional real-time SA, precision, clarity and certainty in an environment where advanced asymmetrical threat identification technologies have become a necessity.

The WESCAM MX-10MS is capable of accommodating a total of six imaging and laser sensor modules: thermal imager; continuous zoom daylight and/or low light cameras; daylight spotter; laser rangefinder; and finally, laser illuminator. Designed to identify heat signatures in zero-light as well as day-light conditions, Thermal Imagers can be programmed to autonomously highlight objects, making it easy to detect other ships and even people in the water CSAR missions.

Similarly, thermal imaging can support special reconnaissance and offensive action missions where it can be employed to identify enemy combatants and vessels, for example. Furthermore, low light cameras have been also designed to assist crews in identifying subjects of interest in sub-optimal lighting conditions- at dusk or when skies are overcast.

The MX-10MS' daylight continuous zoom camera also provides a magnification capability far beyond the range of the human eye, allowing crews to detect and recognize target vessels at extended distances. Laser rangefinders have been optimized to measure objects out to a maximum range of 20km, providing teams with the necessary information to conduct more accurate time estimations

and call for external support from assets in the area. Finally, laser illuminators (compatible with night vision goggles) can be used to designate targets for the benefit of external sensors and platforms.

L3Harris' MX-Series C2 software provides end users with moving map, searchlight and radar interfaces, dependent upon customer preferences, which allows the MX-10MS to be networked to end user displays, digital recorders, digital compass, radars, mission computers, the L3Harris kinetic electronics unit, GPS antenna, and controller options. L3Harris continues to upgrade the MX-10MS with the design of the HD thermal imager; high sensitivity color imagers; advanced video tracker capability and pseudo-color infrared capability.

Autonomous Capability Sets

L3Harris remains ideally positioned to support the critical operational requirements of SOF across the future operating environment. Next-generation concepts-of-operations (CONOPS) currently being considered by the international SOF community include the deployment of MX-10MS payloads on board unmanned surface vessels (USVs) which could be used to support MCT, AP/CP and CN missions. Exploring this emerging CONOP, L3Harris has already integrated MX-10MS payloads on board 13m Maritime Autonomy Surface Testbed (MAST 13) USVs for test and evaluation by naval forces.

WESCAM MX-10MS SAMPLE IMAGES



1 MX-10MS-EO-RHIB@1km



2 MX-10MS-EO-RHIB@300m



3 MX-10MS-IR-ship at night@16km



4 MX-10MS-IR-shipping vessel@4km



5 MX-10MS-IR-suspicious vessel at night @1km



6 MX-10MS-IR-suspicious vessels at night@3km