



WESCAM's MX-10MS. Fully Digital. High Definition. Small, Multi-Sensor, Multi-Spectral Imaging Systems in a single LRU configuration.

An ideal solution for:

- Shipboard surveillance
- Low visibility and night navigation
- Covert operations
- Maritime interception
- Coastal surveillance
- Search and rescue
- Identify friend or foe
- Threat detection
- Deck activity on vessels of interest
- Remote weapon station
- Man overboard

FEATURES & BENEFITS: MX-10MS

Multi Sensor Imaging/Lasing Payload Options

- Supports up to 5 sensors simultaneously
- HD color sensor with large ratio optical zoom delivers clear, sharp imagery
- High resolution thermal sensor for imaging at night and under poor weather conditions
- High sensitivity EMCCD sensor for imaging under low light conditions
- Laser rangefinder measures range to target and aids geo-location
- Near IR eyesafe narrow divergence laser illuminator for target marking

Uncompromised Design

- 4-axis turret design with built-in passive vibration isolation for class-leading stability across all imaging sensors and laser devices
- Precision optics provide wide angle context through to high magnification
- IMU mounted directly to optical bench for precise geo-location
- Robust automatic image focus

Ruggedness

- MIL spec environmental and EMC qualified, including humidity, salt fog and waterproofness
- Extensive testing for mud, salt, and water resistance
- Rigorous environmental stress screening (ESS) program
- Designed to maximize reliability and minimize maintenance requirements and simplify repair

Installation Convenience and Flexibility

- Compact, lightweight package
- Integrated electronics unit, GPS receiver, and video tracker simplifies installation and saves weight

Advanced Image Processing

- Real-time image enhancement on all sensors
- High performance contrast enhancement and haze penetration
- Improved feature recognition and ID
- Image blending merges EO and IR imagery into a single stream for spectrally rich imagery
- Automatic video tracker (AVT) reduces operator burden
- 2x and 4x Ezoom



MX-10MS installed on a Piranha



MX-10MS installed on the Austal Cape Class Patrol Boat
Image courtesy of Austal



PAYLOAD SPECIFICATIONS - Select up to 5 Imaging & Laser Sensors

Sensor #1 - Thermal Imager:

Type: 3-5µm staring array
Resolution: 640 x 512
Fields of View: 30.0°, 7.0°, 1.8°

Sensor #2 - Daylight Continuous Zoom TV:

Type: 5 Megapixel Color HD
Fields of View: 36.3° to 1.0°

Sensor #3 - Low Light Continuous Zoom TV:

Type: Electron-multiplied CCD (Mono)
Resolution: 640x 480
Fields of View: 40.8° to 2.38°

Sensor #4 - Laser Rangefinder (LRF):

Laser Type: Erbium glass (Class 1), Eyesafe
Wavelength: 1.54µm
Range: 20km max.

Sensor #5 - Laser Illuminator, Narrow: (NVG Compatible)

Laser Type: Diode - (Class 1), Eyesafe
Modes: Continuous, Pulsed
Wavelength: 852nm

Additional MX-10MS Features:

IMU: Mounted on optical bench
AutoTracker: Embedded (option)
GPS Receiver: Embedded (option)

Notes:

- 2x, 4x eZoom is available to increase magnification
- 720p FOVs. Consult factory for 1080p and analog FOVs
- All FOVs are horizontal

SYSTEM SPECIFICATIONS

MX-10MS Turret

<43.3 lbs / 19.6 Kg (all sensors)
10.24"(D) x 14.88"(H)
260mm (D) x 378mm (H)

Power

MIL-STD-704F, 28 VDC, 10 Amps max.

Hand Controller Unit (HCU)

4.8 lbs / 2.2 Kg
3.34"(W) x 9.17"(L) x 5.39"(D)
85mm (W) x 233mm (L) x 137mm (D)
Powered: 10 W max.

Cables

Consult factory for available variants

Environmental

MIL-STD-461E, MIL-STD-810F

TURRET SPECIFICATIONS:

Stabilization and Steering

(2) Axis Inner (pitch/yaw)
(2) Axis Outer (azimuth/elevation)

Vibration Isolation

(6) Axis Passive (x/y/z/pitch/roll/yaw)

Azimuth Coverage: Continuous 360°

Elevation Coverage: +90° to -120°

STANDARD INTERFACES:

Video Outputs: 3 Digital & 4 Analog (simultaneously)

Digital Video: SMPTE 292M, 720p or 1080p

Analog Video: NTSC or PAL

Communication: MX Mission Grip Hand Controller

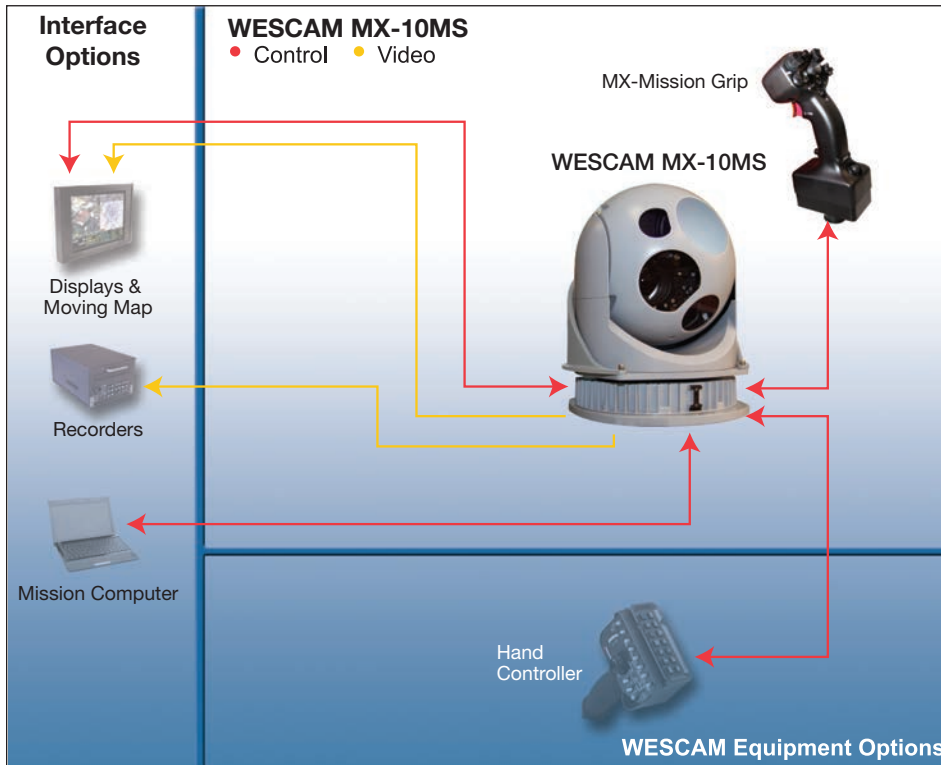
OPTIONS:

Interfaces Types:

RS-422
RS-232
MIL-STD-1553B
ARINC 429
Ethernet

Functional Interfaces:

Moving Map
Remote Control
Radar
Microwave/Data Link
Metadata



Equipment described herein may require Canadian and/or U.S. Government authorization for export purposes.
Diversion contrary to Canadian and/or U.S. law is prohibited.