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

Ideal 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 6 payload items simultaneously
• HD thermal, HD daylight and low-light cameras provide 24/7 imaging
• Continuous zoom IR and EO
• High-magnification spotter
• High-sensitivity color low-light imaging
• Eyesafe laser rangefinder
• Laser illuminator in choice of narrow or wide divergence

High Performance Gimbal
• 4-axis stabilized turret with internal passive isolator for excellent stabilization performance
• Sharp optics and excellent stabilization performance results in industry leading target detection, recognition and identification range performance in the 10” class
• IMU mounted to optical bench for high target location accuracy

Advanced Image Processing
• Real-time image enhancement on all sensors
  - High performance haze penetration
  - Improved feature recognition and ID
  - 2x, 4x Ezoom
  - Advanced video tracker with automatic target detection
  - Imaging blending

WESCAM Advanced Video Engine (WAVE)
• A high-performing embedded computing engine engineered to support advanced image-processing capabilities

• WAVE architecture includes a state-of-the-art graphics processing unit (GPU) – enabling future advancements in image processing & surveillance automation

Interface Flexibility
• Built-in video switch matrix provides multiple HD-SDI and analog video outputs
• 720p or 1080p HD video
• Flexible data ports; RS-232/422, Ethernet,
• All standard MX-Series command and control, moving map, searchlight, and radar interfaces

Ruggedness
• Ruggedized for shipboard use
• MIL spec environmental and EMC qualified, including humidity, salt, fog and waterproofness
• Built-in vibration isolator protects internal payload components
• Rigorous environmental stress screening (ESS)
• Designed to minimize maintenance requirements and simplify repair

Simplified Vessel Integration
• 43 lb turret
• Electronics unit inside the turret
• Built-in vibration isolation
• Built-in GPS receiver
• No calibration required for LRU swapout

Product updates include:
• HD Thermal Imager
• High Sensitivity Color Imagers
• Advanced Video Tracker (AVT)
• Pseudo Color IR
• WAVE Technology
PAYLOAD SPECIFICATIONS - SELECT UP TO 6 IMAGING & LASER SENSORS

Sensor #1a - Thermal Imager:
Type: 3-5µm staring array
Resolution: 640 x 512
Fields of View: 30.0° to 1.8°, Continuous Zoom
or
Sensor #1b - HD Thermal Imager:
Type: 3-5µm staring array
Resolution: 1280 x 720
Fields of View: 30.2° to 2.9°, Continuous Zoom

Sensor #2 - Daylight Continuous Zoom:
Type: CMOS
Resolution: 1920 x 1080
Fields of View: 31.2° to 1.2°

Sensor #3 - Low Light Continuous Zoom:
Type: Electron-multiplied CCD (Mono)
Resolution: 640 x 480
Fields of View: 40.8° to 2.38°

Sensor #4 - Daylight Spotter:
Type: CMOS
Resolution: 1920 x 1080
Fields of View: 0.61°

Sensor #5 - Laser Rangefinder (LRF):
Laser Type: Diode Pumped (Class 1), Eyesafe
Wavelength: 1.54µm
Range: 20km max.

Sensor #6a - Laser Illuminator, Narrow:
Type: Diode - (Class 3B)
Modes: Continuous, Pulsed
Wavelength: 852nm

Sensor #6b - Laser Illuminator, Wide:
Type: Diode - (Class 3B)
Modes: Continuous, Pulsed
Wavelength: 852nm

Additional MX-10MS Features:
IMU: Mounted on optical bench
AutoTracker: Embedded (option)
GPS Receiver: Embedded (option)
Moving Target Indicator: 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)
- 12.2”(D) x 15.3”(H)
- 310mm (D) x 388.5mm (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)

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: +110° to -90°

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: Functional Interfaces:
- RS-422
- Moving Map
- RS-232
- Remote Control
- MIL-STD-1553B
- Radar
- ARINC 429
- Microwave/Data Link
- Ethernet
- Metadata

WESCAM has a policy of continuous product improvement.
Specifications are therefore subject to change without notice.

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Product appearance subject to change.

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.