MX SERIES
ROCK SOLID
FLIGHT PROVEN

MX™-10

L3 WESCAM

WESCAM's MX-10. Fully Digital. High Definition.

A Small, Multi-Sensor, Multi-Spectral Imaging System in a single LRU configuration.

Ideal for: Low-Altitude; Tactical Surveillance & SAR missions requiring low-weight installation flexibility

Airborne Installations: Aerostat, Fixed-Wing, Rotary-Wing, UAV

FEATURES & BENEFITS: MX-10

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
- INS auto-align to aircraft

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
- Wide range of data ports; RS-232/422, Ethernet, MIL-STD-1553B, ARINC429
- All standard MX-Series command and control, moving map, searchlight, and radar interfaces

Ruggedness

- Rugged aerospace grade aluminum structure
- MIL spec environmental, EMC, and power quality qualification
- Built-in vibration isolator protects internal payload components
- Rigorous environmental stress screening (ESS)
- Designed to minimize maintenance requirements and simplify repair

Simplified Aircraft Integration

- 38 lb turret
- Electronics unit inside the turret
- Built-in vibration isolation
- Built-in GPS receiver
- <14" turret height for better ground clearance
- Compatible with standard quick disconnect mounts
- Side mounted connectors for recessed installations
- No calibration required for LRU swapout

See our products in action on YouTube
Search:

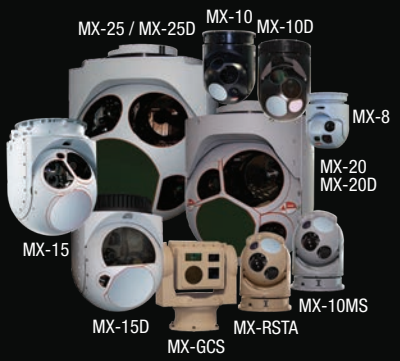
- MX-10 Product Video
- Homeland Security

Product updates include:

- **HD Thermal Imager**
- **High Sensitivity Color Imagers**
- **Advanced Video Tracker (AVT)**
- **Embedded Moving Target Indicator**
- **Pseudo Color IR**
- **WAVE Technology**

HDIR

Pseudo Color IR



WESCAM's EO/IR/Laser Systems

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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 x720
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[1], Narrow: (NVG Compatible)**
Laser Type: Diode - (Class 3B)
Modes: Continuous, Pulsed
Wavelength: 852nm

or

Sensor #6b - **Laser Illuminator[1] Wide:**
Laser Type: Diode - (Class 3B)
Modes: Continuous, Pulsed
Wavelength: 852nm

Additional MX-10 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

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.

SYSTEM SPECIFICATIONS

MX-10 Turret
<38 lbs / 16.8 Kg (all sensors)
10.24"(D) x 13.98"(H)
260mm (D) x 355mm (H)

Power
MIL-STD-704E, 28 VDC, 10 Amps max.,
4 Amp steady state

Hand Controller Unit (HCU)
2.2 lbs / 1.0 Kg
4.25"(W) x 8.97"(L) x 3.00"(D)
108mm (W) x 228mm (L) x 76mm (D)
Powered by turret, 5 W max.

Cables
Consult factory for available variants

Environmental
MIL-STD-461F, MIL-STD-810FG

TURRET SPECIFICATIONS:

Line-of-sight Stabilization
Typically < 15 µrad, fixed wing
< 20 µrad, rotary wing
Consult factory for performance under specific vibration conditions

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-Hand Controller

OPTIONS:

Interfaces Types:
RS-422
RS-232
MIL-STD-1553B
Ethernet

Functional Interfaces:
Moving Map
Remote Control
Searchlight
Radar
Microwave/Data Link
Aircraft INS/GPS
Metadata

Other:
Autotracker
Service Stand
Dovetail Adaptor
Quick Release Adaptor

Controller:
MX Mission Grip

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

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