

WESCAM's MX-8. Fully Digital. High Definition. A Compact, Multi-Sensor, Multi-Spectral Imaging System in a single LRU configuration.

Ideal for: Manned or unmanned airborne platforms requiring high-performing imaging solutions and low-weight installation solutions

Airborne Installations: Smaller Fixed-Wing, Light Rotary-Wing, Small Tactical UAV and Tactical Aerostats



WESCAM's Smallest MX System:

- 4-axis gimbal design
- 4-sensor payload suite
- Advanced processing capabilities



MX-8 Daylight Narrow FOV



MX-8 IR Narrow FOV



WESCAM's EO/IR/Laser Systems

FEATURES & BENEFITS: MX-8

Weight-Optimized System

- 15 lb / 6.8 kg turret
- Electronics unit inside the turret
- Built-in vibration isolation
- Built-in GPS receiver

Installation Flexibility

- 8" turret diameter for small platforms
- <11" turret height for better ground clearance
- Compatible with standard quick disconnect mounts
- Side mounted connectors for recessed installations

Interface Flexibility

- Simultaneous HD-SDI video and NTSC or PAL analog video outputs
- All standard MX-Series command and control, moving map, searchlight & radar interfaces
- Flexible electrical interfaces; Serial or Ethernet

Ruggedness

- MIL spec environmental and EMC qualification
- Built-in vibration isolator protects internal payload components
- Rugged aerospace grade cast aluminium structure
- Completely sealed against the environment
- Rigorous environmental stress screening (ESS) programs used
- Designed to minimize maintenance requirements and simplify repair

Uncompromised Design

- Fully active MX-Series stabilization with internal vibration isolation for best-in-class image stability
- Precision optics support target detection, recognition and identification

Multi Sensor Imaging/Lasing Payload Options

- Supports up to 4 sensors simultaneously
- Thermal, Color-Daylight and Low-Light imaging
- Continuous Zoom IR and EO
- Eyesafe Laser Rangefinder, Laser Illuminator
- Inertial Measurement Unit (IMU) standard

High Performance IMU & MX-GEO

Software Suite

- IMU mounted on the optical bench
- IMU & MX-GEO for accurate target location
- MX-GEO automatically aligns to aircraft
- Robust automatic image focus

Digital Sensors/Advanced Image Processing

- Real-time image enhancement on all sensors simultaneously
 - High performance haze penetration
 - Improved feature recognition & ID
 - Automated Video Tracker (AVT)
 - 2x, 4x Ezoom

PAYLOAD SPECIFICATIONS - SELECT UP TO 4 IMAGING & LASER SENSORS

Sensor #1 - Thermal Imager:

Type: 3-5µm staring array, cooled
Resolution: 640 x 480
Fields of View: 2.75° to 28.4°

Sensor #2 - Color Lowlight Continuous Zoom (HD):

Type: CMOS
Resolution: 1280 x 720
Fields of View: 1.53° to 43.6°

Sensor #3 - Laser Rangefinder:

Type: Class 1 (Eyesafe)
Diode-Pumped

Sensor #4 - Laser Illuminator¹:

Type: Class 3b
Wavelength: 852 nm
Power: 150 mW

Additional MX-8 Features:

AutoTracker: Embedded
Image Blending: Embedded
GPS Receiver: Embedded

Notes:

- 2x, 4x Ezoom is available
- 720p FOVs. Consult factory for analog FOVs
- All FOVs are horizontal

SYSTEM SPECIFICATIONS

MX-8 Turret

15 lbs / 6.8 Kg (all sensors)
8.3"(D) x 10.3"(H)
211mm (D) x 262.5mm (H)

Power

16 – 32 VDC, 65 W avg, 180 W max

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-810F

TURRET SPECIFICATIONS:

Line-of-sight Stabilization

Typically 35 µrad
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: +30° to -120°

STANDARD INTERFACES:

Video Outputs: 3 Digital & 3 Analog simultaneously

Digital Video: HD-SDI

Analog Video: NTSC or PAL

Control & Status:

RS-232/422, Ethernet

Functional Interfaces:

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

Controllers:

MX Mission Grip
MX Hand Controller



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