

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

Weight-Optimized System

- 37 lb turret
- · Electronics unit inside the turret
- Built-in vibration isolation
- · Built-in GPS receiver

Installation Flexibility

- <14" turret height for better ground clearance
- Compatible with standard quick disconnect mounts
- Side mounted connectors for recessed installations

Interface Flexibility

- Simultaneous SMPTE HD digital video and NTSC or PAL analog video outputs
- 720p or 1080p HD video
- All standard MX-Series command and control, moving map, searchlight & radar interfaces
- Wide range of electrical interfaces: MIL-STD-1553B, ARINC 429, RS-232/422, 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 provide wide angle context through to high magnification

Multi Sensor Imaging/Lasing Payload Options

- Currently supports up to 6 sensors simultaneously
- IR, Color HD and Electron-Multiplied CCD imaging sensors
- · Continuous Zoom IR and EO
- High Magnification Spotter
- Eyesafe laser rangefinder, narrow illuminator, wide illuminator
- · Inertial Measurement Unit (IMU) standard

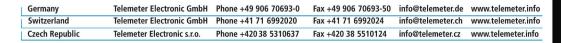
High Performance IMU & MX-GEO Software Suite

- 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

wescam.com







New for 2015:

- Continuous Zoom IR
- High Magnification Spotter
- Picture in Picture (PiP)





MX-10 Lowlight



MX-25 / MX-25D MX-10 MX-10D MX-20I MX-20I

WESCAM's EO/IR/Laser Systems



MX-10



PAYLOAD SPECIFICATIONS - SELECT UP TO 6 IMAGING & LASER SENSORS

Sensor #1 - Thermal Imager:

Type: 3-5µm staring array

Resolution: 640 x 512

Fields of View: 30.0° to 1.8°, Continuous Zoom

Sensor #2 - Daylight Continuous Zoom:
Type: 5 Megapixel Color HD

Fields of View: 36.3° to 1.0°

Sensor #3 - Low Light Continuous Zoom:

Type: Electron-multiplied CCD (Mono)

Resolution: 640x 480 **Fields of View:** 40.8° to 2.38°

Sensor #4 - Daylight Spotter:

Type: 5 Megapixel Color HD

Fields of View: 0.81° 1080p

0.54° 720p

Sensor #5 - Laser Rangefinder (LRF):

Laser Type: Erbium glass (Class 1), Eyesafe

Wavelength: 1.54μm Range: 20km max. Sensor #6a - Laser Illuminator¹, Narrow:

(NVG Compatible)

Laser Type: Diode - (Class 3B)
Modes: Continuous, Pulsed

Wavelength: 852nm

or

Sensor #6b - Laser Illuminator¹ 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)

Notes:

• 2x, 4x Ezoom is available to increase magnification

. 720p FOVs. Consult factory for 1080p and analog FOVs

All FOVs are horizontal

Displays Recorders WESCAM Kinetic Electronics Unit GPS Antenna Mission Computer Microwave Downlink Hand Controller

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.







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

64686J / July 2015

SYSTEM SPECIFICATIONS

MX-10 Turret

<37 lbs / 16.8 Kg (all sensors) 10.24"(D) x 13.98"(H) 260mm (D) x 355mm (H)

Power

704A & F, MIL-STD-704F, 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-461E, MIL-STD-810F

TURRET SPECIFICATIONS:

Line-of-sight Stabilization

Typically < 20 μ rad, fixed wing < 25 μ rad, 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: Functional Interfaces:

RS-422 Moving Map
RS-232 Remote Control

MIL-STD-1553B Searchlight

Ethernet Radar Microwa

Microwave/Data Link Aircraft INS/GPS Metadata

Other: Controller: Autotracker MX Mission Grip

Service Stand Dovetail Adaptor Quick Release Adaptor

Inquiries: 1 800 668 4355 sales.wescam@l-3com.com