



WESCAM's MX-25. Fully Digital. High Definition. Ultra Long-Range Multi-Sensor, Multi-Spectral Imaging and Targeting Systems.

Ideal for: High-altitude, Long-endurance Intelligence, Surveillance
and Reconnaissance, and Target Designation missions (MX-25D)

Airborne Installations: Aerostat, Fixed-Wing, UAV

FEATURES & BENEFITS: MX-25 and MX-25D

Multi-Sensor Imaging/Lasing Payload Options

- Supports up to 9 payload items simultaneously
- HD thermal, HD daylight and HD low-light cameras provide 24/7 imaging
- Continuous wide-angle zoom
- High-magnification step-zoom spotter
- High-sensitivity color low-light imaging
- Compact, efficient, reliable laser target designator with small divergence beam for maximum range
- SWIR camera images designator spot
- Eyesafe laser rangefinder
- Laser illuminator in choice of wide, narrow or ultra narrow divergence
- Laser spot tracker (designator version only)

High Performance Gimbal

- 5-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 large turret class
- IMU mounted to optical bench for high target location accuracy
- INS auto-align to aircraft
- Full laser stabilization minimizes spot jitter

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

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 functional interfaces

Ruggedness

- MIL spec environmental, EMC, and power quality qualification
- Built-in vibration isolator protects internal payload components and minimizes vibration-induced boresight shifts
- Rigorous environmental stress screening (ESS)
- Designed to minimize maintenance requirements and simplify repair

Simplified Aircraft Integration

- Built-in vibration isolation
- GPS receiver built into electronics unit
- No calibration required for LRU swapout

See our products in action on [YouTube](#)

Search:

- MX-25 Product Video
- MX Targeting Family

New for 2017:

- High sensitivity color cameras
- Advanced Video Tracker (AVT)

System Offerings: MX-25

Base offering with
1080p HD Resolution

MX-25D

1080p HD Resolution
and Designating capability



PAYLOAD SPECIFICATIONS

MX-25 Select up to 7 Sensors

Sensor Options for Thermal Imager

Sensor #1 - HD Thermal Imager:

Type: 3-5µm staring array
Resolution: 1280 x 1024
Fields-of-View: 21.7°, 4.4°, 0.88°, 0.58°
720p & 1080p

Sensor #2 - Daylight Continuous Zoom:

Type: 5 Megapixel Color HD
Fields-of-View: 36.3° to 1.1° - 1080p
27.6° to 1.6° - 720p

Sensor #3 - Low-Light Continuous Zoom: (Requires Sensor #2)

Type: Electron Multiplied CCD (Mono)
Fields-of-View: 40.8° to 2.38°

Sensor Options for Spotter

Sensor #4 - Daylight Spotter:

Type: 2 Megapixel Color HD or Mono HD
Fields-of-View: 1.07°, 0.54°, 0.34°, 0.2° - 1080p
0.72°, 0.36°, 0.23°, 0.13° - 720p

Sensor #5a - HD Low-Light Spotter: (Requires Sensor #4)

Fields-of-View: Matched to daylight

or

Sensor #5b - SWIR Spotter: (Requires Sensor #4)

Sensor #6 - Laser Rangefinder (LRF)¹:

Laser Type: Erbium glass (ANSI Class I), Eyesafe
Wavelength: 1540nm
Pulse Rate: 12 pulses/min.
Range: 30km
Range Resolution: ±5m

Sensor #7/8 - Laser Illuminator (LI)²:

Laser Type: Diode - (ANSI Class 4)
Wavelength: 860nm
Modes: Continuous, Pulsed
Beam Divergence: Wide, Narrow or Ultra Narrow

PAYLOAD SPECIFICATIONS

MX-25D Select up to 9 Sensors

Sensor Options for Thermal Imager

Sensor #1 - HD Thermal Imager:

Type: 3-5µm staring array
Resolution: 1280 x 1024
Fields-of-View: 21.7°, 4.4°, 0.88°, 0.58°
720p & 1080p

Sensor #2 - Daylight Continuous Zoom:

Type: 5 Megapixel Color HD
Fields-of-View: 36.3° to 1.1° - 1080p
27.6° to 1.6° - 720p

Sensor #3 - Low-Light Continuous Zoom: (Requires Sensor #2)

Type: Electron Multiplied CCD (Mono)
Fields-of-View: 40.8° to 2.38°

Sensor Options for Spotter

Sensor #4 - Daylight Spotter:

Type: 2 Megapixel Color HD or Mono HD
Fields-of-View: 1.07°, 0.54°, 0.34°, 0.2° - 1080p
0.72°, 0.36°, 0.23°, 0.13° - 720p

Sensor #5a - HD Low-Light Spotter: (Requires Sensor #4)

Fields-of-View: Matched to daylight

or

Sensor #5b - SWIR Spotter: (Requires Sensor #4)

Sensor #6 - Laser Illuminator (LI)²:

Laser Type: Diode - (ANSI Class 4)
Wavelength: 860nm
Modes: Continuous, Pulsed
Beam Divergence: Wide, Narrow or Ultra Narrow

Sensor #7/8 - Laser Designator/Rangefinder: (ANSI Class 4)³

Laser Type: Diode Pumped Nd:Yag
Wavelength: 1064nm/1570nm Selectable
Code Compatibility: US & NATO Laser Guided Munition
Rangefinding: Up to 20km
Rangefinding: ±2m

Sensor #9 - Laser Spot Tracker

Type: Quadrant Detector
Wavelength: 1064nm
Code Compatibility: US & NATO Laser Guided Munition

Notes:

- All FOV's are for Digital outputs. Consult factory for FOV's for Analog Outputs.

PAYLOAD SPECIFICATIONS

MX-25 & MX-25D

MX-25 Turret

MX-25: ≤ 260lbs (all sensors), 25.7"(D) x 30.2"(H)
MX-25D: ≤ 260lbs (all sensors), 25.7"(D) x 30.2"(H)

Power

MIL-STD-704E, 320W (Avg.); 1000W (Max.)

Digital Master Control Unit

<20 lb
7.5"(W) x 12.13"(H) x 16.7"(D)
50W (Avg.); 100W (Max.)
Autotracker

Hand Controller Unit (HCU)

2 lbs, 4.25"(W) x 8.97"(L) x 3"(D)
3.5W (Avg.); 5W (Max.)

Cables

Consult factory for available variants

Environmental

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

TURRET SPECIFICATIONS:

Line-of-sight Stabilization

Typically <3 pradians. Consult factory for performance under specific vibration conditions

Stabilization and Steering

- (3) Axis Inner (pitch/yaw/roll)
- (2) Axis Outer (azimuth/elevation)

Vibration Isolation

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

AZ/EL Slew Rate: 40 degrees / sec maximum

LOS Pan Range: Continuous 360°

LOS Tilt Range: +90° to -120°

STANDARD INTERFACES:

5 Simultaneous EO/IR Digital and Analog Video channels; 1080p configurable for 720p, 1080i, 525i & 625i digital options
MX-Hand Controller

OPTIONS AVAILABLE

MCU Interfaces: Operator Interfaces:

Moving Map Interface	Operator Control Unit & Joystick
Serial Remote Control	Moving Map system
Radar Interface	GEO-Pointing
MIL STD 1553B	
GPS Time Sync	
GPS Data	
INS Data	
Searchlight	
Microwave	
Metadata	

Microwave Equipment:

MX-POD, Digital Transmitter
Diversity Rx

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.



¹ Consult factory for specific environmental and target conditions



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

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