



## WESCAM's MX-15. Fully Digital. High Definition. A Multi-Sensor, Multi-Spectral Imaging System in a single LRU configuration.

Ideal for: Medium-Altitude; Covert ISR, SAR missions, Homeland Security

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

### FEATURES & BENEFITS: MX-15

#### True HD Cameras

- Superior imaging resolution from EO and IR cameras
- 2 mega-pixel EO zoom and spotter cameras
- True HD Digital Imaging
  - No image degradation due to compression

#### Image Blending

- Multi-spectral imaging blends matched images from multiple sensors - uncovering greater detail in each frame
- Reduces operator burden and improves surveillance efficiency

#### Enhanced Local Area Processing: (ELAP):

- Real-time image enhancement for EO Day, EO Night & IR enhances contrast
- Increases stand-off range
- Improves feature detection & recognition
- High performance haze penetration
- Provides up to 4x electronic zoom

#### Solid-State IMU-Inside Technology

- All sensors share highest level of stabilization
- No calibration required for LRU swapout
- Auto align to aircraft

#### Multi-Format

- Meets the needs of new & legacy platforms through multiple Digital & Analog output formats
- Simultaneous digital & analog outputs

#### Integrated Electronics

- Installed weight reduced by up to 50lbs/22kg
- Eliminates 1 LRU
- Reduced install and support costs

#### Lowlight and Short Wave IR Imaging

- 24/7 EO imaging
- Lowlight wide and EMCCD spotter options
- Long range subject ID (ship names, vehicles, faces) in low-light conditions
- Superior resolution to I<sup>2</sup> technology
- High resolution short wave IR option provides outstanding range performance

#### Multiple Laser Payloads

- Long Range Target Illumination, Laser Pointing and Range-Finding

#### MX-GEO Software Suite

- Achieves highest target location accuracy
- AVGT marries Video and GEO-Tracking to provide robust target tracking

#### MX-Series Commonality

- Common operator interfaces and hand controllers (HCL's)
  - ease & familiarity of use
  - simplified interchangeability
  - efficiencies in support & technology enhancements

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

- MX-15 Product Video
- MX-Series Product Video

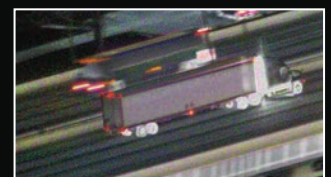


### Product Enhancements:

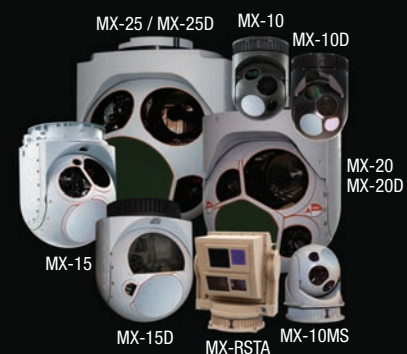
- Color low-light zoom
- Step-zoom spotter
- Short wave IR



MX-15 1080p EON



MX-15 EO+IR Image Blending



## PAYLOAD SPECIFICATIONS - SELECT UP TO 6 IMAGING & LASER SENSORS

### Sensor Options for Thermal Imager

#### Sensor #1a - Thermal Imager:

**Type:** InSb, cooled mid-wave staring array  
**Resolution:** 640 x 512 Pixels  
**Fields of View:** 26.7° to 0.54°

or

#### Sensor #1b - High Definition Thermal Imager:

**Type:** InSb, cooled mid-wave staring array  
**Resolution:** 1280 x 1024 Pixels  
**Fields of View:** 35.5° to 1.2°

#### Sensor #2 - Color Low-Light Continuous Zoom:

**Type:** 2 Megapixel color low-light HD  
**Fields of View:** 2.9° to 40.0° - 1080p  
1.9° to 27.3° - 720p

#### Sensor #3 - Daylight Step-Zoom Spotter:

**Camera Type:** 2 Megapixel Color HD  
**Fields of View:** 0.92° to 0.37° 1080p  
0.61° to 0.24° 720p

### Sensor Options for MX-Day/Night Spotter

#### Sensor #4a - Low-Light Spotter:

(Used with Sensor #3)

**Camera Type:** Electron multiplied CCD

or

#### Sensor #4b - SWIR Spotter:

(Used with Sensor #3)

**Camera Type:** InGaAs

#### Sensor #5 - Laser Rangefinder (LRF)<sup>1</sup>:

**Laser Type:** Eyesafe  
**Wavelength:** 1.54µm  
**Pulse Rate:** 12 pulses/min.  
**Range:** 20km  
**Range Resolution:** ±5m

#### Sensor #6 - Laser Illuminator (LI)<sup>2</sup>:

**Laser Type:** Diode - (ANSI Class 4)  
**Wavelength:** 860nm  
**Modes:** Continuous, Pulsed  
**Beam Power:** 350mW or 700mW  
**Beam Divergence:** Wide, Narrow, Ultra Narrow

#### Notes:

- All FOV's are for Digital outputs: Consult factory for FOV's for Analog Outputs.
- Up to 4x Ezoom available.

## SYSTEM SPECIFICATIONS

### MX-15 Turret

≤100 lbs (all sensors) 15.5"(D) x 18.95"(H)

### Power

MIL-STD-704E,  
MX-15HDI - 280W (Avg), 900W (Max)

### Hand Controller Unit (HCU)

2.2 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-461, MIL-STD-810, RTCA/DO-160

### TURRET SPECIFICATIONS

#### Line-of-sight Stabilization

Typically <5 µradians  
Consult factory for performance under specific vibration conditions.

#### Stabilization and Steering

(2) Axis Inner (pitch/yaw)  
(2) Axis Outer (azimuth/elevation)

#### Vibration Isolation

(6) degree-of-freedom passive isolation

**AZ/EL Slew Rate:** 0-60°/sec

**LOS Pan Range:** Continuous 360°

**LOS Tilt Range:** +90° to -120°

### STANDARD INTERFACES

5 independent analog and digital output video channels.  
Digital channel options are 1080p, 1080i, 720p, 525i, 625i  
Hand Controller Interface

### OPTIONS AVAILABLE

#### MCU Interfaces:

Moving Map Interface	GPS Data Interface
RS-422 Serial Remote Control	INS Data Interface
Radar Interface	Searchlight Interface
MIL STD 1553B Interface	Microwave Interface
GPS Time Sync Interface	Metadata

#### Performance Enhancement:

Operator Control Unit & Joystick	GEO-Pointing
Autotracker (AVT) Embedded	GPS Embedded
Moving Map system	

#### Controller:

MX Mission Grip

#### 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.



<sup>1</sup> 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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