



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

Multi-Sensor Imaging/Lasing Payload Options

- Supports up to 7 payload items simultaneously
- HD thermal, HD daylight, HD low-light and SWIR cameras provide 24/7 imaging
- Continuous zoom wide angle
- High-magnification step-zoom spotter
- High-sensitivity color low-light imaging
- Eyesafe laser rangefinder
- Laser illuminator in choice of wide, narrow or ultra narrow 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 15" 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
 - Embedded Moving Target Indication (EMTI)
 - Pseudo-color IR

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

- Electronics unit inside the turret
- Built-in vibration isolation
- Built-in GPS receiver
- <19" 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-15 Product Video

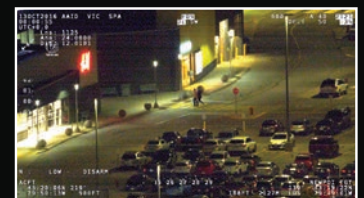


New for 2018:

- Dual-channel wide zoom
- Embedded Moving Target Indication
- Pseudo-color IR
- WAVE Technology



Pseudo-color IR



High Sensitivity E0



PAYLOAD SPECIFICATIONS

Sensor Options for Thermal Imager

Sensor #1a - Thermal Imager:

Type: MWIR, cooled
Resolution: 640 x 512 Pixels
Fields-of-View: 26.7° to 0.54°

or

Sensor #1b - HD Thermal Imager:

Type: MWIR, cooled
Resolution: 1280 x 1024 Pixels
Fields-of-View: 35.5° to 1.2°

Sensor #2 - Daylight Zoom:

Type: Color
Resolution: 1920 x 1080 Pixels
Fields-of-View: 31.2° to 1.2° - 720p
31.2° to 1.8° - 1080p

Sensor #3 - Low Light Zoom:

Fields-of-View: 40.8° to 2.4°

Sensor #4 - Daylight Spotter:

Type: Color
Resolution: 1920 x 1080 Pixels
Fields-of-View: 0.72° to 0.29° - 720p
1.1° to 0.43° - 1080p

Sensor Options for MX-Day/Night Spotter

Sensor #5a - Low Light Spotter:

(Used with Sensor #4)
Resolution: 1920 x 1080 Pixels
Fields-of-View: 0.72° to 0.29° - 720p
1.1° to 0.43° - 1080p

or

Sensor #5b - SWIR Spotter:

(Used with Sensor #4)

Sensor #6 - Laser Illuminator (LI)¹:

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

Sensor #7 - Laser Rangefinder (LRF)²:

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

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-704F
MX-15HDi - 280W (Avg)

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-461F, MIL-STD-810G, 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°

VIDEO INTERFACES

Built-in video switch matrix
6 independent HD-SDI output channels available
5 analog video (NTSC or PAL) output channels available

DATA INTERFACES

Interface types:

RS-232/422
Ethernet
MIL-STD-1553B
ARINC 429

Functional interfaces:

Aircraft GPS/INS
Remote control
Moving map
Microwave / Data Link
Searchlight
Radar
Metadata / status

HMI OPTIONS

MX Standard Handcontroller
MX Mission grip
Moving map, mission console

Compatible with WESCAM microwave communications equipment.



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.