



## WESCAM's MX-RSTA

### A Multi-Sensor, Multi-Spectral Imaging System

**Ideal for:** Reconnaissance, Surveillance, Target Acquisition, Ground Combat and Force Protection missions

**Ground Installations:** Amphibious, Armoured Combat and Reconnaissance Vehicles, including mast-mounted

*The MX-RSTA is a highly modular system that can be configured based on your mission, desired capability, and budget. Available solutions for Commander Independent Viewers, above-armor Gunner Sighting Systems, fixed/mobile Border Surveillance, and Mobile Reconnaissance applications.*



## FEATURES & BENEFITS: MX-RSTA

### Fully Integrated System for Installation Simplicity

- Integrated electronics
- Built-in vibration and shock isolation – no external shock isolator
- Optional built-in GPS

### Ruggedness

- Qualified to US military standards for environmental and electromagnetic compliance
- Ruggedized for both ground and shipboard use
- Survives 4 ft drop
- Reliability assured by accelerated life testing
- Supplementary mud and salt testing

### Uncompromised Performance

- Fully active 4-axis steering and stabilization
- 6 degree-of-freedom internal passive isolator
- Precision large aperture, long focal length optics
- High definition (HD) color sensors
- High accuracy gimbal position feedback for target handoff applications

### Multi-Sensor Imaging/Laser Payload Options

- Mid-wave large-format cooled thermal sensor
- Combined color and low-light EO sensor
- Dual-channel EO option, with separate color CMOS and low-light EMCCD cameras
- Laser rangefinder
- Two laser pointers – eyesafe and long-range

### Digital Sensors / Advanced Image Processing

- Real-time image enhancement of all sensors / high performance haze penetration
- Improved feature recognition and ID
- Imaging blending between IR and EO sensors
- Video tracker
- Turbulence mitigation and super resolution (future growth)



Daylight, Wide FOV



Daylight, Very Narrow FOV



IR, Narrow FOV



## PAYLOAD SPECIFICATIONS - Select up to 7 Imaging & Laser Sensors

### Sensor #1 - Thermal Imager:

**Type:** 3-5µm staring array  
**Resolution:** 640 x 512 pixel  
**Fields of View:** 1.83° to 35.5° continuous zoom

### Sensor #2a - Daylight Color / Low-Light Imager:

**Type:** CMOS  
**Resolution:** 1 megapixel  
**Fields of View:** 1.79° to 31.2° continuous zoom

or

### Sensor #2b - Daylight Color Imager:

**Type:** CMOS  
**Resolution:** 5 megapixel  
**Fields of View:** 1.05° to 36.3° continuous zoom

### Sensor #3 - Low-Light Imager:

(bundled with 2b)  
**Type:** EMCCD  
**Resolution:** 640x 480 pixel  
**Fields of View:** 2.38° to 40.8° continuous zoom

### Sensor #4 - Color Spotter:

**Type:** CMOS  
**Resolution:** 5 megapixel  
**Fields of View:** 0.61° (1080p), 0.40° (720p)

### Sensor #5 - Laser Rangefinder (LRF):

**Laser Type:** Erbium glass (Class 1), Eyesafe  
**Wavelength:** 1.54µm  
**Range:** 20km (range gate)

### Sensor #6 - Laser Pointer, Eyesafe:

**Laser Type:** Diode - (Class 1), Eyesafe  
**Modes:** Continuous, Pulsed  
**Range:** 400m\*  
**Wavelength:** 852nm

### Sensor #7 - Laser Pointer, Long Range:

**Laser Type:** Diode - (Class IIIb)  
**Modes:** Continuous, Pulsed  
**Range:** 1000m\*  
**Wavelength:** 852nm

\* Viewed with NVG in accordance with curves in MIL-STD-3009

## SYSTEM SPECIFICATIONS

### MX-RSTA

70 lbs (max) / 31.8 kg (all sensors)  
530 mm (21") D x 560 mm (22") H clearance envelope

### Power

MIL-STD-1275D, 28VDC, 140 W steady-state

### Environmental / EMC

MIL-STD-810G, MIL-STD-461E

### Stabilization and Steering

4-axis, 2 inner (pitch/yaw) and 2 outer (azimuth/elevation)  
6 degree-of-freedom passive isolator

**Azimuth Travel:** Continuous 360°

**Elevation Travel:** -75° to +84°

### STANDARD INTERFACES:

**Video Outputs:** 2 digital (SMPT292M) and  
2 analog (NTSC or PAL)

**Communication:** MX-Mission Grip or Hand Controller

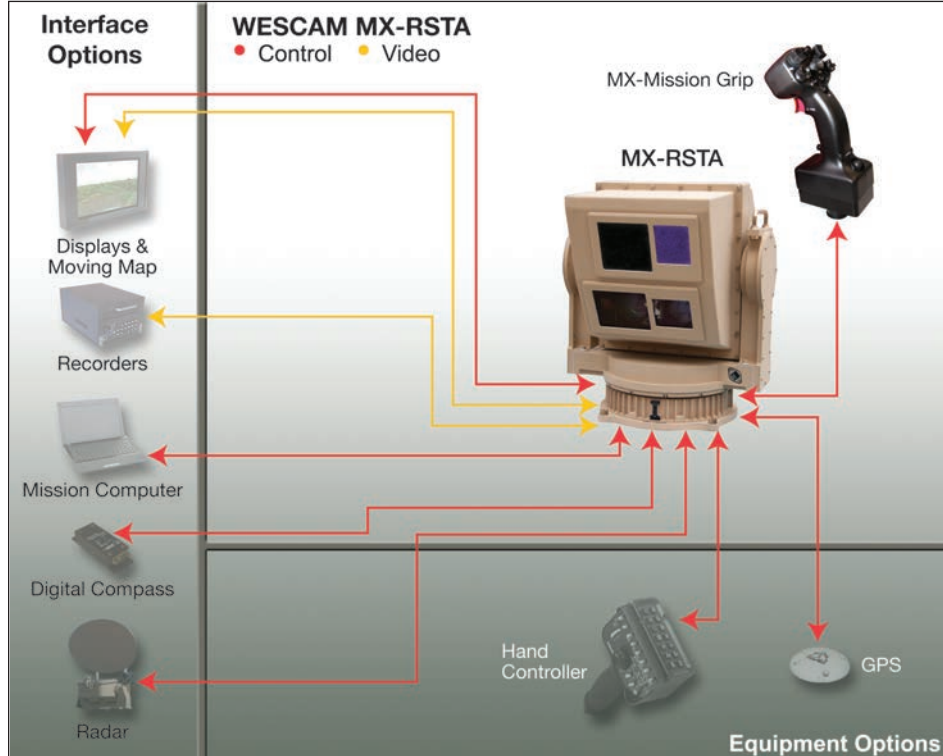
### OPTIONS:

#### Interfaces Types:

Ethernet  
RS-232/422

#### Functional Interfaces:

Moving Map  
Remote Control  
Radar  
Microwave/Data Link  
Metadata



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.