

WESCAM's MX-GCS Independent Stabilized Sighting System

WESCAM's MX-GCS is a highly versatile above-armor Gunner or Commander Sight that provides on-the-move target identification, tracking, and firing capabilities while significantly improving the lethality and survivability of new or upgraded land combat vehicles. The capability of the MX-GCS can be scaled through a modular payload approach, to suit almost any platform requirement and program budget.

Land Platform Installations: Infantry Fighting Vehicles (IFVs), Main Battle Tanks (MBTs)

Sighting System Applications:

As a Gunner Sight: The MX-GCS can identify threats beyond the range of the vehicle's weapon system, allowing for standoff distance engagements at maximum effective ranges.

As a Commander Sight: The MX-GCS provides vehicle commanders the ability to scan for, identify, and track targets (Hunter) independent of the gunner system, hand-off identified threats between target acquisition systems (Killer), or fire weapons autonomously from the commander position.



System Offerings:

- A versatile above-armor Gunner or Commander Sight
- 360 degree scanning ability
- Long-range, on-the-move sighting and firing capacity

FEATURES & BENEFITS: MX-GCS

Enhance Your Situational Awareness

- 360 degree scanning capability independent of the gun turret axis
- Integrate a series of high-performing sensors for optimal visibility – day and night
 - Mid-wave large-format cooled thermal imager
 - High Definition (HD) daylight imaging sensor
 - Eyesafe Laser Rangefinder

Reduce Your Detection Time

- Real-time image enhancement of all sensors / high-performance haze penetration
- Improved feature recognition and Identification
- Image blending – combine day and infrared night images into a single image stream – affording the operator the benefits of both

Uncompromised Sighting and Firing Efficiency

- Fully active gimbal stabilizes and steers the imager and rangefinder's line-of-sight in azimuth and elevation
- High accuracy gimbal position feedback for target handoff applications

- High boresight accuracy and retention
- Optional
 - Target auto-tracking facility – utilize high-speed or stationary mission profiles
 - Armor accessory - protects against small arms fire
- Proven - live fire tested with 30mm and 105mm gun systems

Fully Integrated for Installation simplicity

- Integrated electronics
- Interfaces to dual-channel gun resolver
- High-vibration / shock suppression and positional accuracy for gun sight applications
- Field-Swappable

Ruggedness

- Qualified to U.S. military standards for environmental and electromagnetic compliance
- Reliability assured by accelerated life testing



PAYLOAD SPECIFICATIONS - SELECT UP TO 3 IMAGING & LASER SENSORS

Sensor #1 - Thermal Imager:

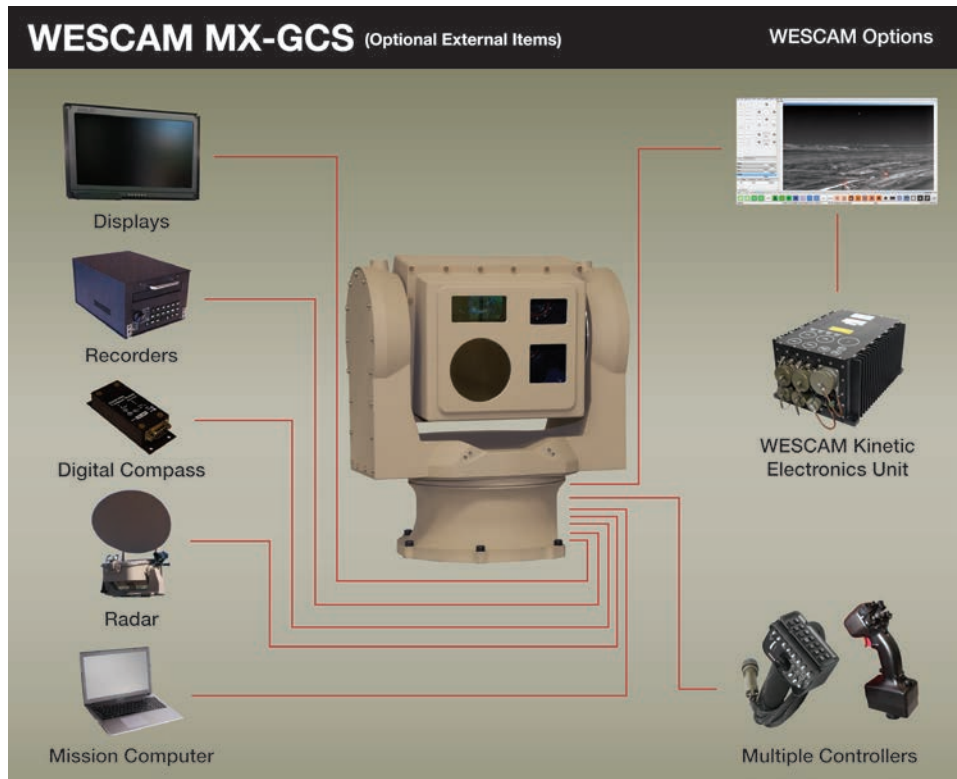
Type: 3-5µm staring array
Resolution: 640 x 512 pixel
Fields of View: 2.0°, 10.0°

Sensor #2 - Color Imager:

Type: CMOS
Resolution: 1280 x 720 pixel
Fields of View: 1.6°, 10.0°

Sensor #3 - Laser Rangefinder (LRF):

Laser Type: Class I (eyesafe)
Wavelength: 1.54µm
Range: 10km
Rate: 1 Hz



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.

SYSTEM SPECIFICATIONS

MX-GCS

103.4 lbs (max) / 47 kg (all sensors)
517 mm (20.3") H x 413 mm (16.2") W
x 302 mm (11.8") D*

Power

28 VDC, 20A (nom), 40A (peak)

Environmental / EMC

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

Line-of-sight Stabilization

<50 µrad

Consult factory for performance under specific vibration conditions.

Line-of-sight Point Accuracy

<0.1 mrad

Stabilization and Steering

2-axis gimbal, 3-axis with armor

Azimuth Travel: Continuous 360°

Elevation Travel: -71° to +74°
(relative to horizontal)

STANDARD INTERFACES:

Video Outputs: SMPTE292M, PAL

Control: CANbus, Ethernet, RS-422/232

Resolver: BiSS

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

*In forward position. Swept envelope in operation is slightly larger.