

ELECTRO OPTICAL TURRET CUSTOMIZATION CAPABILITIES

L3Harris electro optical/infrared (EO/IR) turrets may be customized to accept a myriad of customer-furnished sensors

Tested and proven, L3Harris EO/IR turrets provide a convenient solution for customers looking to mount their sensor in a trusted, stabilized turret system. L3Harris can work with your team to rapidly configure a solution for your specific application.

KEY FEATURES:

- > Patented X-MAST™ precision stabilization and Soft-Ride™ integrated shock mounting provides five-axis stability to the entire optical bench and provides greater than two μrad of jitter under a variety of conditions
- > Inertial Measurement Unit (IMU) technology - IMU Inside™ - with integrated inertial navigation system (INS) and global positioning system (GPS) receiver for precision geolocation and geopointing
- > State-of-the-art IMU-based stabilization provides precision location accuracy, facilitates geopointing, geolocation and geofocus
- > Increased sensor reliability
- > Excellent boresight retention
- > Single line replaceable unit system
- > Large usable volume for custom payloads
- > Optional Video Processing Unit (VPU)
- > Demonstrated ability to carry up to 125 lb payload mass (including counterbalance)
- > The ideal stabilized platform for advanced sensors

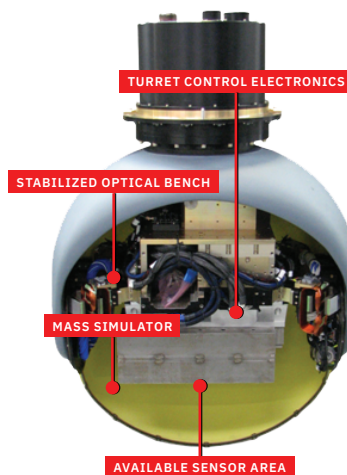
BENEFITS:

- > Fast tracks technology and gets it flying
- > Reduces program risk with proven technology

APPLICATIONS:

Designed for a variety of missions:

- > Intelligence, surveillance and reconnaissance
- > Counter improvised explosive device/ counter terrorism
- > Persistent surveillance
- > Mine detection
- > Classified missions
- > Flying on numerous platforms:
 - EGRETT II
 - DC-3
 - 737
 - Twin Otter
 - Caravan
 - C-12
 - MQ-9 Reaper



With years of experience in delivering electro optical infrared systems and solutions for special and fleet warfighter requirements, L3Harris brings a highly sophisticated and process-focused systems engineering approach to program requirements, and is the right partner to rapidly deliver customized sensors, systems and data to successfully achieve program mission objectives.

EXAMPLE PAYLOADS:

- > Wide area surveillance
- > Hyper-spectral
- > Multi-spectral
- > Light Detection and Ranging (LIDAR)
- > Laser communications
- > Synthetic aperture radar

TYPICAL CUSTOMIZATION INCLUDES:

- > Modified wiring harnesses
- > Fiber twist cap or slip ring
- > Input/output (I/O) options (fiber and/or copper)
- > Window placement and custom bezel
- > Balance kit design and manufacture
- > Sensor boresighting
- > Servo-loop optimization (if necessary)

SINGLE LRU SYSTEM:

- > Onboard INS
- > Inertial measurement unit

- > Optional L1/L2 GPS receiver
- > Built-in power filter compliant to MIL-STD-704

OTHER FEATURES:

- > Standard library of system modules
- > Flexible I/O solutions
- > Copper and fiber interfaces
- > Ethernet command and control
- > Pass-through capability

VALUE-ADDED SERVICES:

- > Mechanical packaging
- > Payload mass simulator customization
- > Slip ring/harness customization

- > Window and bezel design/manufacturing
- > Sensor-dependent software customization
- > Custom console/graphical user interface

NOTES:

- > Empty weight does not include CFE payload or harnesses
- > Payload weight based on performance requirements, center of gravity location and aircraft dynamics
- > Consult with L3Harris about larger payload weights
- > Rated power is for a continuous load - consult L3Harris for peak and increased power capabilities

TURRET	1200M	2100X	2500X
			
Empty Weight	40 lb	104 lb	145 lb
Diameter x Height	12.2 in x 14.6 in	20.8 in x 30.7 in	24.8 in x 36.1 in
Power, Turret Only (Typical)	75 W at 28 VDC	310 W at 28 VDC	310 W at 28 VDC
Geo-Capable	Yes, < 1 mrad	Yes, < 750 µrad	Yes, < 750 µrad
IMU Type	NG LN-200	NG LN-200	NG LN-200
Gimbal Type	Four-axis, ring type, internally isolated	Five-axis, cardan type, internally isolated	Five-axis, cardan type, internally isolated
Max Payload Weight	21 lb	50 lb	165 lb
Payload Volume	550 in	2101 in	3681 in
Payload Power Dissipation	150 W	200 W continuous, 800 W peak	250 W continuous, 800 W peak
Pass-Through Wiring	<ul style="list-style-type: none"> > 10 TSP (30 AWG) > 5 TP 28 VDC > 3A each 	<ul style="list-style-type: none"> > 21 TSP (32 AWG) > 11 MM fibers > 7 TP 28 VDC (16 AWG) > 8A each 	<ul style="list-style-type: none"> > 21 TSP (32 AWG) > 11 MM fibers > 7 TP 28 VDC (16 AWG) > 8A each

Electro Optical Turret Customization Capabilities

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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers’ mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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