WESCAM’s MX-20 and MX-20D
Fully Digital. High Definition.
Ultra Long-Range Multi-Sensor, Multi-Spectral Imaging and Targeting Systems

**MX-20** Ideal for:
High-Altitude; Long-Range MPA and Persistent Surveillance

**MX-20D** Ideal for:
High-Altitude; Covert Intelligence, Surveillance & Reconnaissance, Armed Reconnaissance, CSAR, Target Designation

**MX-20D** Airborne Installations:
Fixed-Wing, Rotary-Wing, Aerostat

**FEATURES & BENEFITS: MX-20 / MX-20D**

**True HD Cameras**
- Superior imaging resolution from EO and IR cameras
- 2 mega-pixel EO zoom and spotter cameras
- True HD Digital Imaging
  - Fully digital – easily converts to analog to ease legacy integrations
  - No image degradation due to compression

**Enhanced Local Area Processing (ELAP)**
Real-time image enhancement for EO Day, EO Night & IR
- Increases stand-off range
- Improves feature detection & recognition
- High performance haze penetration

**Solid-State IMU-Inside technology - 5 axis stabilization**
- All sensors share highest level of stabilization
- No calibration required for LRU swapout
- Auto align to aircraft
- Nav grade IMU
  - Enhanced target location accuracy

**Multi-Format**
- Meets the needs of new & legacy platforms through multiple digital & analog output formats
- Concurrent digital & analog outputs

**Multiple Laser Payloads**
- Long Range Target Illumination, Pointing and Range-Finding

**Short Wave IR Imaging**
- Enhanced haze penetration & target contrast
- Laser spot imaging

**Laser Target Designator (MX-20D)**
- Compact, efficient and reliable diode-pumped laser
- Provides exceptional range through a small divergence high quality beam
- IMU Inside technology & exceptional EO/IR sensor range achieves unparalleled designating ranges
- Designator electronics package is incorporated into the turret payload
- Laser spot tracker detects a designator spot of a given code in the system’s field of view, and slews the turret’s line of sight to track it

**MX-GEO Gen.3 Software Suite**
- Achieves highest target location accuracy
- AVGT marries Video and GEO-Tracking to provide robust target tracking
- Discrete motion scanning for wide-area terrain visualization

**MX-Series Commonality**
The extensive interfacing capability of the MX-20 Family supports a wide range of installations spanning simple, single operator configurations through to complex, multi-operational systems. The software commonality and powerful built-in functionality within the MX-Series product family provides:
- Common operator interfaces and LRU’s
  - ease & familiarity of use
  - simplified interchangeability
  - efficiencies in support & technology enhancements

See our products in action on [YouTube](https://www.youtube.com)
Search:
- MX-20 Product Video
- MX-Series Product Video

wescam.com

Previous Description, MX-20HD/20D
**PAYLOAD SPECIFICATIONS**

**MX-20** Select up to 7 Sensors

<table>
<thead>
<tr>
<th>Sensor #1a - Thermal Imager</th>
<th>Sensor #1b - HD IR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: 3-5μm staring array</td>
<td>Type: 3-5μm staring array</td>
</tr>
<tr>
<td>Resolution: 640 x 512</td>
<td>Resolution: 1280 x 1024</td>
</tr>
<tr>
<td>Fields of View: 18.2°, 3.7°, 0.73°, 0.24°</td>
<td>Fields of View: 31.5°, 6.4°, 1.3°, 0.86°</td>
</tr>
<tr>
<td>or</td>
<td>or</td>
</tr>
<tr>
<td>Sensor #2 - Daylight Continuous Zoom:</td>
<td>Type: 2 Megapixel Color HD</td>
</tr>
<tr>
<td>Fields of View: 2.8° to 40.5° - 1080p</td>
<td>Fields of View: 2.8° to 40.5° - 1080p</td>
</tr>
<tr>
<td>1.8° to 27.7° - 720p</td>
<td>1.8° to 27.7° - 720p</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sensor #3 - Daylight Spotter:</th>
<th>Sensor #4 - Lowlight Spotter: (Requires Sensor #3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: 2 Megapixel Color HD or Mono HD</td>
<td>Camera Type: Charge-multiplying CCD (Mono)</td>
</tr>
<tr>
<td>Fields of View: 0.92°, 0.46°, 0.29°, 0.17° - 1080p</td>
<td>Wavelength: Selectable, 450-1000nm</td>
</tr>
<tr>
<td>0.61°, 0.31°, 0.19°, 0.115° - 720p</td>
<td>Fields of View: 0.73°, 0.37°, 0.23°, 0.14°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sensor #5 - Laser Rangefinder (LRF):</th>
<th>Sensor #5 - Laser Illuminator (LI):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Type: Eribium glass (ANSI Class I), Eyesafe</td>
<td>Laser Type: Diode - ANSI Class 4</td>
</tr>
<tr>
<td>Wavelength: 1540nm</td>
<td>Wavelength: 860nm</td>
</tr>
<tr>
<td>Pulse Rate: 12 pulses/min.</td>
<td>Modes: Continuous, Pulsed</td>
</tr>
<tr>
<td>Range: 30km</td>
<td>Beam Divergence: Wide, Narrow or Ultra Narrow</td>
</tr>
<tr>
<td>Range Resolution: ±5m</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sensor #6/7 - Laser Illuminator (LI):</th>
<th>Sensor #6/7 - Laser Designator/Rangefinder: (ANSI Class 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Type: Diode - (ANSI Class 4)</td>
<td>Laser Type: Diode Pumped Nd:Yag</td>
</tr>
<tr>
<td>Wavelength: 860nm</td>
<td>Wavelength: 1064nm/1570nm Selectable</td>
</tr>
</tbody>
</table>

Notes:
- All FOV’s are for Digital outputs. Consult factory for FOV’s for Analog Outputs.

**PAYLOAD SPECIFICATIONS**

**MX-20D** Select up to 6 Sensors

<table>
<thead>
<tr>
<th>Sensor #1a - Thermal Imager</th>
<th>Sensor #1b - HD IR:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: 3-5μm staring array</td>
<td>Type: 3-5μm staring array</td>
</tr>
<tr>
<td>Resolution: 640 x 512</td>
<td>Resolution: 1280 x 1024</td>
</tr>
<tr>
<td>Fields of View: 18.2°, 3.7°, 0.73°, 0.24°</td>
<td>Fields of View: 31.5°, 6.4°, 1.3°, 0.86°</td>
</tr>
<tr>
<td>or</td>
<td>or</td>
</tr>
<tr>
<td>Sensor #2 - Daylight Continuous Zoom:</td>
<td>Type: 2 Megapixel Color HD</td>
</tr>
<tr>
<td>Fields of View: 2.8° to 40.5° - 1080p</td>
<td>Fields of View: 2.8° to 40.5° - 1080p</td>
</tr>
<tr>
<td>1.8° to 27.7° - 720p</td>
<td>1.8° to 27.7° - 720p</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sensor #3 - Daylight Spotter:</th>
<th>Sensor #4 - Lowlight Spotter: (Requires Sensor #3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: 2 Megapixel Color HD or Mono HD</td>
<td>Camera Type: Charge-multiplying CCD (Mono)</td>
</tr>
<tr>
<td>Fields of View: 0.92°, 0.46°, 0.29°, 0.17° - 1080p</td>
<td>Wavelength: Selectable, 450-1000nm</td>
</tr>
<tr>
<td>0.61°, 0.31°, 0.19°, 0.115° - 720p</td>
<td>Fields of View: 0.73°, 0.37°, 0.23°, 0.14°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sensor #5 - Laser Rangefinder (LRF):</th>
<th>Sensor #5 - Laser Illuminator (LI):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Type: Diode - (ANSI Class 4)</td>
<td>Laser Type: Diode Pumped Nd:Yag</td>
</tr>
<tr>
<td>Wavelength: 860nm</td>
<td>Wavelength: 1064nm</td>
</tr>
<tr>
<td>Range: up to 20km</td>
<td>Range: 20km</td>
</tr>
<tr>
<td>Range Resolution: ±2m</td>
<td>Range Resolution: ±2m</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sensor #6/7 - Laser Designator/Rangefinder: (ANSI Class 4)</th>
<th>Sensor #8 - Laser Spot Tracker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Type: Diode Pumped Nd:Yag</td>
<td>Type: Quadrant Detector</td>
</tr>
<tr>
<td>Wavelength: 1064nm</td>
<td>Wavelength: 1064nm</td>
</tr>
</tbody>
</table>

**SYSTEM SPECIFICATIONS**

**MX-20 & MX-20D**

**MX-20 Turrets**
- MX-20: ≤ 200lbs (all sensors), 21.0°(D) x 26.25”(H)
- MX-20D: ≤ 210lbs (all sensors), 21.0°(D) x 26.25”(H)

**Power**
- MIL-STD-704E, 320W (Avg.); 1000W (Max.)
- Digital Master Control Unit
- <20 lb
- 7.5”(W) x 12.13”(H) x 16.7”(D)
- 50W (Avg.); 100W (Max.)
- Autotracker

**Hand Controller Unit (HCU)**
- 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

**TURRET SPECIFICATIONS**

**Line-of-sight Stabilization**
- Typically <4 radians. Consult factory for performance under specific vibration conditions

**Stabilization and Steering**
- (3) Axis Inner (pitch/yaw/roll)
- (2) Axis Outer (azimuth/elevation)

**Vibration Isolation**
- (6) Axis Passive (x/y/z/pitch/roll/yaw)

**AZ/EL Slew Rate:**
- <4 μradians. Consult factory for performance under specific vibration conditions

**LOS Pan Range:**
- Continuous 360°

**LOS Tilt Range:**
- +90° to -120°

**STANDARD INTERFACES**

- 5 Simultaneous EO/IR Digital and Analog Video channels; 1080p configurable for 720p, 1080i, 525i & 625i digital options
- MX-Hand Controller

**OPTIONS AVAILABLE**

**MCU Interfaces:**
- Moving Map Interface
- Serial Remote Control
- Radar Interface
- MIL STD 1553B
- GPS Time Sync
- GPS Data
- INS Data
- Searchlight
- Microwave
- Metadata

**Operator Interfaces:**
- Operator Control Unit & Joystick
- Moving Map system
- GEO-Pointing

**Microwave Equipment:**
- MX-POD, Digital Transmitter
- Diversity Rx

Inquiries: 1 800 668 4355
sales.wescam@l-3com.com

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.