The Geo-MMS includes an inertial navigation system coupled with a LiDAR sensor. Raw data from the integrated GPS, IMU and LiDAR sensors are recorded on the internal data recording device and can be post-processed using Geodetics’ LiDARTool software to directly geo-reference the LiDAR point clouds with LAS format output.

**Key Features**
- Flexible mounting for different platforms including UAV, UGV, ground vehicles and robots
- Minimized sensor size and weight to meet payload restrictions
- Available with many IMU’s to support a wide range of application requirements
- Geo-Referenced LAS File Output

**Applications**
- Self-driving cars
- Intelligence, Surveillance and Reconnaissance (ISR)
- Situational Awareness
- Sense & Avoid
- Critical Oil & Gas Infrastructure Inspection
- SLAM Capable

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www.geodetics.com
Geo-MMS™ LiDAR Mobile Mapping System

Point Cloud Geo-Referenced Accuracy*

<table>
<thead>
<tr>
<th></th>
<th>GPS/IMU</th>
<th>RTK (Real-Time)</th>
<th>Autonomous (WAAS)</th>
<th>Post-Mission (DGPS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tactical (MEMS)</td>
<td>25cm</td>
<td>0.7m</td>
<td>10cm</td>
<td></td>
</tr>
<tr>
<td>Advanced (FOG, RLG)</td>
<td>10cm</td>
<td>0.5m</td>
<td>5cm</td>
<td></td>
</tr>
</tbody>
</table>

*Accuracy is dependent on GPS satellite system performance, ionospheric conditions, satellite visibility, data-link and other factors

Supporting LiDAR Systems: Velodyne VLP-16 Laser Scanner (PUCK or PUCK LITE)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Commercial Configurations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size / Weight / Power</td>
<td>40.32 in³ (4.7x3.9x2.2) / 3.9 lbs. / 10 – 30 VDC @ 2 Amps min.</td>
</tr>
<tr>
<td>Real-Time Data Output</td>
<td>Navigation solutions at up-to 125 Hz. available via Ethernet or RS-232</td>
</tr>
<tr>
<td>Data Recording/Logging</td>
<td>5 Hour capacity (180° FOV) Navigation solutions, raw GPS, IMU and LiDAR point clouds</td>
</tr>
</tbody>
</table>


Configuration Options

- RTK centimeter-level position accuracy
- Available with FOG/RLG IMU’s
- Datalink for real-time monitoring
- Graphical viewer
- Post-processing software
- Flight planning
- Dual-antenna inertial navigation
- Support for global corrections