Gabbiano Ultra-Light provides long and short range surveillance capabilities for both civilian and military forces.

With a high level of modularity and flexibility, the system is suited for operation aboard of mini/small Unmanned Aerial Vehicles (UAVs) as well as both fixed and rotary wing small manned platforms. It has been designed for the following applications:

- Homeland Security
  - Drug trafficking, smuggling, illegal immigration and terrorism
- EEZ protection
  - Illegal fishing
- Environmental surveillance
  - Oil and hazardous material spills, wildlife protection
- Maritime Patrol and Search & Rescue operations
- Support to covert day/night operations of Special Forces.

MULTI-MODE, HIGH PERFORMANCE RADAR FOR FITMENT TO MINI AND SMALL UAV PLATFORMS

Installing a payload aboard mini and small manned/unmanned platforms is fast becoming the most challenging aspect.

Gabbiano Ultra-Light takes advantage of its light weight and low power consumption to provide a compelling solution to the problem. It weighs 24kg and is powered from a single 28VDC power supply source.

Gabbiano Ultra-Light provides top capability performance for those platforms with demanding installation constraints.
Key features
▪ Low weight
▪ Low power consumption
▪ ±90° surveillance
▪ LPI capability
▪ TWS >200 targets
▪ ECCM capabilities
▪ Short blind zone
▪ High resolution imaging modes and target recognition
▪ Maritime surveillance, up to 160NM
▪ High reliability
▪ Standard and flexible interfaces.

Ground Surveillance
The Gabbiano Ultra-Light provides all the features for Homeland Security missions, primarily aimed at border protection or Combat Search & Rescue missions.

High resolution modes (Spot Synthetic Aperture Radar and Strip Synthetic Aperture Radar) provide a submetrical resolution over wide swath areas. GMTI mode allows detection of moving targets on ground. Unique patents and owned proprietary techniques have been developed for High Resolution Radar Imaging.

Sea Surveillance
Gabbiano Ultra-Light is ideal for Search & Rescue and long range maritime surveillance missions with TWS.

High resolution ISAR mode enables the user to classify the intercepted targets. To complete the Search & Rescue features, SMTI and several standard beacons modes are also available (SST-181X, DO-172 and SART classes). A dedicated search mode is optimised for Oil Spill Detection.

Air Surveillance
Air-to-Air mode allows detection and high resolution imaging of air targets.

Navigation
Navigation aid to the crew is provided through the following modes: ground mapping, doppler beam sharpening, weather (compliant with civil certification standard) and beacon (SART, SST-181X and DO-172 standards supported).

Growth Capability
State-of-the-art high computational capabilities guarantee wide growth and customisation by software updates.

TECHNICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th></th>
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<tbody>
<tr>
<td>LRU Antenna ±90° (nose) 12”</td>
<td>350mm x 350mm x 350mm</td>
</tr>
<tr>
<td>LRU RTP</td>
<td>446mm x 290mm x 220mm</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>GENERAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>24kg</td>
</tr>
<tr>
<td>Cooling</td>
<td>Air cooled</td>
</tr>
<tr>
<td>Frequency</td>
<td>X band</td>
</tr>
<tr>
<td>Interfaces</td>
<td>Ethernet plus MIL Std 1553B, ARINC 429, RS422 and ARINC 708</td>
</tr>
<tr>
<td>MTBF</td>
<td>2000 hours</td>
</tr>
<tr>
<td>Input power</td>
<td>450W single power source 28VDC</td>
</tr>
<tr>
<td>Fully coherent transmitter</td>
<td>Solid state power amplifier</td>
</tr>
<tr>
<td>Average transmitted power</td>
<td>&gt;20W</td>
</tr>
</tbody>
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For more information please email infomarketing@leonardocompany.com

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