Lightweight Airborne Maritime Surveillance Radar

ELM-2022ML

Rotary-wing Aircraft

Fixed-wing Aircraft

Unmanned Aircraft

IAI

Where Courage Meets Technology™
Lightweight Airborne Maritime Surveillance Radar
ELM-2022ML

ELM-2022 is a combat-proven family long-range airborne multimode maritime surveillance radars designed for deployment on fixed-wing aircraft, helicopters and UAVs. Operating in X-Band, the ELM-2022ML is a lightweight version consisting of two LRUs and designed for reduced size weight and power requirements (SWaP). The ELM-2022 family is as a true all-weather, day and night sensor capable of penetrating clouds, rain, smoke, smog, fog and man-made camouflage. Modular hardware, flexible interfaces and antenna design, enable the ELM-2022 radars to be installed on a wide range of platform types.

With systems deployed worldwide, ELM-2022 radars have been continuously updated to utilize the vast operational experience that has been accrued as well as being upgraded with the latest available technologies. ELM-2022ML radars provide a highly effective and cost-competitive solution for the following maritime operational missions:

- Maritime Surveillance and EEZ Patrol
- Search and Rescue Location and Support
- Law Enforcement, Fishery Protection and Drug Enforcement
- Air-to-Air Surveillance
- Air-to-Ground (SAR and GMTI) Intelligence, Reconnaissance and Surveillance (ISR) Missions

Features
- Detection and automatic tracking of small targets in adverse sea conditions
- Range profile, ISAR and CSAR classification modes with automatic classification to class (ISAR library)
- Strip and spot Synthetic Aperture Radar (SAR) imaging and GMTI for ISR support for ground operation
- Navigation and weather mode
- Integrated IFF/AIS/ADSB system
- Advanced Ground Radar Operation Station (GROS) - optional for standalone operation (not included in weight)

Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection range: small targets</td>
<td>up to 200 nm</td>
</tr>
<tr>
<td>Detection range: medium to large targets</td>
<td>up to horizon</td>
</tr>
<tr>
<td>Power consumption</td>
<td>1.1 kW</td>
</tr>
<tr>
<td>Weight</td>
<td>54 kg</td>
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Sea Mode Display
ISAR Mode Display
Strip SAR Display
Navigation and Weather Mode Display