SMART-L Multi Mission/Deployable (MM/D) is a next generation Tactical Long Range Multi Mission Radar for Air and Ballistic Missile Defense Surveillance. The fully digitally controlled Active Electronically Scanned Array (AESA) type of radar, applying GaN transmitter and Dual Axis Multibeam receiver technology, is capable of detecting a very wide variety of air and space objects including stealth, short, medium up to intermediate range ballistic missiles and space objects. The applied high-end techniques result in a tactical deployable radar with an unrivalled long range performance of up to 1000 km. The SMART-L MM/D is a downscaled variant of the SMART-L MM, specifically in support of mobile tactical air and missile defense weapons systems.

3D LONG RANGE AIR AND MISSILE DEFENSE RADAR
- Simultaneous multi mission mode and multi function
- Unrivalled long range performance
- Autonomous Ballistic Missile Search and Track capabilities
- Easily upgradable

SMART-L MM/D
Long Range Multi Mission Radar
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Long Range Multi Mission Radar

SIMULTANEOUS MULTI MISSION MODE AND MULTI FUNCTIONS
The SMART-L MM/D combines Air Defence (AD) and Ballistic Missile (BM) defence in one mode by adaptable radar wave-forms for the various tasks in a single rotation.

UNRIVALLED LONG RANGE PERFORMANCE
The unique and patented extended long range waveform and matched processing and flexible scan time results in very long range performance. It covers an instrumented range of maximum 1000 km against ballistic missile targets.

AUTONOMOUS BALLISTIC MISSILE SEARCH AND TRACK CAPABILITIES
SMART-L MM/D independently sense Ballistic Missile type objects. Following fast track initiation, the ballistic target track is maintained up to zenith. The Ballistic Missile defence capability is based on the extended long range waveform functionality proven during various live ballistic missile trials. Thanks to AESA, Ballistic Missile detection range is even improved significantly by applying forward/backward scanning and staring modes.

EASILY UPGRADABLE AND PREPARED FOR THE FUTURE
In traditional radar systems the functionality remains unchanged through its lifespan. However SMART-L MM/D, as part of the SMART-L MM Family, is an AESA programmable radar, which is characterized by full flexibility. Additional capabilities can be introduced during lifetime according to customer needs. This makes the radar future proof in case of evolving requirements.

MAIN FEATURES
- Fast track initiation and active tracking
- Dedicated Electronic Protective Measures technique
- Multipath suppression
- Windmill Mitigation
- SSR Characteristics: 3 Channel Mk XII IFF
  - Modes 1, 2, 3/A, C, NATO Secure Mode 4
  - Mode 5 level 1 & 2 and Mode S level 1 & 2
- Interoperability (through dedicated radar Control, Communications and Power Plant)
  - TLVS / MICS
  - Link 16 (LOS RF)
  - JREAP B & C (BLOS)
- Deployable
  - Low NATO STANAG Criteria
  - Truck Mounted Airbus A-400 Roll On Roll Off
- Deployment Time < 15 minutes

Technical Data

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Defence Range</td>
<td>400 km instrumented</td>
</tr>
<tr>
<td>Ballistic Missile Range</td>
<td>Up to 750 km instrumented (Rotating Mode)</td>
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<tr>
<td></td>
<td>Up to 1000 km instrumented (Staring Mode)</td>
</tr>
<tr>
<td>Minimum range</td>
<td>5 km</td>
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<tr>
<td>Tracking capacity</td>
<td>2000 tracks</td>
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</tbody>
</table>

Antenna

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency band</td>
<td>D-Band</td>
</tr>
<tr>
<td>Update rate</td>
<td>5 seconds or shorter (in staring mode)</td>
</tr>
<tr>
<td>IFF antenna</td>
<td>Integrated and fit for mode 5 and S Low Vertical Aperture 3-channel IFF antenna</td>
</tr>
<tr>
<td>Maintainability</td>
<td>Standard building blocks, from inside the antenna accessible</td>
</tr>
<tr>
<td>Weight</td>
<td>12 Tons (Excluding Prime Mover but Including Platform)</td>
</tr>
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