

Multi-Mission Radar Family

Full AESA 4D Radar



C-MMR



M-MMR



F-MMR



D-MMR



MS-MMR



H-MMR



Where Courage Meets Technology

Multi-Mission Radar Family

Full AESA 4D Radar

The Multi-Mission Radar (MMR) is a family of advanced mobile radars (ELM-2084: M/F/MS/H-MMR, ELM-2248LB: D-MMR & ELM-2311: C-MMR) that operate in S or C-Band and perform multiple missions: air surveillance, counter rocket artillery and mortar (C-RAM) and fire control. Different radar sizes and configurations are available to match customer requirements. An open architecture facilitates the integration of additional sensors such as SIGINT, IFF (all modes), and EO/IR. Each radar employs an advanced 4-D full Active Electronically Scanning Array (AESA) enabling electronic steering in azimuth and elevation, and is based on high performance Gallium Nitride (GaN) RF modules.

The MMR detects high and low flying targets, tracks, classifies and generates a real-time Air Situation Picture of all aerial targets such as low Radar Cross Section platforms (e.g. UAVs, tactical aerial weapons, loitering munitions, cruise and Tactical Ballistic Missiles (TBM)) and Rockets, Artillery, and Mortars (RAM). The MMR's innovative design delivers high accuracy and rapid update rates, performing concurrent search with dedicated track beam. MMR can acquire targets through external cueing from a C2 system and can operate independently or be integrated into a radar network.

Combat proven, the MMR is operational in Israel and worldwide. It is used as the key sensor of the leading air & missile defense systems, including Iron Dome, David's Sling and Barak.

Missions

- Air Surveillance
- Air Defence – as a Fire Control Radar (FCR)
- Early Warning Alerts (TBM & RAM)
- Artillery & C-RAM:
 - Hostile Weapon Locating by real-time calculation of Launch & Impact points (LP & IP)
 - Friendly fire ranging

Features

- 4D, Multi-beam, full AESA, S/C Band radar with GaN
- Simultaneous multi mission operations
- Sector or rotating modes (up to 30 RPM)
- Advanced ECCM Capabilities
- Advanced signal processing when operating in dense & high clutter environments
- High mobility & air transportable; fast deployment
- Graceful degradation and very high availability
- Dedicated C2 for remote controlling, planning, monitoring and managing an array of MMRs
- NATO Compliant and interoperable

Specifications

Description	Rotating Mode	Sector Mode
Operation Mode	Up to 30 RPM	Stop/Stare
Azimuth Coverage	360°	±65° Electronic Steering Sector
Range for MMR	256 NM (475 KM)	350 NM (650 KM)
Elevation Coverage	-7 to 70°	-7 to 90°
Height Coverage		>100k ft (30.5 KM)