



C-MMR

Compact Multi-Mission AESA

Artillery Radar

ELM-2311



C-MMR

Compact Multi-Mission AESA Artillery Radar

C-MMR (ELM-2311) is a mobile, unique all-in-one multi-mission radar system that simultaneously performs vital air defense and surveillance missions, and is a member of the world-renowned MMR family. The radar detects, tracks, classifies, and generates a real-time Air Situational Picture of low Radar Cross Section aerial targets such as rockets, artillery and mortars (RAM), UAVs, and small aerial platforms. C-MMR is ideal for supporting maneuvering forces, such as battalions or brigades, on the battlefield. The radar's innovative design delivers high accuracy and rapid update rates, enabling concurrent search with dedicated track beams. The radar can also acquire targets through external cueing from a C2 system and can be integrated into a radar network.

C-MMR features a Doppler radar operating in the C-Band and employs an advanced 3D Active Electronically Scanning Array (AESA) enabling electronic steering in azimuth and elevation, and is based on high performance Gallium Nitride (GaN) RF modules. The complete system architecture comprises a phased array antenna, power and cooling units, a shelter for operator consoles and communication equipment. The radar system is fast to deploy and only requires two operators.

C-MMR is **combat proven** and is in use by armies across the world.

MISSIONS

- Artillery & C-RAM (simultaneous):
 - Hostile Weapon Locating by real-time calculation of Launch & Impact Points (LP & IP) with very high accuracy
 - Friendly Fire Ranging
- Air Surveillance
- Air Defence – Radar
- Fire Control
- Early Warning Alerts (TBM & RAM)



FEATURES

- 3D multi-beam Active Electronically Steered Antenna (AESA)
- High mobility, fast deployment and folding
- Advanced Signal processing for:
 - Heavy clutter and noisy environment
 - Classification of targets
 - Detection of very low elevation targets
- Advanced ECCM capabilities
- Single vehicle operated by two operators located in an onsite compartment or remotely operated
- AESA technology enables high redundancy and graceful degradation
- Performance Highlights:
 - Weapon Location missions:
 - Range: up to 100km
 - Air Defense missions:
 - Range: up to 250km
 - Spatial coverage:
 - Azimuth: sectorial 120°, pedestal enabled $\pm 135^\circ$
 - Elevation: up to 75°
 - Capacity: >250 targets

