

AESA Air Defense Search & Track Radar

ELM-2026BF



Where Courage Meets Technology™

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ELM-2026BF is a highly accurate 3D Tactical Air Defense Radar that detects and tracks airborne targets, including: low RCS drones and UAVs, helicopters and fighter aircraft. The radar operates in X-Band and employs solid-state Active Electronically Scanning Array (AESA) technology. The radar is dual mode providing air surveillance and tracking with precise range, azimuth and elevation angles for anti-aircraft guns fire control. The radar employs multi-beam elevation coverage through Digital Beam Forming (DBF) and 360° azimuth coverage by antenna rotation.

The radar can be mounted on the ground or on a fixed platform or moving vehicle where it is installed on a customized pedestal. Integrating the radar with E/O sensors provides enhanced classification of targets. Real-time data and status information can be transmitted directly to a command and control unit.

Applications

- Tactical Air Situation Picture
- Cueing of short range missiles
- Detection of drones and UAV
- Fire Control of anti-aircraft guns

Features

- Automatic detection of airborne targets
- Advanced Digital Phased Array
- High reliability – full solid-state design
- Advanced ECCM capabilities

Parameters	Values
Instrumentation range	40 Km
Detection range for Micro Drone	5.2 Km
Detection range for Fighter Aircraft (ie F16 & MIG 21BIS)	20 Km
TWS number of simultaneous targets	>100
Surveillance Mode (TWS) Az El Accuracy	0.5deg
Tracking Mode (STT) Az El Accuracy	2mrad
Elevation coverage (electronic)	0 - 30°
Elevation coverage (TWS, electronic, designated target)	60°
Elevation tracking (STT mode)	Pedestal elevation limit
Minimal detection velocity	2.5 m/sec
Azimuth coverage (Mechanical)	360°
Weight of antenna	65 Kg
Power consumption of antenna	750 W
Supply Voltage	18V to 32V DC
Environmental Condition	MIL-STD-810F
EMC/EMI	MIL-STD-461E
Operation Temperature	-40°C - +55°C



ELM-2026BF Ground Mounted