



LOCKHEED MARTIN 
We never forget who we're working for®

APG-67 Multimode Radar

The capabilities necessary for modern air combat



Designed to Fit the Aircraft, Designed to Fit the Mission... ... Anywhere in the World

For both new and existing fighter aircraft, the APG-67 multimode radar provides the situational awareness and fire control capabilities necessary for modern air combat engagements. The system provides both air and surface modes for true multi-role operation. The long-range detection and tracking capabilities allow maneuvering to gain tactical advantage.

The radar is fully integrated and tested with Beyond Visual Range missiles (semi-active and data link), allowing the pilot to take advantage of the APG-67's long-range detection and tracking capability. The highly capable tracking modes assure lock-on and reliable track during "high g" maneuvers.

The APG-67 radar is fully operational 90 seconds after turn-on. Its coherent pulse-Doppler processing is particularly adept at detecting targets in the "look-down" engagement which gives the pilot look-down/shoot-down capability for targets hiding in high ground clutter and sea clutter. Additionally, pilot distraction due to false alarms is minimized.

The fourth-generation design takes advantage of 21st century signal processing with a compact transmitter, processor and antenna using less than 1.9 cu. ft./0.054 cu.m.

Advanced Features, Highly Capable, Adaptable

Easy to Install

- Three line-replaceable units
- Volume – less than 1.9 cu. ft./0.054 cu.m.
- Weight – less than 160 lb. (73 kg.)
- Antenna easily scaled to the aircraft

Features

- Monopulse tracking
- Guard channel with full two-channel processing
- Pulse compression
- Electronic Counter Countermeasures
- Full area Constant False Alarm Rate
- High reliability
 - Greater than 350 hour Mean Time Before Failure (MTBF) from field data
 - Predicted MTBF of 600 hours

Prime Power and Cooling

- Prime Power – less than 2,100 watts
- Cooling – 1,800 watts
- Transmitter
 - 396-watt average power
 - Air cooled

Performance

- Fighter-sized targets at > 40 nmi/75 km
- 90 seconds from power on to full operation
- Track while scan
 - Ten targets
 - Weapons delivery quality data

Easily Maintainable

- Built-In Test fault isolates to the shop-replaceable Unit
- Plug-in modules

Supportable

- Training
- Maintenance documentation
- Spares documentation
- Support beyond 2025

Optional Capabilities

- High-resolution synthetic aperture imaging



Synthetic Aperture Imaging

Full Suite of Modes

Air to Air

- Range While Search Look-Up/Look-Down (LU/LD) at > 50/40 nmi
- Track While Scan LD at > 40 nmi
- Air Combat Maneuvering at 10 nmi
- Head Up Display Search, Vertical Acquisition, Boresight and Slewable
- Adaptive Search Mode LU/LD
- Velocity Search
- Single Target Track
- Situation Awareness Mode

Air to Surface

- Real Beam Ground Map and Expand
- Doppler Beam Sharpening Map - 40:1
- Freeze
- Ground Moving Target Indication > 40 nmi (small ship) and Track
- Air to Ground Ranging
- Fixed Target Track
- Beacon
- Sea Mode > 50 nmi (small ship)

APG-67(v)4 Programs

- The fourth generation of the proven APG-67 radar system has finished development and is integrated on the T/A-50 aircraft.
- A program is underway to retrofit a variant of the APG-67(v)3 radar, currently in operational service, with a variant of the APG-67(v)4 processor, to enhance the capability of this aircraft.
- The APG-67 radar has been selected for use on the AT-63 Pampa Trainer/Light Attack aircraft.
- Additionally, the APG-67 radar has been flight tested on the F-5 aircraft and is adaptable for any small/fighter/attack aircraft.

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