

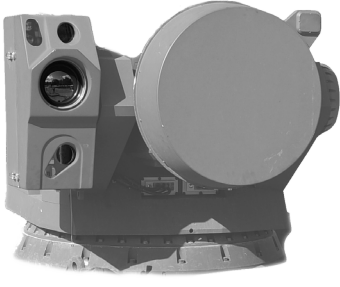
**aselsan**

# AKR-D

NAVAL PLATFORM  
FIRE CONTROL RADARS



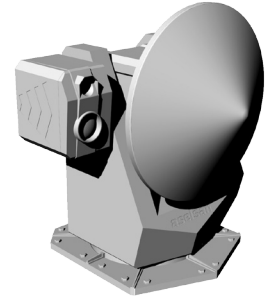
[www.aselsan.com](http://www.aselsan.com)



AKR-D Block-A1, Ku Band, 30km



AKR-D Block-A2, Ku Band, 80km



AKR-D Block-B1/2, X+Ka Band, 120km

# AKR-D

## NAVAL PLATFORM FIRE CONTROL RADARS

AKR-D Family are brand new state-of-the-art fire control radar systems designed by ASELSAN for naval platforms.

- AKR-D Block-A1, Ku Band, 30km instrumented range
- AKR-D Block-A2, Ku Band, 80km instrumented range
- AKR-D Block-B1, X+Ka Band, 120km instrumented range
- AKR-D Block-B2, X+Ka Band, X-Band Illumination, 120km instrumented range

AKR-D radar searches for air and surface targets by automatically directing to the location supplied by the radar operator or other search sensors, locked-in to the targets and produce track information of targets in 3-D with high accuracy. AKR-D air/surface fire control radar supports the capabilities of integrated gun system with high performance.

AKR-D has state-of-the-art solid state power amplifiers, Cassegrain type dual monopulse reflector antenna and improved digital signal processing units. It can keep working with graceful degradation even in case of certain failures in the system.

AKR-D has different operation modes including RF radiation only, E/O track only and corporation of RF and E/O sensors. These modes could be switched easily upon the operational requirements.

AKR-D system can easily be operated in coordination with Search radar, Optical Systems and Combat Management System installed on the platform, while an optional dedicated operator console can be provided on request

### Common features for AKR-D family

- 3-D track information (elevation, bearing and range)
- High accuracy
- Fast response time from detection to tracking
- Video tracking without RF radiation by E/O package (thermal camera, video camera and laser range finder)
- Improved track performance by integration of E/O and RF track info
- Advanced Electronic Counter-Counter Measures;
  - Jammer detection and tracking
  - Waveform agility
  - Frequency agility
  - Wide band width
  - Digital pulse compression
  - Clutter suppression
  - Doppler processing
  - Sector blanking
  - Very low side lobe levels
  - Side lobe blanking
  - Automatic Least-Jammed Frequency operation
  - CFAR (Constant False Alarm Rate) thresholding
- Fire Support;
  - Splash spotting by A-Scope video
  - Miss distance indication
  - Kill assessment
  - Pre-action calibration
  - In-action calibration
- Tracking targets maneuvering at 7g.
- Different search patterns for given sector
- Automatic track initiation to the diverging fast targets in case of firing a guided missile or a bomb by tracked target.
- War-mode frequency and waveform adjustment
- Defining RF free and Laser free regions
- Blanking signal output for Electronic Support and Laser Warning Systems
- Advanced Built-in-Test ability
- ESSM Guided Missile Illumination Capability in AKR-D Block-B2

