

# Medium Range 3D Tactical Air Defense Radar

## AD06 ATAR



The Air Defense 06 ATAR (Advanced Tactical Acquisition Radar) is BATS' fourth generation of 3D Tactical Air Defense Radars.

This AD06 ATAR system is a 3D, solid state L-band medium range tactical radar with Active Electronically Steering Array (AESA) in elevation. The radar detects a wide variety of low RCS targets such as: low flying fighter aircraft, hovering helicopters, low velocity ultra-lights and UAVs.

The radar provides accurate target measurements of range, azimuth and elevation angles, differentiating between aircraft and helicopters and classifying the helicopter type according to its blades returns.

The AD06 ATAR can be deployed as a local Air Defense system providing warning and target designation to Surface-to-Air weapon systems, including MANPADS.

It can be also deployed as gap filler for supporting C3I centers for Air Traffic Control.

The AD06 has been field proven, operating in noisy and high clutter environment.

### Features

- Automatic detection of airborne targets
- Track While Scan up to 100 targets
- Target differentiation and classification
- Interoperability with Surface-to-Air weapon system
- Integration with IFF
- Several radars can be combined into to provide an integrated air surveillance picture
- Low power consumption (2500 W typ.)
- Extensive BIT
- High MTBF (2500 Hrs) and low MTTR (20 Minutes)
- Technologies:
  - Solid State T/R Module
  - Elevation Multi-beam by Phased Array Technology
- Extensive ECCM capabilities
- Digital technologies :
  - Digital beam forming
  - Digital Pulse Compression
  - Digital receivers

### Installation

- Fixed, on the ground or on a tower
- Transportable on a truck

### Applications

- Search radar for supporting surface-to-air weapon system
- Medium range air surveillance
- Gap filler for main air defense radar system
- Local Air Defense C<sup>3</sup> system
- Protection of sensitive sites

### Specifications

- Detection range :
  - Instrumented : 180km
  - Fighter aircraft : 70-110km
  - Hovering helicopter : 40km
  - UAVs and Ultra Lights : 40-60km
- Elevation accuracy : 1°
- Azimuth accuracy : 0,5°
- Range accuracy : 30m
- Elevation coverage : 60°
- Target Detection Velocity : Radial velocity of more than 36km/h
- Transmission : 1600 W Peak, L-Band, Solid State
- Interface Protocol : Asterix
- IFF Modes : 1, 2, 3/A, C (mode 4 optional)
- EMC/EMI : MIL-STD-461C
- Environmental conditions : MIL-STD-810F
- Operation temperatures : (-30°C, +50°C)