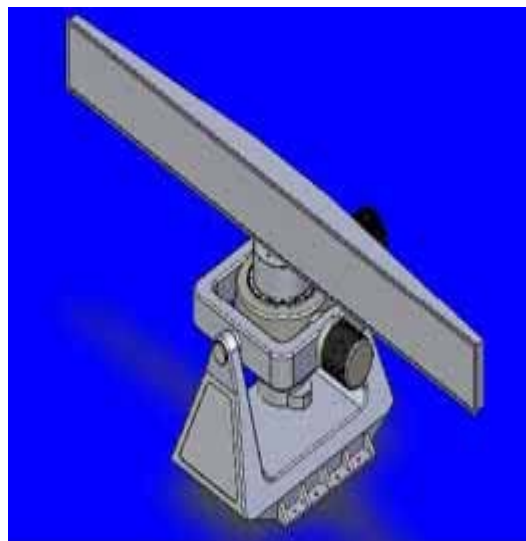


## 2D Multi-Mode Naval Radar

### System Features

- 2D Multi-Mode Naval Radar
- Coherent pulse Doppler processing
- Comprehensive ECCM Suite
- Low mast weight suitable for small vessels
- Integrated into Combat Management System or stand-alone
- Application in Gun Fire Support
- Close range detection and high data update rate for helicopter guidance
- Extensive on-line Built-In Test facilities with integrated diagnostics
- COTS-based software signal and data processor
- Roll & pitch-stabilised antenna platform
- Optional IFF capability



**Table 1: Performance Specifications**

Radar frequency	X-band (NATO I/J Band)
Radar Detection Range(Fighter aircraft)	> 45 km (5 m Radar Cross Section)
Rotation Rate(Air/Sea Surveillance)	15 rpm
Rotation Rate(Self-Defence Anti-Air)	30 rpm
Rotation Rate(Gun Fire Support)	60 rpm
Rotation Rate(Helo Guidance)	60 rpm
Accuracy(Azimuth)	< 0.3°
Accuracy(Range)	< 10 m
Instrumented Range(Air/Sea Surveillance)	2 - 55 km
Instrumented Range(Self-Defence Anti-Air)	1 - 30 km
Instrumented Range(Gun Fire Support)	1 - 25 km
Instrumented Range(Helo Guidance)	200 m - 10 km
Elevation Coverage	> 7.5° cosec to 35°
Operational Temperature(Above decks)	-30° to +50°C
Operational Temperature(Below decks)	+5° to +45°C
Stabilisation(Roll)	±35°
Stabilisation(Pitch)	±10°

### Sub-system Features

- **Antenna**

- > Planar Array Antenna
- > Aperture Dimensions (excluding IFF): 2.8 x 0.4 m
- > Stabilisation Accuracy: < 1°
  
- Transmitter
  - > Type: Air cooled Travelling-Wave Tube Amplifier
  - > Bandwidth: > 7%
  - > Output Power: 8 kW nominal
  
- Receiver/Exciter
  - > Multi-channel
  - > Pulse Compression
  
- Signal/Data Processing
  - > Type: Doppler Software Signal Processor
  - > Separate air and surface channels
  - > Plot Capacity per scan: > 200 each air and sea plots
  - > Target Classification: Surface, rotary wing or fixed wing
  - > Track Initiation: Manual or automatic

#### Physical Features

- Mass
  - > Antenna/Pedestal: < 400 kg (excluding IFF)
  - > Below Decks: < 1000 kg
  
- Receiver/Exciter
  - > Antenna/Pedestal: 1.5 m height x 1.5 m swept radius
  - > Below Decks: 1.8 m x 1.95 m x 0.65 m (h x w x d)

#### Options

- Mass
  - > Control and Plot/Track display in absence of Combat Management System
  
- Receiver/Exciter
  - > Supplied or as Customer Furnished Item
  - > Plot integration with primary or as separate interface
  - > Control Interface directly to CMS

2D Multi-Mode Naval Radar

<http://surveillance-radars.at-communication.com/en/at/rsr-210n.html>