



# BARRACUDA

## RADAR ELECTRONIC SUPPORT MEASURE

### Your Silent Observer

BARRACUDA, an innovative Radio Direction Finding (RDF) system, leverages advanced technology to excel in the electromagnetic environment, providing early warning capabilities against potential threats. With extensive 360° coverage and a range of 500 km, it adeptly detects and determines target directions using a passive approach, which is ideal for stealth and intelligence gathering. Aligned with Electronic Support Measures (ESM) for safety operations and Electronic Countermeasures (ECM), BARRACUDA proves invaluable in military applications. Serving as a complementary component to existing radar systems, BARRACUDA stands as a dependable early warning system, safeguarding Malaysia's airspace sovereignty.



## Key Features



Receiving signals from radars in all directions within a 500 km radius, including signals from air targets.



Characterizing the signal of a target and evaluating its shape parameters for comparison with data in the Emitter Library.



Identifying the bearing of targets in real-time with a 3° RMS accuracy.



Recognizing the position of incoming targets.



Providing a warning system for suspicious/hostile aircraft.



Facilitating early actions and ensuring battle readiness.



Open architecture design for an integrated environment.

## Technical Specifications

| Parameter  | Specification  |
|--|--|
| Operating Frequency Range                                | 0.95 – 18 GHz  |
| Bandwidth of Bearing Analysis                            | 500; 100; 50; 20; 10; 5; 2; 1; 0.5; 0.1 MHz          |
| Bandwidth of Parallel Detection                          | Entire operating frequency range                     |
| Antenna Pattern  | 360° (6 beams×60° each)                              |
| Detection Range:<br>Surface Target<br>Airborne Target    | up to 100 km<br>up to 500 km (LOS)                   |
| Direction Finding Method                                 | Angle of Arrival (AOA)                               |
| Bearing Accuracy   | 3° RMS   |
| Numbers of Simultaneous<br>Detection and Identifications | Up to 200  |
| System Sensitivity                                       | -110 dBW (wideband 500 MHz)<br>-130 dBW (narrowband) |





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