



ELDIS
RADAR
SYSTEMS

RL-3000 **3D LONG RANGE AIR SURVEILLANCE RADAR**

ELDIS RL-3000 is a fully software-defined 3D long range surveillance radar that provides Command and Control (C2) centers with a comprehensive situational overview of aerial situation and detects all threats within the declared range of the radar.

The radar is intended for continuous monitoring of airspace. It detects and classifies individual types of objects with different Radar Cross Section (RCS) in a wide range of speeds.

The system uses the latest processing technology utilizing a powerful fail-soft architecture and advanced detection and extraction algorithms. Therefore it is capable to process large amounts of data and adaptively suppress not only ground clutter but also sea clutter.

The radar is equipped with a MSSR interrogator with full Mode S capability and can be extended with an functionality Identification Friend or Foe (IFF) which provides automatic identification of targets.

BASIC DETECTION PARAMETERS

- › Operating frequency S-band (NATO E/F-band)
- › Instrumented range 240NM
- › Instrumented ceiling up to 100,000 feet
- › Elevation coverage > 25°
- › Refresh rate selectable (from 6 to 10 seconds)

KEY FEATURES

- › Advanced solid-state 3D PSR sensor with IFF extension
- › AESA antenna using stacked beams in elevation
- › GaN technology
- › Fully digital radar integrating T/R modules with digital signal distribution and processing
- › Output peak power:
 - PSR 70 kW
 - MSSR 2.5 kW
- › Software defined radar (SDR), utilizing highly modular architecture
- › Programmable operating modes
- › BITE diagnostics up to LRU level
- › Automatic system of local and remote diagnostics and control (optional manual override in combat mode)
- › Wide operating bandwidth
- › Frequency agility
- › Electronic counter-countermeasures (ECCM)
- › Antijamming techniques
- › Automated / manual selection of operating frequency, transmitted waveform and EMCON

DATA OUTPUTS

- › Standard data outputs ASTERIX Cat 034/048
- › Weather data output ASTERIX Cat 008/009
- › ADS-B data output ASTERIX Cat 021

AVAILABILITY AND RELIABILITY

- › Operational availability > 99 %
- › MTBCF > 3,500 hours
- › MTTR < 45 min.
- › Preventive maintenance 60 hours / year

CONFIGURATION, INSTALLATION AND INTEGRATION

- › Standalone installation with ELDIS GCI C2 system (ERDIS)
- › Simple integration into a national airspace surveillance network
- › Integration and adaptation with existing national C2 systems

