SL- ASR- II
Semi-Long Vhf Air Surveillance Radar

DESCRIPTION

Mobile solid state digital VHF band radar is a semi-long range system designed to detect air targets within the radar's coverage to determine the target's coordinates such as range, azimuth and range rate as well as to transmit radar information to the air defense information network. SL-ASR-II is new generation radar, combining advanced radar developments, modern digital technologies and hardware with constructive technological solutions. The radar can operate in self-contained mode and also as a component to automation C3I system. SL-ASR-II is a highly mobile, fully solid state, medium altitude surveillance radar developed based on the armed forces' operational demands. This radar is vehicle carried and designed based on full coherent pulse compression and MTD detection techniques. The radar is characterized by good performances such as high mobility, high automation, etc.

FEATURES

- Advanced signal processing and data extraction
- Early detection of air targets and determination of their coordinates including range, azimuth, radial velocity and height.
- Capability of IFF system conjunction as secondary radar.
- Advanced ECCM capabilities against wide range of jamming and interference.
- Target tracking using TWS technique.
- Detection of targets with small RCS, stealth, and low altitude (such as UAVs).
- Supplying peripheral radars with extracted target data.
- Standard ports for data transmission
- High reliability and easy maintenance
- Modular designed system

TECHNICAL FEATURES

Transmitter	
Type	Fully solid state
Frequency band	VHF
Peak power	12kw
Duty cycle	10 %
Signal	Pulsed
Antenna	
Type	Array yagi
Gain	27 dB ~ 28 dB
Azimuth beam width	6.5°
Elevation coverage	20° (Csc2)
Receiver	
No. of channels	2
Type	Super heterodyne
Noise figure	≤5 dB
Dynamic range	≥80 dB
Processing	
Processing modes	Normal, MTI, MTD
Tracking	
TWS	≥40 targets
Max. detection range	500 km (RCS≥ 5m2)
Min. detection range	2 km
ECCM capabilities	
Adaptive threshold (CFAR), sector blaning, frequency agility, code agility, staggered PRF	
Environmental conditions	
Indoor temperature	0°C ~ +40°C
Outdoor temperature	-20°C ~ +55°C
Storage temperature	-30°C ~ +65°C
Control and Monitoring	
Monitors size	19'' (2 pieces)
Operator console	2 pieces
Built in Test capability	Yes