SELEX
Sistemi Integrati
A Finmeccanica Company

Predictable results
for unpredictable threats

RAT 31DL/M
3D DEPLOYABLE LONG RANGE RADAR

RAT 31DL/M is the latest distributed fully solid-state radar designed by SELEX Sistemi Integrati.

RAT 31DL/M is a Tactical Long Range Radar operating in L-band, specifically designed to support the NATO troops in peacekeeping missions. RAT 31DL/M can be deployed on the battlefield as a front line system to protect and survey territories and assets against all air threats.
To perform these tasks in a worldwide tactical environment, the RAT 31DL/M is highly mobile and does not require any special loading /unloading equipment.

The whole system is housed in two 20 ft ISO container, mounted on two commercial cross-country trucks for land mobility.

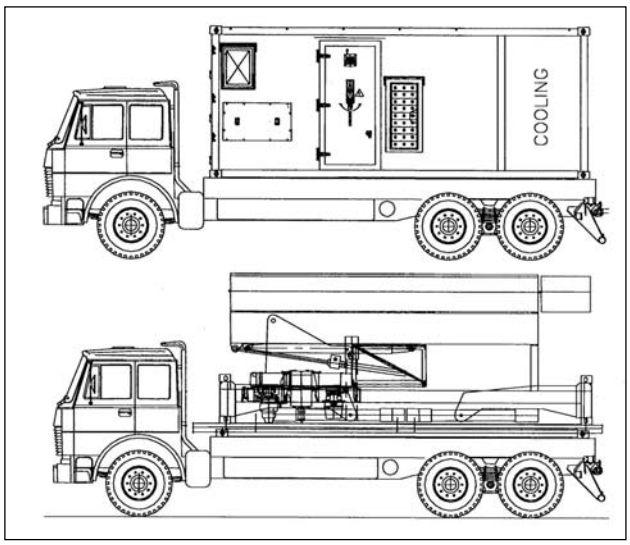
This radar is designed for rapid deployment, to provide the Corps with the capability to move quickly for regrouping. It is equipped with its own electrical power source and is self-sufficient for a long time.

The system acts as an Air Defense stand-alone Command and Control Center. It can be integrated in a cluster of some netted RAT 31 family systems (RAT 31SL, RAT 31DL, RAT 31S) reporting to a mobile Command and Control Center (provided as well by SELEX Sistemi Integrati) which ensures outstanding radar co-operation by means of robust radio link communications.

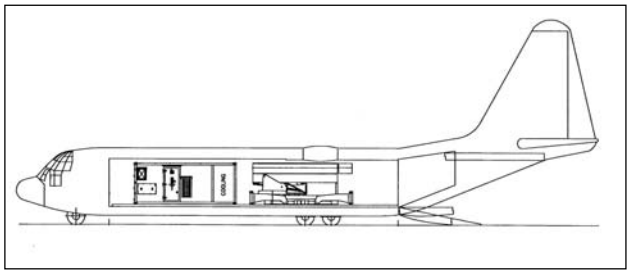
The RAT 31DL/M belongs to the RAT 31 radar family, which guaranteed SELEX Sistemi Integrati's successes in all the Long Range Radar NATO bids in the last 15 years. The radar architecture is the worlwide unique Multiple Simultaneous Pencil Beams (MSPB). The multiple beams are electronically and independently steered in elevation both in transmission and in reception.

This technology allows innovative and dedicated war-fighting solutions against several threat sources such as TBM, ECM, mass raid.

RAT 31DL/M exceeds NATO requirements for the Deployable Air Defence Radar and provides the troops and assets with the best protection in outside operation. Monopulse technique in the elevation angle measurements is applied to the targets flying in the wide RAT 31DL/M coverage volume, thus ensuring high-quality 3D target data. The MSPB architecture provides a large number of transmitted pulses in each beam pointing direction, guaranteeing high clutter suppression in adverse weather conditions in the whole instrumental coverage volume.



RAT 31DL/M Road transportability



RAT 31DL/M Air transportability (C-130)

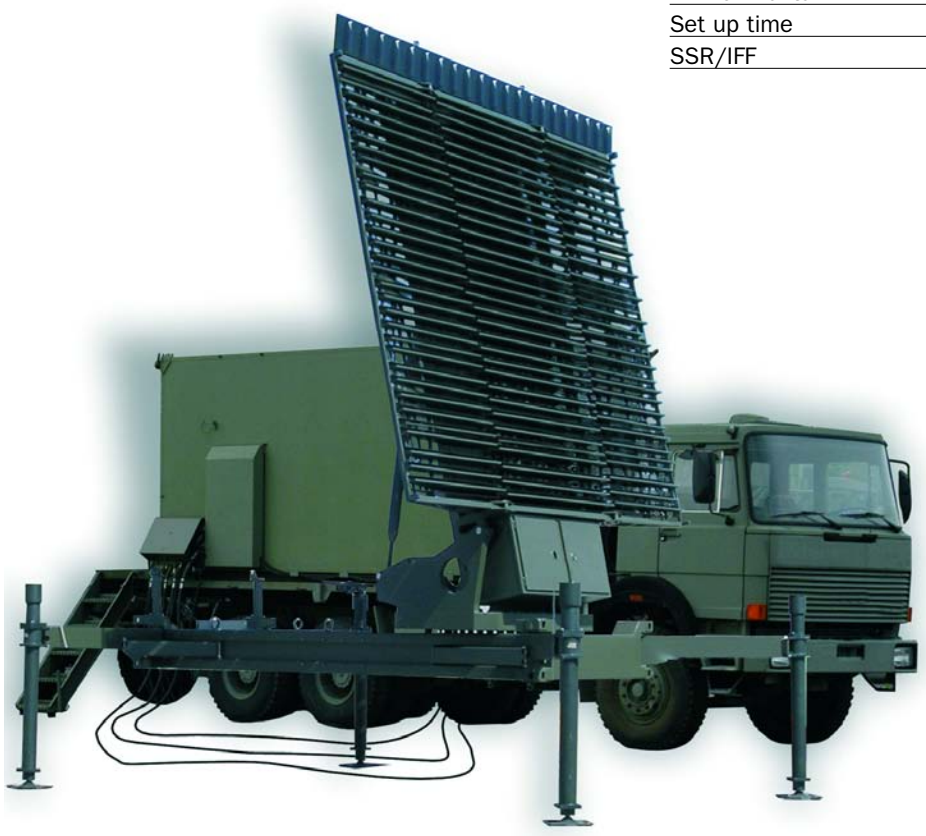
The most advanced processing techniques are supported by flexible and state-of-the-art data processors. These features, combined with the ultra-low antenna sidelobes and the advanced ECCM techniques, guarantee an outstanding jamming resistance.

KEY SYSTEM CHARACTERISTICS

- Tactical L-band Long Range Early Warning radar
- Tactical Ballistic Missile Defence Radar
- Distributed Solid State transmitters/Receivers
- Multiple instantaneous and simultaneous pencil beams in transmitting and in receiving
- High mobile and rapidly deployable
- High detection performance in heavy ECM and clutter environment

MAIN TECHNICAL CHARACTERISTICS

Frequency Band	L
Instrumental range	400 Km
Elevation coverage	-2° to 20° ABT
	(30.5 Km height ABT ceiling)
Size	2 load 20' ISO std
Weight	30,000 Kg
	(each single package < 8,000 Kg)
Transportability	aircraft (C-130)
	helicopter (CH-47)
	road (10 tons std)
Environmental	-40 to +50°
Set up time	120 min. by 5 persons
SSR/IFF	every available mode



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