



MILDAR

Fire Control Radar

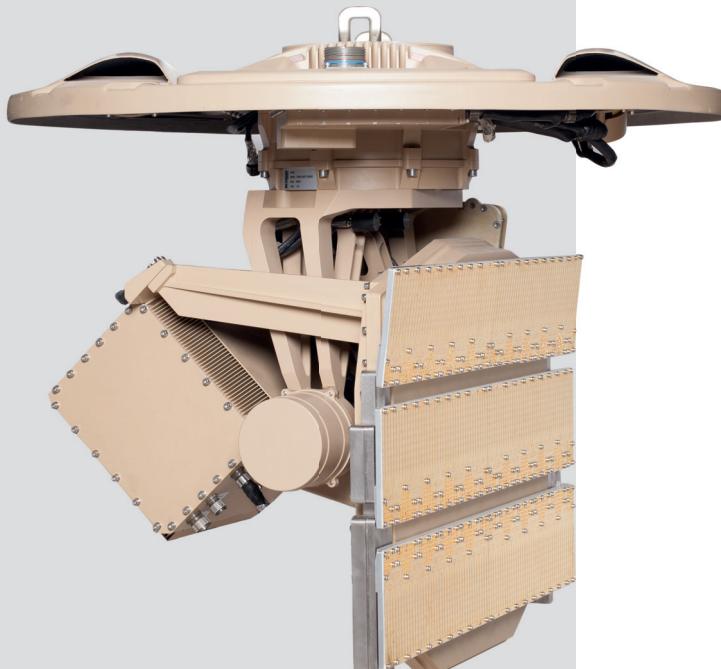


The MILDAR, which is developed as a Fire Control Radar, is characterized with its small size, weight, and power consumption (SWAP) property. In the scope of the MILDAR's primary functionalities targeting and terrain profiling, LPI (Low Probability of Intercept) property, frequency hopping, Track-While-Scan capability, multiple target tracking, smaller weight and size with "Embedded Waveguide" technology compared to its rivals, are the prominent features of the MILDAR Fire Control Radar.

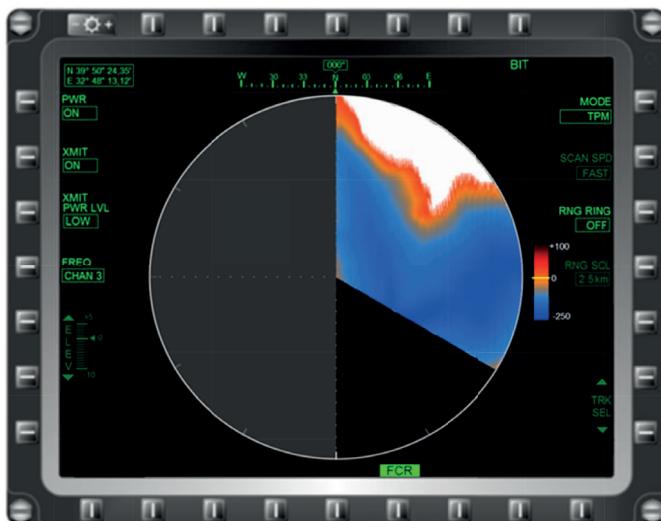
The MILDAR whose operating frequency is Ka-band, provides precise angular and range resolution for the ground targets including main battle tanks (MBTs), armoured fighting vehicles (AFVs), and armoured personnel carrier (APCs) within 12 km in range, for the air targets including helicopters and unmanned aerial vehicles (UAVs) within 8 km in range. It also provides target classification feature based on target speeds. The MILDAR capabilities are aimed to increase T129 ATAK Helicopter's lethality and survivability. The MILDAR makes a significant improvement on the warfighting capability of T129. It will be the force multiplier qualified and verified through excessive field testing efforts.

Pilots have substantial difficulties in maintaining flight safety during the flights in low visibility and low altitude conditions. The MILDAR facilitates the pilots in these conditions with terrain profiling for the area over which the helicopter will navigate. In terrain profiling mode, the MILDAR creates a terrain profile including the terrain topology and natural/artificial obstacles over the terrain up to 2.5 km in range. The MILDAR's terrain profiling feature gives a significant contribution to the pilot's situational awareness during the low altitude flights.

Although the MILDAR's qualification process is completed by integrating the system under T129's right boom bracket without having to structurally modify the helicopter, the MILDAR with its 360° angular scanning span is ready to be deployed on any suitable region of the helicopter including the helicopter's static mast.



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Targeting Mode (TM) Specifications

Operating Frequency	Ka-bant
Range @SlowScan	12 km
Range @FastScan	8 km
Number of Targets	50

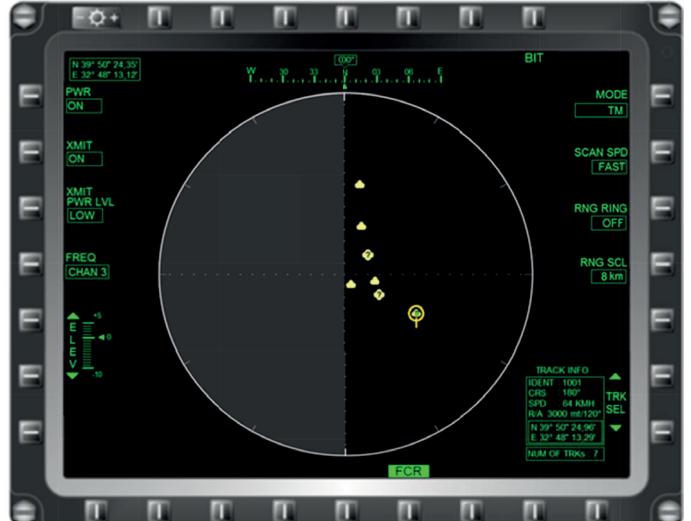
- High Range Resolution
- High Angular Resolution
- Coherent Signal Processing
- Pulse Compression
- Costumized Wave Form
- Solid State Technology

Terrain Profiling Mode (TPM) Specifications

Coverage	60°- 120°
Minimum Range (Rmin)	100 m
Maximum Range (Rmax)	2500 m

Other Specifications

Avionic Bus	MIL-STD-1553B
Video	XGA
Control	VMFD-68
Weight	55 kg
Size	750x750x750mm
Mechanical Interface	Hook Lifting Release (2 pc MS3314 Suspension lug)



Environmental Conditions

MILDAR whose qualification process is completed in accordance with the rotary wing aircraft's requirements, can appropriately operate under the following environmental conditions:

Operating Temperature	-35°C - +55°C
Storage Temperature	-35°C - +65°C
Vibration	MIL-STD-810F
EMI/EMC	MIL-STD-461F
Power Characteristics	MIL-STD-704E
Relative Humidity (Operating)	%95