



## 3D Radar M4 3D Air Surveillance Radar



### TECHNICAL SPECIFICATIONS

Parameter	Value														
Operational Frequency	S band														
Radar Bandwidth	400 MHz														
Coverage in Elevation	0° ~ 25°														
Coverage in Azimuth	0° ~ 360°														
Track While Scan (TWS)	200 targets														
Radar Processing Modes	Normal, MTI, PD														
Range	450 km (Instrumental Range) 350 km (RCS 2m2 , SW1 , Pd=0.8 , Pfa=10-6)														
Accuracy in Range	100 m														
Accuracy in Azimuth	0.3°														
Accuracy in Elevation	600m (@200 Km)														
Resolution in Range	200 m														
Resolution in Azimuth	1.4°														
Resolution in Elevation	2° ~ 3.5°														
Speed of Detectable Targets	20 m/s – 3 Mach														
Antenna Rotation Speed	3 & 6 RPM														
Number of Beam	12 (Digital Beam Forming)														
Antenna Specifications	<table border="0"> <tr> <td>Antenna Type</td> <td>Slotted Waveguide Planar Array</td> </tr> <tr> <td>Antenna polarization</td> <td>Linear, Horizontal</td> </tr> <tr> <td>Antenna gain</td> <td>40dB</td> </tr> <tr> <td>Elev. S.L.L</td> <td>&lt;-25dB</td> </tr> <tr> <td>Az. S.L.L</td> <td>&lt;-35dB</td> </tr> <tr> <td>Elev. BW</td> <td>2° ~ 3.5°</td> </tr> <tr> <td>Az. BW</td> <td>1.4°</td> </tr> </table>	Antenna Type	Slotted Waveguide Planar Array	Antenna polarization	Linear, Horizontal	Antenna gain	40dB	Elev. S.L.L	<-25dB	Az. S.L.L	<-35dB	Elev. BW	2° ~ 3.5°	Az. BW	1.4°
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Detection Altitude	100 m – 28000 m														
Transmitter	Type: Solid State Number of Array Lines: 40 Power of each Array Line: 800 w														
ECCM Capabilities	Burn Through, SLB, SLC, Frequency Hopping, PRF Jitter, JATS, LSL antenna														
Calibration and BIT	Yes														
IFF	SSR/MSSR														
MTTR	>30 minutes														
MTBF	<800 hours														
Set up Time	30 minutes by 6 people														
Teardown Time	30 minutes by 6 people														
Number of Truck	3 trucks for radar system and 3 trucks for telecommunication and maintenance systems														
Number of Crew	6														
Non operational Temperature	-40°C ~ +70°C														
Operational Temperature	-30°C ~ +60°C outdoor -10°C ~ +45°C indoor														
Maximum Operational Altitude	3000 m from the sea surface														
Tolerable Wind Speed	25 m/s (operational mode)														
Humidity	95% @ 30° C														
Salt Fog	2 mg/m2														
Rain	5 mm/min														