R15000 Low-Altitude Surveillance Radar

1 Performance Parameters

No.	Parameter Name	R15000
1	System	One-dimensional simultaneous multi-beam
2	Beam Scanning Mode	Elevation simultaneous multi-beam, azimuth mechanical scanning
3	Operating Frequency Band	Ku
4	Frequency Adjustable	Yes
5	Average Power of the Whole Machine	≤ 2000 W
6	Detection Capability (Detection Probability 85%)	≥ 15km (RCS=0.01m²), 15rpm; ≥ 25km (RCS=0.1m²), 15rpm
7	Range Blind Zone	≤ 200m
8	Azimuth Coverage	360°
9	Elevation Coverage	≥ 60°
10	Speed Measurement Range	1m/s - 300m/s
11	Range Measurement Accuracy	≤ 10m
12	Azimuth Measurement Accuracy	≤ 0.2°
13	Elevation Measurement Accuracy	≤ 0.3°
14	Data Rate	4s
15	Number of Simultaneously Detected Targets	≥ 500 targets
16	Weight	≤ 120kg
17	Dimensions	Antenna: 850mm×460mm×115mm; Turntable: 450mm×390mm×260mm

The R15000 low-altitude surveillance radar, featuring Ku-band operation, 360° azimuth coverage, and a detection range of up to 25km for targets with RCS=0.1m², offers precise tracking of over 500 targets simultaneously with high measurement accuracy (≤10m range, ≤0.2° azimuth, ≤0.3° elevation) and a compact design (≤120kg), making it ideal for critical infrastructure security, border surveillance, and low-altitude air traffic management.