

RT02 Low-Altitude Surveillance Radar

Technical Parameters

No.	Item	Specification
1	Operating Frequency Band	Ku Band
2	Spatial Coverage	- Elevation: -5°~60° - Azimuth: 360° - Range: 3.5km - Blind Zone: 50m - Height: 600m
3	Detection Capability	- Small Rotor UAV (RCS=0.01m²): ≥2km - Medium Fixed-wing UAV (RCS=1m²): ≥3.5km - Personnel: ≥2.5km - Helicopter/Vehicle: ≥3.5km
4	Measurement Accuracy	- Range: ≤5m (RMS) - Azimuth Angle: ≤0.4° (RMS) - Elevation Angle: ≤0.4° (RMS)
5	Antenna Rotation Speed	20rpm (3s), 30rpm (2s), 60rpm (1s, upgradable)
6	Simultaneous Tracking Targets	≥100 targets
7	Tracking Speed	1m/s ~ 100m/s

Interface & Power Supply

No.	Item	Specification
1	Power Supply	DC18 ~ 28V (with AC220V-DC24V adapter)
2	Communication	Gigabit Ethernet connector
3	Power Consumption	≤120W

Environmental Adaptability

No.	Item	Specification
1	Operating Temperature	-40°C~+55°C
2	Operating Humidity	≤90%
3	Protection Class	IP66 (Host IP67)

Weight & Dimensions

No.	Item	Category	Specification
1	Weight (kg)	Single Unit	- Host: 9 - Turntable: 13.5 - Tripod: 13
		Packaging	- Host+Turntable: 42 (including all accessories like adapter) - Tripod: 15
2	Dimensions (mm)	Single Unit	- Host: 440* 355* 90 - Turntable: 400* 228* 216 - Tripod: 1050* 230 *230
		Packaging	- Host+Turntable: 580* 460* 220 - Tripod: 1140* 290* 290

The RT02 Low-Altitude Surveillance Radar is a high-performance system that accurately identifies and continuously tracks low-altitude targets such as aircraft, UAVs, birds, and loitering munitions, while also monitoring ground and surface targets. It integrates Digital Beam Forming (DBF) technology, offering 360° azimuth and 65° elevation coverage, a refresh rate of 1s/2s/3s, and the ability to track over 100 targets simultaneously with a speed of up to 100m/s. Featuring adaptive clutter suppression for low false alarm rates, portability with low power consumption and lightweight design, it is widely applied in air traffic control, key area protection, low-altitude economy, airport bird detection, battlefield anti-UAV operations, and border/coastal defense.