



BCS07 radar is a low-altitude surveillance and reconnaissance device operating in the Ku-band frequency range, capable of detecting small, slow-moving targets. This radar employs an Active Electronically Scanned Array (AESA) configuration. It uses a phase-scanning mode in the elevation scan, while mechanical scanning mode in the azimuth to achieve 360° azimuth coverage. The entire system is designed with a modular, all-solid-state approach to ensure equipment reliability. It can replace high cost phase array radar.

With 360° mechanical scanning technology, BCS07 can perform all-weather detection of high and low speed objects. With highly accurate azimuth data, combined with EO/IR cameras, it can automatically track and identify UAVs day and night, and selectively interrupt the downlinks of UAVs with operators. Moreover, adopting CW technology, BCS07 has higher detection efficiency with lower transmission power and less vulnerable to interception.

Features:

360° azimuth mechanical scan, 0-60° elevation frequency scan

All weather detection of mini, low altitude, high/low speed targets

Can detect distance, azimuth, elevation angle and speed

GIS and sea chart fusion into the display interface

Can detect and identify multiple targets selectively and precisely in noise backgrounds

Can work with EO/IR system cameras for visual identification of drones

Can work with RF jammer to neutralize various drones manually or automatically

Multi-beam scan and CW technology, higher detection efficiency, lower power and less interception

Specifications:

Frequency band: Ku

Detection range: ($P_d=0.9$ $P_t=10^{-6}$):

Mini drone ($RCS=0.01m^2$)

6km $RCS=1m^2$ 10km

$RCS=10m^2$ 14km

Range and scope: 0.075 to 30km

Detection Azimuth: 0-360°
 Detection Elevation: 0-60°
 Scan speed: low/medium/high, adjustable (Sector scanning)
 30°, 60°, 90°/s (Omnidirectional scanning)

Antenna

Antenna size: 380*220*0.5mm

Antenna gain:

>28.5dB E beam

width: <14 deg E

sidelobe level:

<-20dB H beam

width: <2°

H sidelobe level: <-24dB

Detectable target speed: ±1km/h to ±80km/h



multi-purpose

Accuracy

Distance accuracy: ≤10m

Azimuth accuracy: ≤0.3deg

Elevation accuracy: ≤0.5deg

Resolution

Distance resolution:

≤15m Azimuth

resolution: ≤2deg

Elevation resolution:

≤8deg Track mode: TWS

Target number: 200

MTBF: ≥2000 hours

MTTR: ≤0.36 hours

Continuous work time: 24 hours

Power consumption: 280W

Radar: 880*510*240mm

Weight: 35 kg

