

ED-GRS Series Integrated Surveillance Radar System

Introduction

Integrated Surveillance Radar System is designed to detect and track distant moving targets with a slew-to-cue of camera to radar. This fixed solution provides higher efficiency in target recognition, identification and alarm to threats. It is built to support border security, critical infrastructure protection, police & military mission in perimeter.

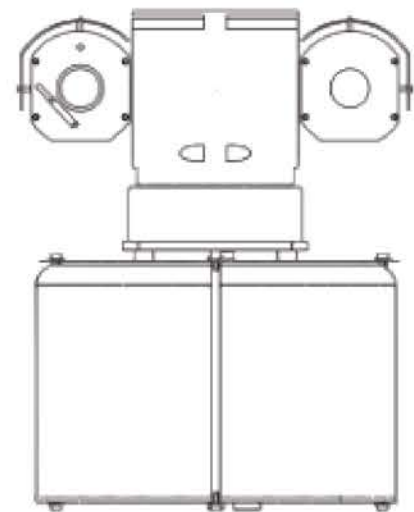
Operating in K-band with LFMCW signal and Mechanical Scanning System, it adopts advanced techniques like TWS, MTD, ATR, FD.

This multi-mission system is also built as a mobile defence solution when installed on a trailer, which combines surveillance radar, infrared/visible light camera, electric mast, encrypted communication equipment and battery supply. Outstanding performance with fast setup of warning area, enabling users to make strategic decisions.



Specifications

*Radar Unit	
Frequency Band	K-band
Detection Range	≥ 3000m (vehicles)/≥ 1500m (humans)
Modulation	Linear Frequency Modulation Continuous Wave (LFMCW)
Minimum Detectable Velocity	0.3m/s
False Alarm Rate	1×10 ⁻⁶ (or one/day)
Ranging Accuracy	0.4m
Angular Accuracy	0.4°
Scan Rate	30rpm
Refresh Rate	0.5Hz
Covering	360°
Operating Temperature	-40°C ~ +50°C
Consumption	Typical ≤ 30W/Maximum 50W
Weight	≤ 8kg
Size (D×H)	≤ Ø360mm×250mm
Output Format	TCP/IP Ethernet
Data Rate	100Mb/s
IP Rate	IP65
*Camera Option (reference only)	
Humans Readable Range	Daytime 800m/Night 420m
Resolution	1920×1080 f60
Minimum Illuminance	Color 0.05lux / Mono 0.01lux
Field of View	65°~ 2.3°
Lenses	4.3mm~129mm
Horizontal Rotation Range	0°~ 360°
Vertical Rotation Range	-90°~+90°
Horizontal Rotation Speed	0°~ 80°/s
Vertical Rotation Speed	0°~ 60°/s
Working Temperature	-35°C ~ 55°C
Power	AC24V/2.5A
IP Rate	IP66
Weight	≤ 8kg
Wiper	Yes



Features

- Outstanding integrated solution with radar + infrared/visible camera
- User-friendly interface with touching screen
- Continuous 360° surveillance with the coverage up to 78m²
- Target number up to 256 during TWS
- Advanced real-time MTD/tracking algorithm
- Remote control capability based on Ethernet
- System networking available via multiple frequency design
- Easy installation and deployment with high reliability
- Affordable Technology

Applications

- Border Security
- Critical Infrastructure Protection
- Anti-terrorism
- Special Service Guarantee
- Training and Surveillance
- Mobile and Emergency Surveillance