

EXPERIENCE THE DIFFERENCE YOUR SECURITY & SAFETY PRODUCTS



Ground Surveillance Radar

C4iwave S20-G is a Ku-band pulse doppler radar specially used in ground security monitoring. It has the ability to carry out large-area, long-lasting, high-density search and monitoring of ground targets and instantaneous multi-target tracking. It adopts a customized AI algorithm, not only It can monitor and classify ground personnel and vehicle targets, and it can also effectively warn low-altitude drone intrusion. With high detection accuracy and cover age Wide, high installation flexibility, all-time, all-weat her work and many other advantages.

Al intelligence

Electronic phase scanning, autonomous positioning and orientation, ground and low-altitude target classification, excellent ground clutter suppression signal processing algorithm

Environmental adaptability

Fully sealed design, excellent performance such as wind resistance, salt spray resistance, rain resistance, damp heat resistance, high reliability, and maintenance-free

Small target detection

Phased array rapid scanning, high data refresh rate, minimum detection speed 0.2m/s, effective identification and detection of low, small and slow targets

Easy to deploy

Using Ethernet communication interface, integrated design, easy to deploy, simple to configure, and easy to operate

Multi-target processing

Active phased array system, with 0~256 batches of multi-target tracking capabilities (optional processor to enhance target tracking capabilities)

Integration

It can be installed separately or integrated with multiple devices, supporting compatibility to various security monitoring platforms and alarm platforms

High precision

Distance accuracy is 3m, distance resolution is 10m; angle measurement accuracy is 0.3°, azimuth resolution is 3°

Expansibility

Support 360° scanning & detection by using multi-array mode or rotary table

APPLICATION SCENARIOS



Early warning of suspicious target approach, Prevent and control terrorists



Smart guard zone, Unattended security



Real-time tracking of suspicious targets, Guarding border security



Combating Drug Smuggling and Trafficking, Strictly prevent cross-border crime

TECHNICAL DATE

Product type		C4iwave S20-G
Operating Frequency		Ku
Power Transmitted		10W
Azimuth Range		±45°
Pitch Range		8° (machinery ±10°, adjustable)
Velocity Measurement Range		0.2m/s-80m/s (radial direction)
Min.Operating Distance		90m
Distance Precision		3m
Azimuth Angular Precision		0.3° or 0.5°(optional)
Typical Target Detection Range	UAV (RCS 0.01m²)	3km
	Walking person (RCS 0.5m²)	7km
	Small vessel (RCS 4m²)	15km
	Middle vessel (RCS 20m²)	20km (FSR)
Velocity Resolution		0.2m/s
Distance Resolution		10m
Azimuth resolution		3°
Data Refreshing Rate		>10Hz
Power Supply		AC 220V±22V, 50Hz±5Hz Storage battery: DC24V±2.4V
Overall Power Consumption		<130W
Dimension		575mm×282mm×84.5mm
Weight		15kg
Ingress protection		IP66
Communication Interface		Network interface
Operating Temperature Range		-40°C∼+65°C







