
AresX™ Portable Tactical Reconnaissance Radar



*Military and Police Border Defense
Industry Solutions*



“ELECTRONIC SENTINEL” INDIVIDUAL SOLDIER RECONNAISSANCE ALERT SYSTEM

The AresX™ unmanned “Electronic Sentinel” system consists of detection units, aggregation modules, and mobile terminals. It is an intelligent security solution that integrates detection, perception, and response in a single platform. Designed with low power consumption, no infrastructure dependency, long standby time, auto wake-up, rapid deployment, high reliability, and strong concealability, the system is ideal for critical control areas such as mountain passes, narrow channels, and uninhabited islands. It effectively prevents illegal border crossings, smuggling, infiltration, and other disruptive activities.



System Features

1 Highly adaptable to diverse environments

it addresses needs such as blind spot coverage at border and coastal surveillance points, mobile deployment of concealed sentry units, and operations in harsh or hard-to-deploy conditions.

1

2 Flexible model configurations

The **high-altitude model** is suitable for regions at elevations ≥ 3000 meters; the **standard model** is designed for areas below 3000 meters. The **portable model**, powered by an internal battery, is ideal for temporary duty missions, while the **fixed model** is suited for locations with available power and transmission infrastructure.

2

3 Modular design enables efficient operation

With a modular structure, the system allows for easy maintenance, inspection, component replacement, and self-diagnosis via the control software—ensuring fast and convenient management and upkeep.

3

4 Secure data transmission

Designed to prevent unauthorized device access and information leakage, ensuring robust system security.

4

CB/RB101-3100C ELECTRONIC SENTINEL

The functions of aggregation equipment

Data aggregation	Data transmission
Data fusion	Equipment security
Data storage	Transmission security

The functions of detection equipment

Target detection	Self-grouping
Trigger wake-up	Intelligent analysis
Equipment positioning	Equipment positioning
	Data storage

The functions of mobile terminal

Alarm display	Data storage
Data storage	Electronic map
Equipment status	Information interaction
Electronic map	Display control terminal

Custom equipment colors available upon request.

Forest Green



Metallic Yellow



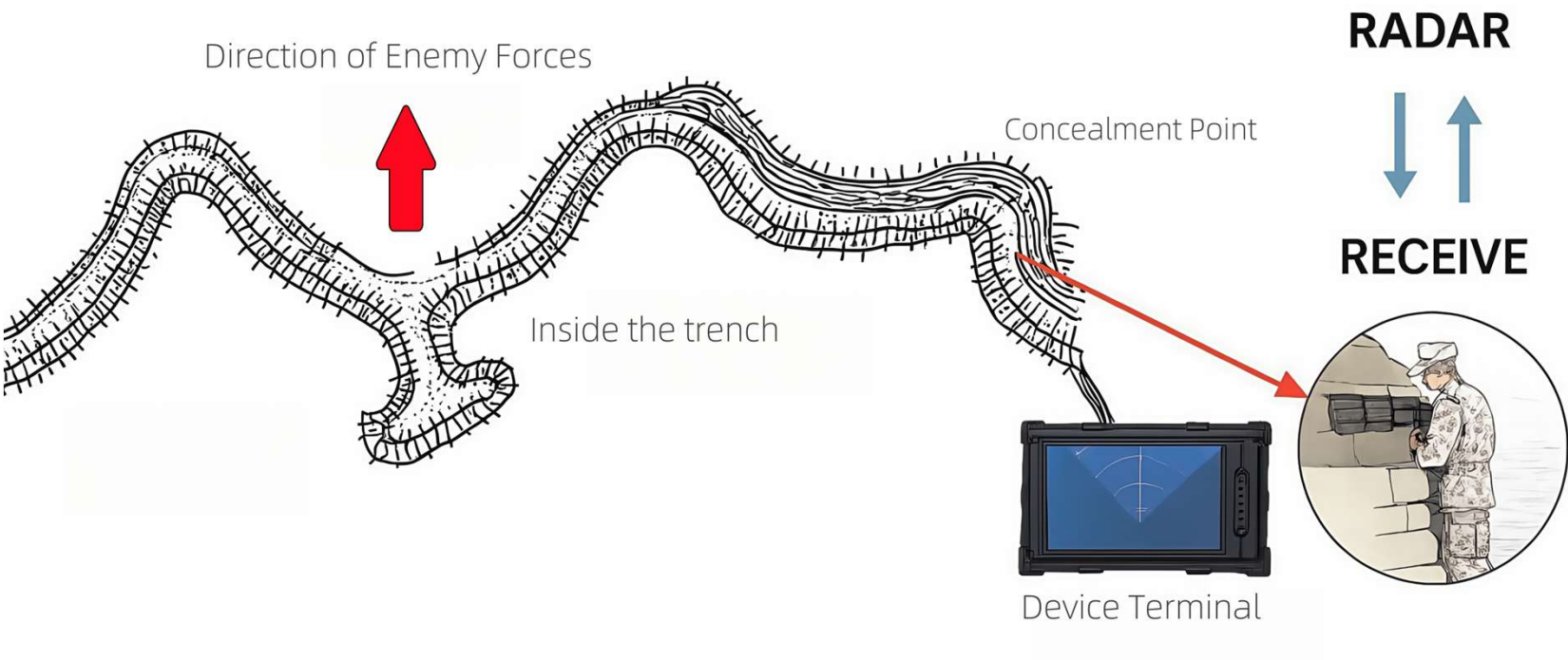
Glacier Gray



CB/RB101-3100C ELECTRONIC SENTINEL



Low power, Standalone
Long standby, Self-waking
Quick deployment, Highly
concealable



Applicable to war zones,
mountain passes,
uninhabited islands, jungles,
corridors, and other
regulatory blind spots.

CB/RB101-3100C ELECTRONIC SENTINEL

Technical Parameters

Parameter	Value/Description
Working Mechanism	Phased Array Mechanism/Servo Motor Assistance
Working Mode	C Band
Azimuth Coverage	≥90°
Elevation Coverage	≥18°
Target Distance for Pedestrians	100m-1.5km
Target Distance for Vehicles	100m-3km
Target Distance for 5-10m Moving Boat	100m-3km
Speed of Moving Targets	1.8km/h-130 km/h
Data Interface	Wireless (Support RJ45)
Positioning Accuracy	≤55W (Adjustable)
Fixed Position	Supports Fixed Position Self-Adaptive Adjustment
Working Temperature	-20°C-55°C
Enclosure Size	346mm×280mm×84mm
Continuous Working Time	≥4h (Powered Down, Single Battery)
Installation Time	≤3min
Weight	≤12.0kg



Assault Pack



Case Dimension: 80*60*28cm
Weight: 30kg



THE ART OF INNOVATION

Basic Radar Model



The **CB/SR215 series** is specifically designed for perimeter and border protection as well as ground-based human and vehicle detection



The **SA/SR237 series** is primarily designed for surveillance in nearshore and inland waterway areas.



The **HP/SR226 series** is consisting of a radar array, a mechanical pan-tilt unit, and a power adapter. It is designed for the detection, surveillance, and target indication of micro/small civilian drones within critical areas such as prisons, exhibitions, and military bases.

CB/SR215 series Ground Surveillance Radar




Azimuth Coverage

$\geq 90^\circ$



Accurate Target Classification

Supports detection of pedestrians, bicycles, motorcycles, vans, large vehicles, and other target types



All-Weather Operation

24/7 all-weather sensing, applicable to snow, fog, dust, sand, and other harsh weather conditions



Intelligent Filtering & Warning

Easy operation, support automatic filter out false alarms, mask foliage disturbances



Simple & User-Friendly

Easy operation, support GPS map display, real-time alarm retrieval, and security

Specifications

CB/SR215 Series

Antenna Mechanism: Phased Array
(Azimuth Scan) Pulse-Doppler

Operating Frequency: C-Band (ISM)

Azimuth Coverage $\geq 90^\circ$

Detection Speed 1.8km/h ~ 108km/h

Data Rate ≥ 2 Hz

Data Interface RJ45 / 1 Gigabit
Ethernet

Power ≤ 45 W (Standard);
 ≤ 55 W (Standard)
 ≤ 60 W (Standard)
AC220V ~ 240V (In.)

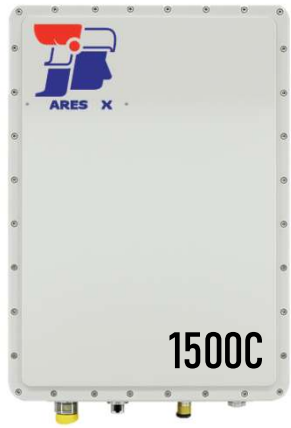
Operating Temperature: -40°C ~ $+55^\circ\text{C}$

Weight ≤ 5.5 kg

CB/SR215 series Ground Surveillance Radar

The AresX™ CB/SR215 series is the advanced, integrated security solution designed for perimeter and border protection, as well as ground-based detection of people and vehicles. The monitoring range for pedestrians and vehicles can be customized to meet specific needs. This system not only accurately measures target parameters such as direction, distance, trajectory, and speed, but also leverages cutting-edge radar and electro-optical technology to automatically detect and identify suspicious intrusions, enabling automatic tracking and surveillance of suspicious targets.

SA/SR237 series Nearshore Surveillance Radar



FILTER INTERFERENCE

Co-frequency signal filtering technology minimizes impact from same-channel radar targets and background



FLEXIBLE RADAR RANGE

Selectable ranges of 1.2km/3km/5km/8km to meet different requirements and facilitate operations in various environments



EASY INSTALLATION

Lightweight, ultra-compact, and no need for tripod installation to reduce installation complexity and cyclical costs



HIGH PRECISION

Doppler frequency measurement provides real-time, highly accurate continuous velocity readings



Azimuth Coverage



SA/SR237 series Ground Surveillance Radar

The AresX™ SA/SR237 Series is a cutting-edge security solution developed by Hermesys, specifically designed for surveillance in nearshore and inland waterway regions. Featuring customizable detection ranges for vessels, the system accurately identifies key parameters such as target direction, distance, movement trajectory, and speed. By integrating advanced radar with electro-optical fusion technologies, the system enables automatic detection and identification of suspicious intrusions, and seamlessly initiates intelligent tracking and real-time monitoring of potential threats.

Specifications	SA/SR237 Series
Antenna Mechanism	Phased Array (Azimuth Scan) Pulse-Doppler
Operating Frequency	C-Band (ISM)
Azimuth Coverage	≥90°
Detection Speed	1.8km/h~120km/h
Data Rate	≥2Hz
Data Interface	RJ45 / 1 Gigabit Ethernet
Power	≤45W (Standard); ≤55W (Standard); ≤60W (Standard); AC220V ~ 240V (Input)
Operating Temperature	-40°C ~ +55°C
Weight	≤5,5 kg

HP/SR226 series Low-Altitude Surveillance Radar

The AresX™ HP/SR226 Series is an advanced radar system independently developed by our company. It consists of a radar array, mechanical pan-tilt platform, and power adapter. Specifically designed for critical areas such as prisons, exhibitions, and military bases, this system excels in detecting, alerting, and indicating micro to small civilian drones. It delivers accurate flight path data including target azimuth, range, altitude, and velocity—ensuring effective situational awareness and rapid response capability.



Specification	Details
Antenna Mechanisam	Phased Array System (3D Coordinates) / Pulse-Doppler
Operating Frequency	C-Band
Effective Detection Distance	100m ~ 1.5km (Unmanned Aircraft)
Azimuth Coverage	360°
Detection Speed	1.8km/h ~ 108km/h
Data Rate	≥0.2Hz
Data Interface	RJ45 / 1 Gigabit Ethernet
Power Consumption	≤100W (Standard) AC200~AC240 (Input)
Operating Temperature	-40°C ~ +55°C
Weight	≤15kg



Specification	Details
Antenna Mechanisam	Phased Array System (3D Coordinates) / Pulse-Doppler
Operating Frequency	X-Band
Effective Detection Distance	100m ~ 2.0km (Unmanned Aircraft)
Azimuth Coverage	360°
Detection Speed	1.8km/h ~ 108km/h
Data Rate	≥0.2Hz
Data Interface	RJ45 / 1 Gigabit Ethernet
Power Consumption	≤200W (Standard) AC200~AC240 (Input)
Operating Temperature	-40°C ~ +55°C
Weight	≤30kg

HP/SR226 series Low-Altitude Surveillance Radar

Specification	Details
Antenna Mechanisam	Phased Array System (3D Coordinates) / Pulse-Doppler
Operating Frequency	S-Band
Effective Detection Distance	100m ~ 5.0km (Unmanned Aircraft)
Azimuth Coverage	360°
Detection Speed	1.8km/h ~ 108km/h
Data Rate	≥0.2Hz
Data Interface	RJ45 / 1 Gigabit Ethernet
Power Consumption	≤200W (Standard) AC200~AC240 (Input)
Operating Temperature	-40°C ~ +55°C
Weight	≤50kg



Advanced Technology

Equipped with superior capabilities of low-speed small target detection, high adaptability, and low false alarm rate



Multidimensional Precision Detection

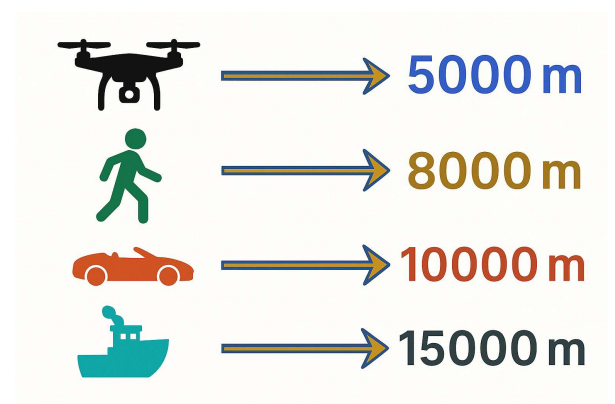
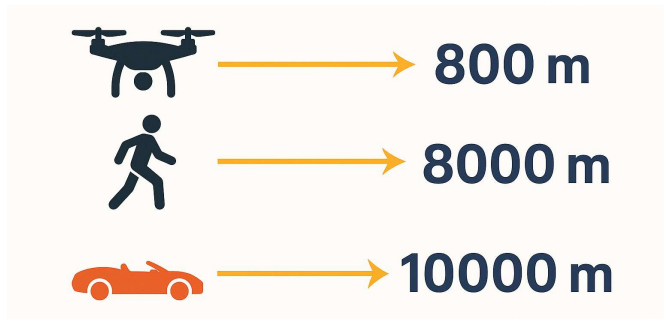
Can achieve low-altitude, ultra-low altitude target distance, azimuth, elevation, speed multidimensional precision detection

Specification	Details
Antenna Mechanisam	Phased Array System (3D Coordinates) / Pulse-Doppler
Operating Frequency	S-Band
Effective Detection Distance	100m ~ 10.0km (Unmanned Aircraft)
Azimuth Coverage	360°
Detection Speed	3.6km/h ~ 306km/h
Data Rate	≥0.2Hz
Data Interface	RJ45 / 1 Gigabit Ethernet
Power Consumption	≤250W (Standard) AC200~AC240 (Input)
Operating Temperature	-40°C ~ +55°C
Weight	≤60kg

HP/SR226 series Multi Application Surveillance Radar



Model	6000X	6000XP
Antenna Mechanisam	Phased Array System (3D Coordinates) / Pulse-Doppler	
Operating Frequency	X-Band	
Effective Detection Distance	100m ~ 5.0km (Unmanned Aircraft) 100m ~ 8.0km (Human) 100m ~ 10.0km (Vehicle) 100m ~ 15.0km (Boat) For 6000XP	
Azimuth Coverage	360°	
Detection Speed	1.8km/h ~ 108km/h	
Data Rate	≥0.2Hz	≥0.5Hz
Data Interface	RJ45 / 1 Gigabit Ethernet	
Power Consumption	≤350W (6000X)	≤400W (6000XP) AC200~AC240 (Input)
Operating Temperature	-40°C ~ +55°C	
Weight	≤32kg	≤77kg





Thank you

www.hermesys.com

