

AERIS-10X

EXTENDED-RANGE
ADVANCED RADAR SYSTEM

UP TO 20 KM
DETECTION RANGE



ABAC INDUSTRY
ADVANCED SENSING TECHNOLOGIES

AERIS-10X

Extended-Range Advanced Radar System

Commercial Documentation

Product Overview

The AERIS-10X is ABAC Industry's extended-range radar platform designed for advanced surveillance, UAV detection, infrastructure protection, research applications, and situational awareness missions.

Combining phased-array radar technology, electronic beam steering, advanced signal processing, and long-range detection capabilities, the AERIS-10X delivers professional radar performance in a compact and scalable architecture.

Designed for organizations that require greater coverage and enhanced tracking performance, the AERIS-10X represents the next evolution of modern sensing technology.



Key Advantages

Extended Detection Range

Detection capabilities up to 20 km depending on target characteristics and environmental conditions.

Phased-Array Technology

Electronic beam steering enables rapid scanning, target acquisition, and tracking.

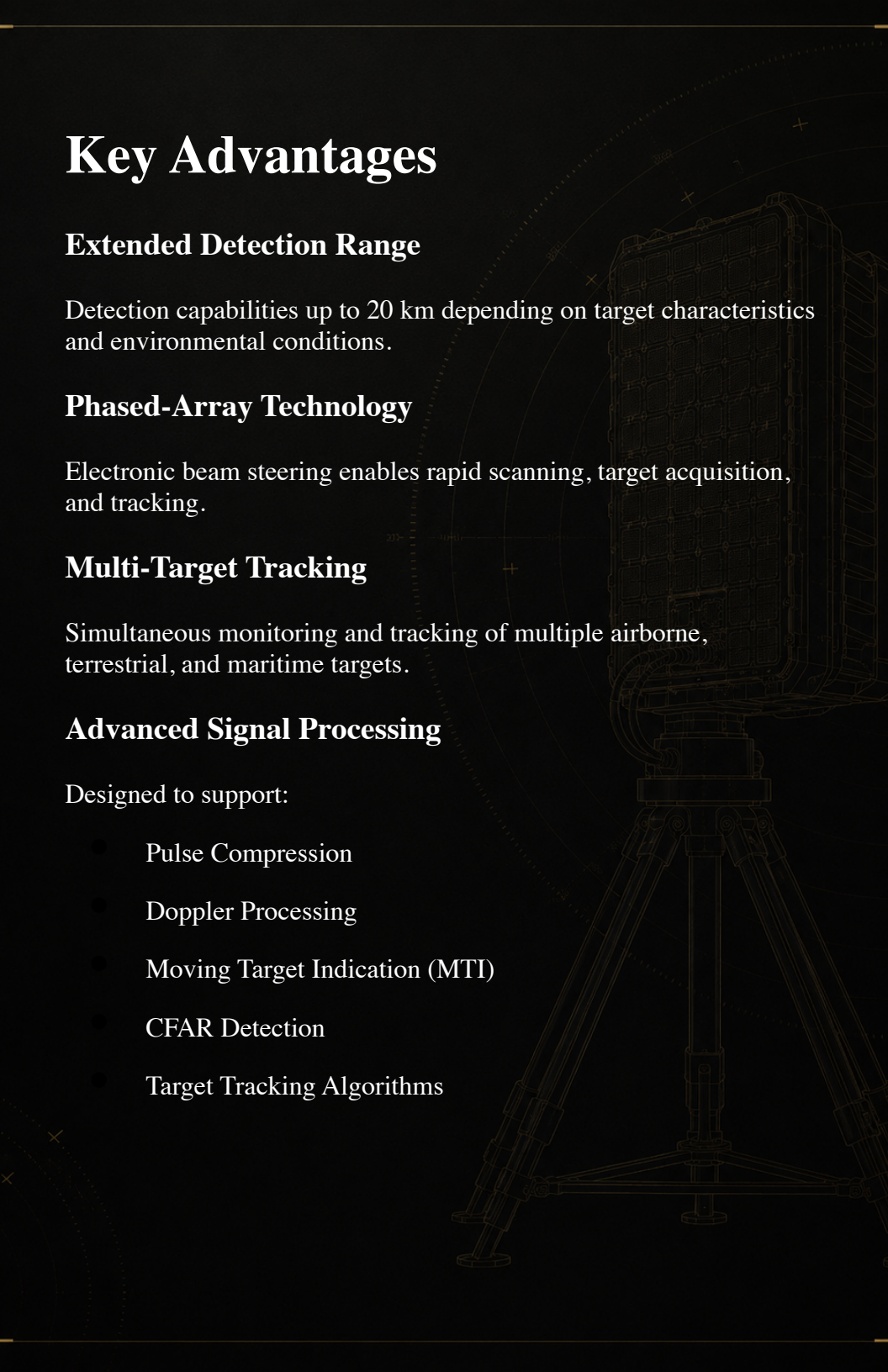
Multi-Target Tracking

Simultaneous monitoring and tracking of multiple airborne, terrestrial, and maritime targets.

Advanced Signal Processing

Designed to support:

- Pulse Compression
- Doppler Processing
- Moving Target Indication (MTI)
- CFAR Detection
- Target Tracking Algorithms



Open Architecture

Flexible integration into existing command, surveillance, research, and sensing environments.

Rapid Deployment

Compact architecture suitable for fixed-site and mobile deployments.

Applications

Counter-UAV Operations

Detection and tracking of unmanned aerial systems around sensitive areas.

Critical Infrastructure Protection

Airports, ports, industrial facilities, energy sites, and strategic assets.

Border & Coastal Monitoring

Extended-range situational awareness for surveillance operations.

Research & Development

Universities, laboratories, radar research programs, and advanced sensing projects.

Maritime Surveillance

Monitoring of vessels and maritime traffic.

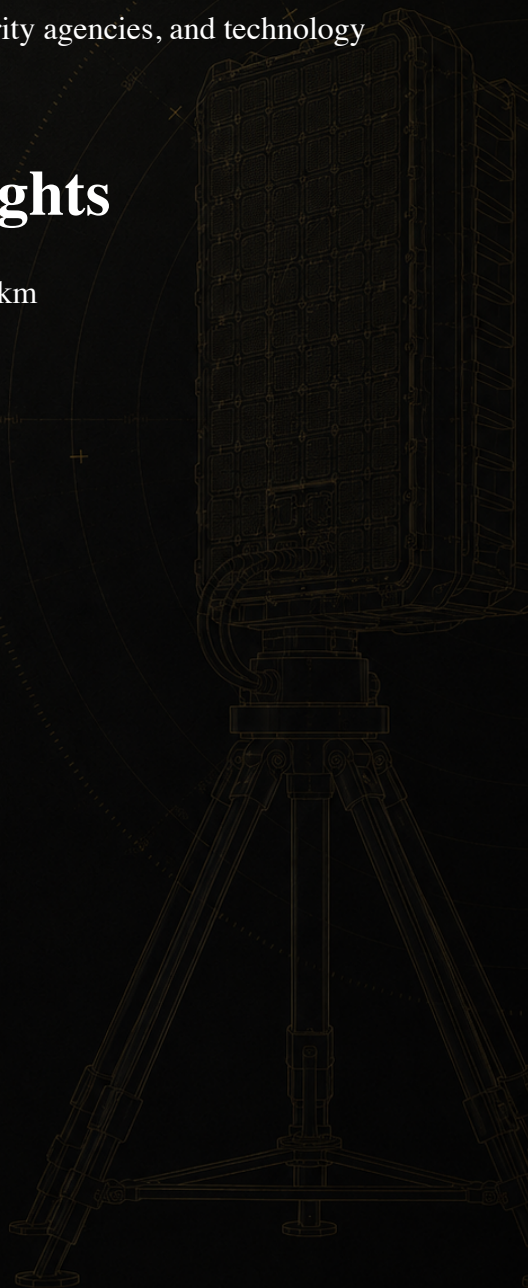


Security Operations

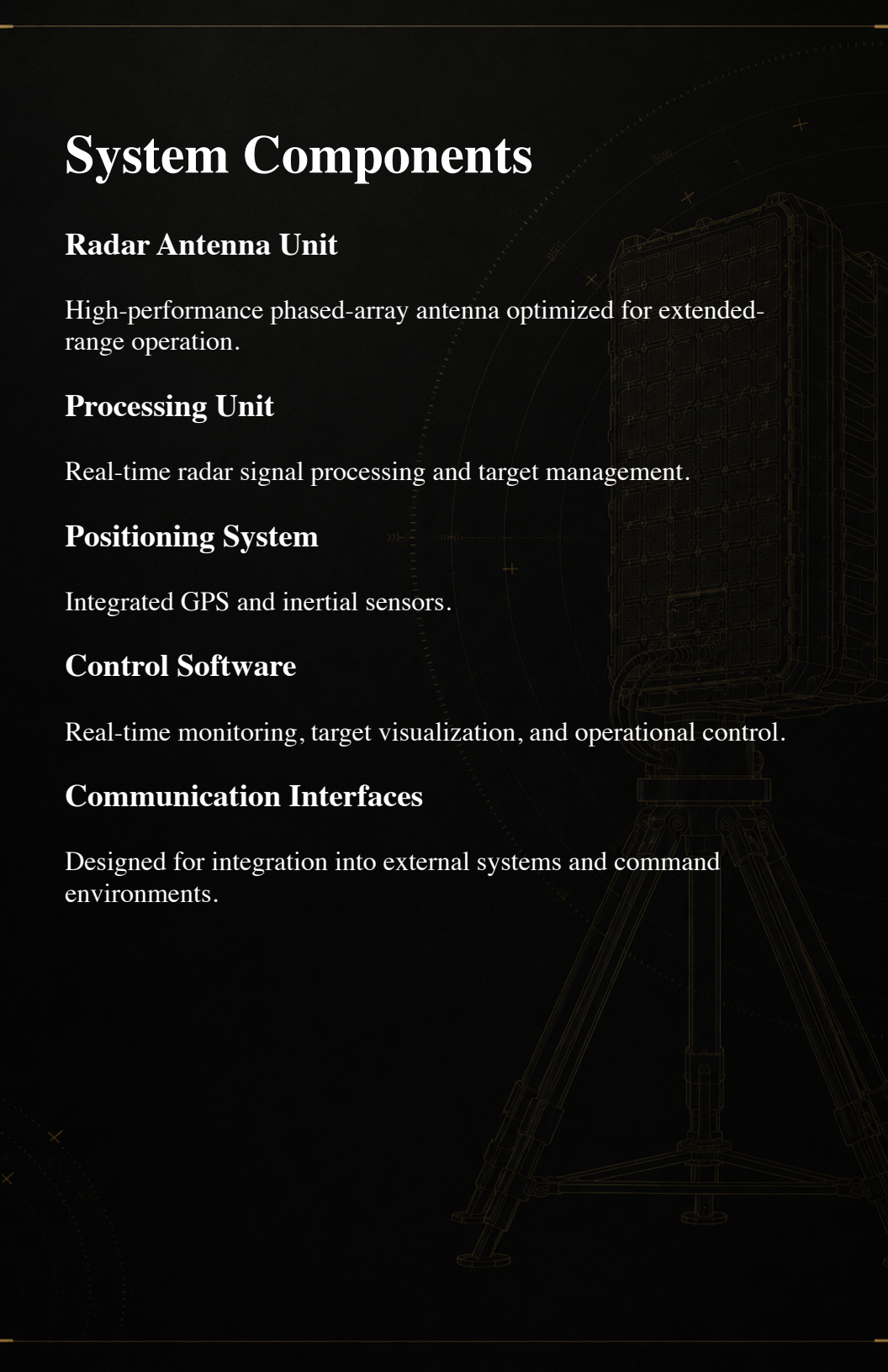
Support for law enforcement, security agencies, and technology integrators.

Technical Highlights

- Detection Range: Up to 20 km
- Phased Array Antenna
- Electronic Beam Steering
- Multi-Target Tracking
- Doppler Processing
- MTI Processing
- CFAR Detection
- GPS Integration
- IMU Integration
- Real-Time Processing
- Advanced User Interface
- Open System Architecture



System Components



Radar Antenna Unit

High-performance phased-array antenna optimized for extended-range operation.

Processing Unit

Real-time radar signal processing and target management.

Positioning System

Integrated GPS and inertial sensors.

Control Software

Real-time monitoring, target visualization, and operational control.

Communication Interfaces

Designed for integration into external systems and command environments.

Why AERIS-10X

The AERIS-10X was developed to provide organizations with access to advanced radar capabilities traditionally available only in significantly more expensive systems.

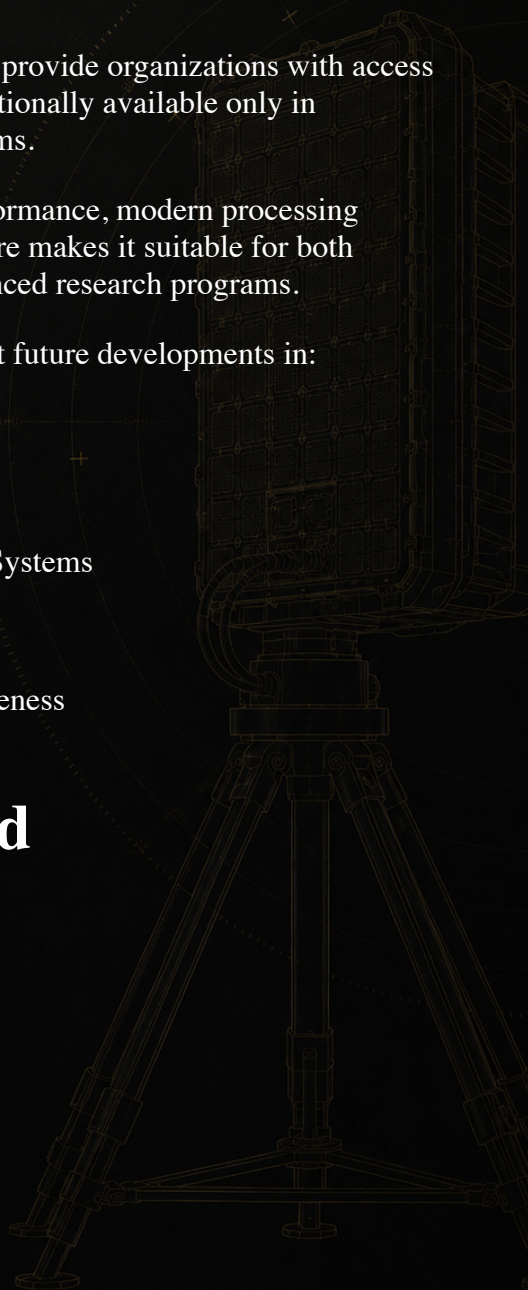
Its combination of long-range performance, modern processing capabilities, and flexible architecture makes it suitable for both operational deployments and advanced research programs.

The platform is designed to support future developments in:

- Sensor Fusion
- AI-Assisted Classification
- Autonomous Surveillance Systems
- Multi-Sensor Integration
- Advanced Situational Awareness

Industries Served

- Defense & Security
- Aerospace
- UAV Manufacturers
- Government Agencies
- Research Institutions



- Universities
- Critical Infrastructure Operators
- Maritime Organizations
- Technology Integrators

Partnership Opportunities

ABAC Industry is actively developing partnerships with:

- Distributors
- System Integrators
- Research Organizations
- UAV Companies
- Infrastructure Operators
- Government Programs

Organizations interested in deployment, integration, research collaboration, or distribution opportunities are encouraged to contact our team.



ABAC INDUSTRY

Advanced Sensing Technologies

Building the future of radar, sensing intelligence, target classification,
and situational awareness systems.

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