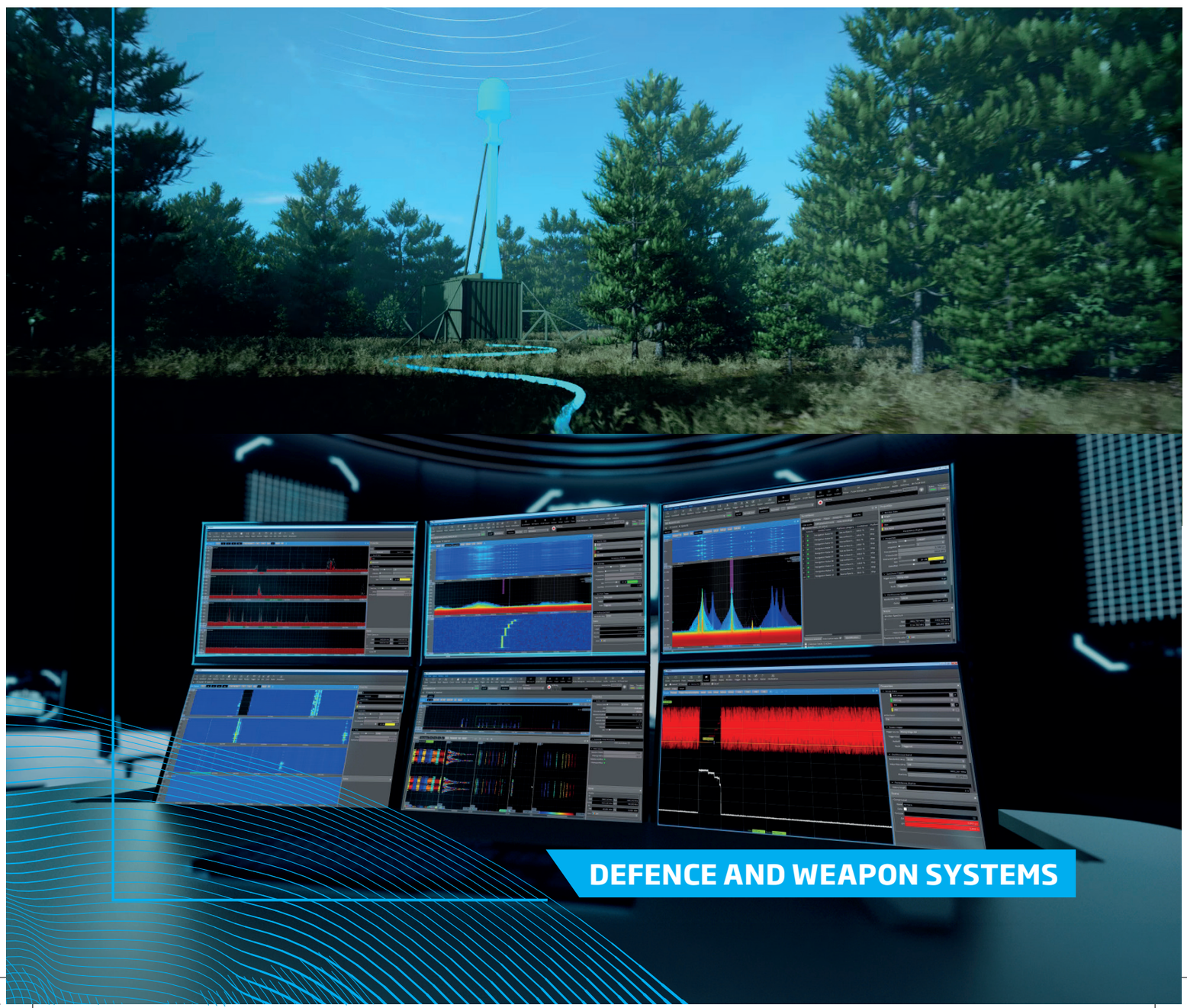
Patria

Patria ARIS

The Most Advanced ELINT Collection and Analysis System



PROTECTED MOBILITY

SUSTAINMENT SOLUTIONS

DEFENCE AND WEAPON SYSTEMS

EXTREME SURVIVABILITY

Finland is known for high technology and extreme resilience. Our harsh nature and limited resources have pushed us to learn and innovate efficiently. Thorough preparation for the future is the backbone of our culture.

Patria is a modern and international defence and technology company with over 100 years of experience. We use resources wisely, create innovative solutions and build intelligent systems that provide extreme survivability in any conditions. We work with our customers throughout the entire lifecycle to ensure maximum value. Honest and straightforward co-operation is at the core of our work.

We build exceptional partnerships that last through critical operations. That's what it takes when you stand for your sovereignty. Trust us, we've been there.

QUALITY AND SIMPLICITY

In a world brimming with fleeting trends and overengineered solutions, we stand apart by offering tools built with a singular focus: unwavering reliability and uncompromising quality.

We believe in the power of simplicity. Our products are well-designed, robustly constructed, and thoroughly tested to perform their intended task flawlessly, every single time.

Our philosophy is simple: true innovation should help, not complicate. Driven by dedicated research, we develop advanced technologies for real results. Our straightforward approach makes the difference. Engineered for a single purpose – Yours.

Patria - Extreme conditions embedded.

In today's crowded electromagnetic battlespace, even the faintest signal can reveal a critical threat. Modern radar systems are faster, smarter, and harder to detect. Staying ahead requires early, accurate detection and the ability to distinguish targets within a dense, dynamic signal environment.

Patria ARIS is a high-performance, remotely operable ELINT system engineered to operate in complex radar signal environments across air, sea, and ground domains. It combines spectrum surveillance with advanced signal processing and analysis into a single platform–enabling detection of unknown emitters, detailed waveform characterization, and continuous development of validated emitter databases.

Use Cases

Strategic ELINT: Long-term signal collection and analysis to build national databases, reveal adversary tactics, and provide persistent situational awareness and early warning at the national level.

Operational & Tactical ELINT: Real-time and retrospective situation assessment, mission planning, and immediate threat recognition–supporting early warning, target acquisition, and cueing of electronic attack in joint operations.

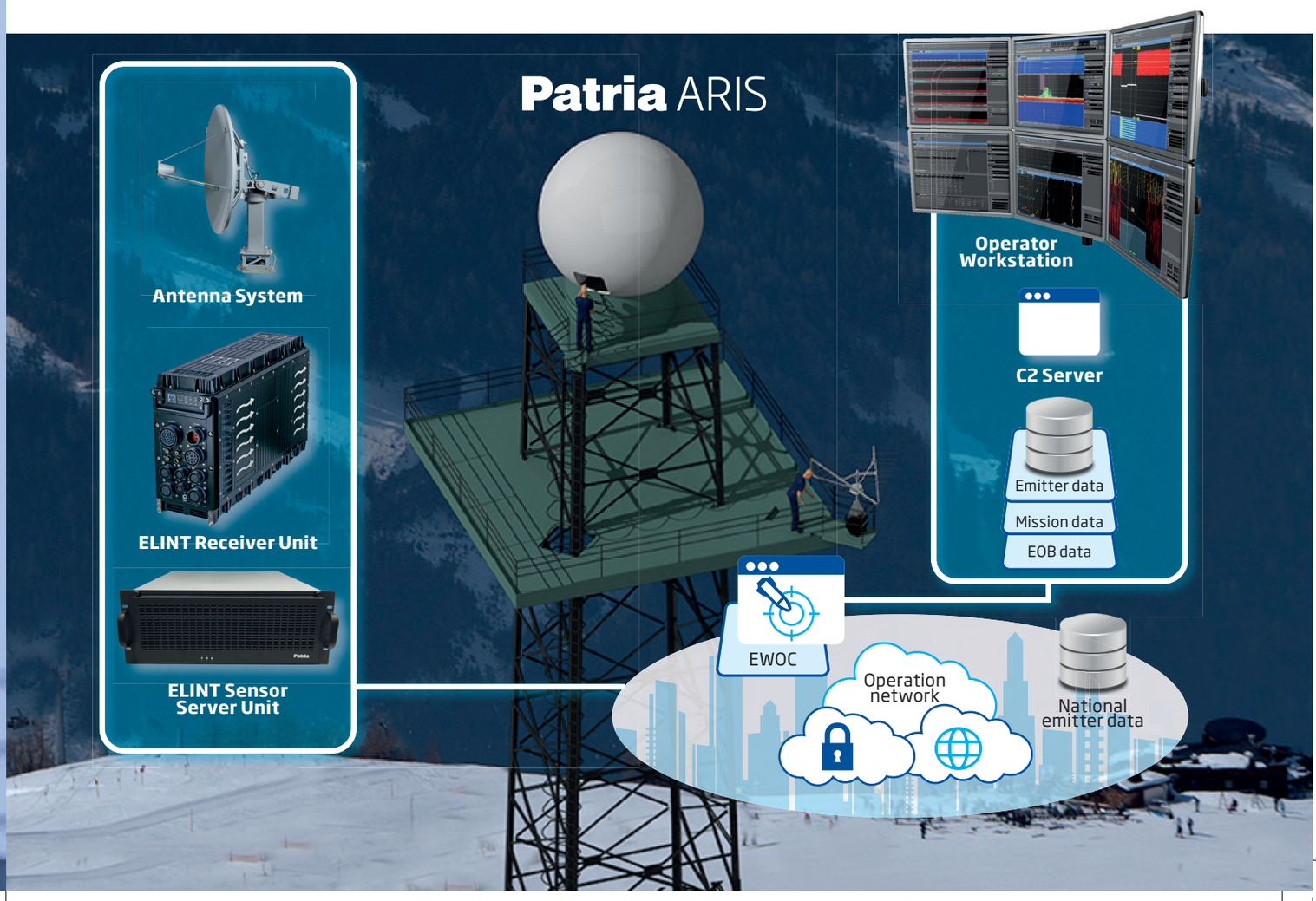
Technical ELINT: High-precision signal measurement and in-depth analysis of radar parameters and waveforms to understand emitter characteristics and system behavior.

Key Operational Advantages

Superior Detection & Processing Performance: Outstanding spectrum awareness, high sensitivity, and real-time processing ensure rapid transition from first detection to trusted situational awareness and actionable emitter data, even in dense and LPI signal environments.

Optimized User Experience for Collectors and Analysts: Operator-driven design with intuitive workflows and advanced tools supports efficient recording, spectrum monitoring, and in-depth analysis of radar pulses and patterns.

Modular and Remote-Operable: Deployable as a standalone ELINT core or a fully integrated, networked system with remote operability and centralized C2.



Main Features

- **Search:** Spectrum and waterfall displays, audio monitoring
- **Monitoring:** Real-time spectrum and waterfall displays, audio
- **Recording :** Raw I/Q and PDW buffering, recording, replay, crop, export (BLUE 2.0), import
- **Direction finding:** Antenna control, polar plot, monopulse DF
- **Waveform analysis:** Spectrogram snapshot, real-time oscilloscope, modulation analyzer
- **Pulse analysis:** Real-time pulse detection, scatter view, PDW analysis tools
- **Situational awareness:** Automatic identification, track activity dashboard, map-based EOB display with connected layers
- **Reporting:** Measurement reporting tool
- **Emitter database management:** Integration with national emitter data, database visualization, ELINT data management tools
- **Autonomous surveillance:** Preset surveillance tasks and automated recording
- **Command and control:** Networked ELINT sensor management, mission planning tools, remote maintenance, controlled user roles

System Configuration

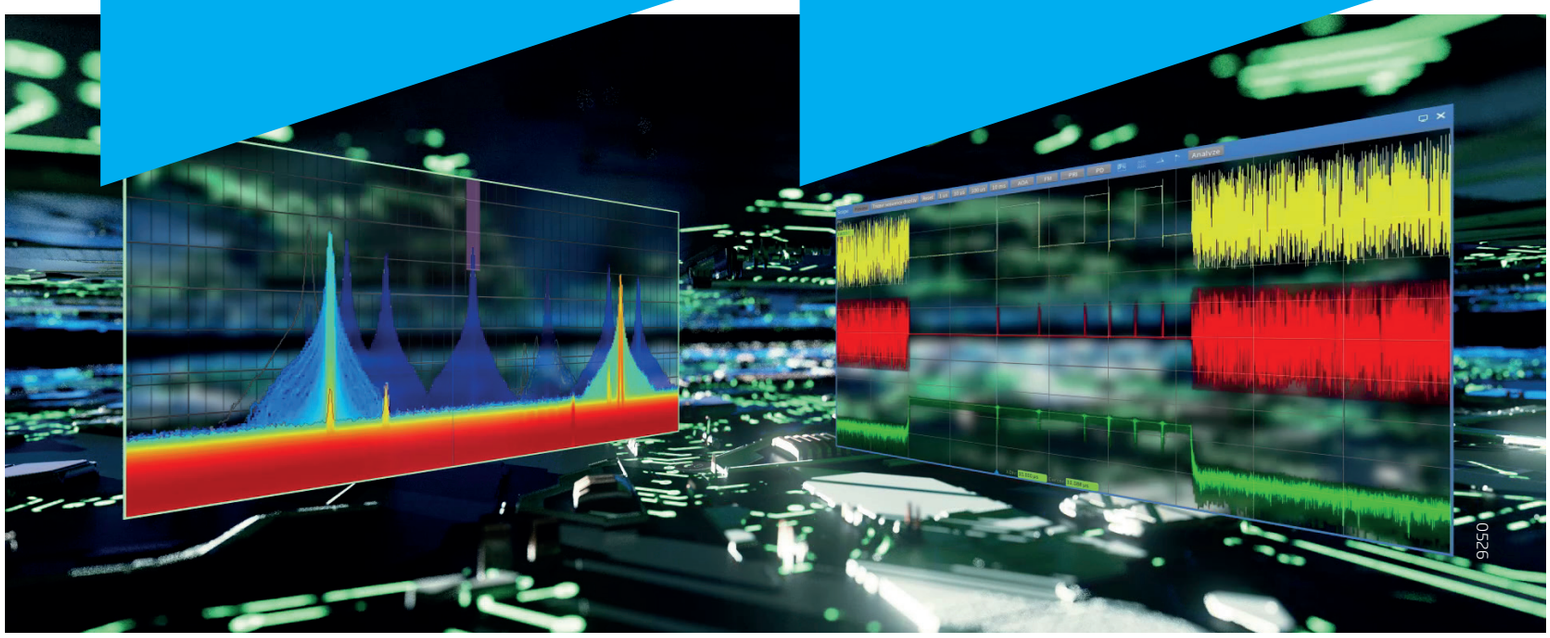
- **Sensor:** Microwave Antenna System, V/UHF Antenna System, ELINT Receiver Unit, ELINT Sensor Server Unit. Various high-gain and spinning DF antenna options and analog front-end and filtering options
- **Sensor network:** C2 Server, which operates within standalone sensors or in coordinated networked configurations. Client application for operating and monitoring the system. Optional Offline Analysis Servers.
- **Interfaces:** Standard file systems, STANAG 4658 CESMO and STANAG 4676 NITS for integration with C2, ISR, and EW systems
- **Options:** Turn-key sensor site solutions, integration to fixed (tower), transportable (shelter), mobile (vehicle) ground, air and sea platforms, training, life-cycle support services

Performance

- **Frequency range:** 20 MHz – 40 GHz (with options)
- **Instantaneous bandwidth:** 3 x 500 MHz (with options)
- **Signal recording:** At least 2 hours full-band raw I/Q signal recording and replay

Hardware Characteristics

- **ELINT Receiver Unit:** 315 x 155 x 412 mm, 16 kg, 280 W, mast mount
- **ELINT Sensor Server Unit:** 176 x 430 x 540 mm, 17 kg, < 500 W, 19" rack mount 4U



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When if is not an option.

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