



Boerboel Seismic - your real-time high-precision security solution for state borders and critical infrastructure, pipelines, communication towers, and banking institutions.

Reach out to us for tailored solutions that ensure your mission's success.



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**AUTONOMOUS, RAPID-DEPLOYABLE
MOVEMENT DETECTION SYSTEM**

BOERBOEL

Introduction

Boerboel Seismic is an autonomous, rapid-deployable system for real-time detection of humans, vehicles, and low-flying aircraft. Utilizing seismic vibration analysis, it identifies ground disturbances with precision, ensuring perimeter security and critical infrastructure protection.



System Components

- Seismic Sensors** – Detect and analyze vibrations.
- STU Transceiver** – Secure real-time communication.
- Mobile Control Unit** – Centralized monitoring and response.
- Photo & IR Camera** – Visual threat verification.
- Antennas & Batteries** – Ensure long-lasting operation.



Multi-Sens Fusion Seismic, IR, and optical detection	AI-Driven Analysis Instant threat classification	Seamless Integration Works with CCTV, UAVs
KEY FEATURES		
Extreme Climate Operation Performs in harsh conditions	Extended Battery Life Up to 12 months	Tamper-Resistant Design Secure and durable

Out-of-the-box principle

Key Applications

- Perimeter Security** – Monitors state borders and restricted areas.
- Infrastructure Protection** – Secures pipelines, communication towers, and warehouses.
- High-Risk Zones** – Guards nuclear facilities, forests, and game reserves.
- Banking & Government Security** – Detects unauthorized activity near vaults and institutions.

Performance in Key Sectors

- 1. Pipelines Protection**
 - Detects excavations, leaks, and tampering.
 - Identifies surface and underground vibrations.
 - Covers large areas efficiently.
- 2. Communication Towers Security**
 - Monitors ground activity near telecom infrastructure.
 - Detects unauthorized access and sabotage.
 - Integrates with surveillance systems.
- 3. Banking Institution Protection**
 - Detects tunneling, drilling, and movement.
 - Sends instant alerts for rapid intervention.
 - Ensures discreet underground monitoring.

Advantages

- Rapid Deployment** – Ready in 30 minutes.
- Wide Coverage** – Up to 800m per sensor.
- Autonomous Operation** – Functions for 12 months.
- Remote Monitoring** – Accessible via mobile and cloud.
- Durable Build** – Waterproof, dustproof, and tamper-resistant.

TECHNICAL SPECIFICATIONS		DETECTION CAPABILITIES	
Radio Range	500m – 15km	Humans	Up to 100m
Frequency	433 / 868 MHz	Vehicles	Up to 300m
Battery Life	12 months	Helicopters	Up to 600m
Geolocation Accuracy	±1.5m	Tracked Vehicles	Up to 800m
Protection	IP67-rated waterproof, dustproof		

How It Works

- Detection** – Senses ground vibrations.
- Alert** – Sends real-time notifications.
- Verification** – Captures images.
- Response** – Notifies security teams.
- Analysis** – Differentiates real threats.
- Action** – Enables intervention.

