

WHAT IS A

Stationary platform



Installed directly in the field, this platform monitors soil and environmental conditions continuously — no need for lab samples.

KEY FEATURES



- Real-time data on soil moisture, pH, salinity, and temperature



- Ideal for long-term monitoring
- Tailored for different soil types



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WHAT IS A

Mobile platform for soil scanning



A sensor-equipped mobile unit that scans soil on the move, giving farmers a fast, precise view of what's happening underground.

KEY FEATURES

- Mounted sensors for real-time scanning
- Maps soil nutrients and properties
- Supports precision fertilization



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WHAT IS A



Mobile platform for crop scanning

An autonomous field unit that monitors crop health and stress levels — helping optimize wheat yield and input use.

KEY FEATURES

- Detects crop stress in real time
- Tracks growth and leaf health
- Supports yield optimization



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WHAT IS A

Remote sensing soil platform



Aerial and satellite-based technology for large-scale soil health monitoring and early stress detection.



KEY FEATURES

- Covers wide areas quickly
- Integrates satellite and drone data
- Detects variability and stress zones



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WHAT IS A



Robotic-Based sensing and sampling

Autonomous systems equipped with sensors and sampling tools to monitor both soil and crop conditions — combining observation and action in one platform.

KEY FEATURES



- Performs in-field soil sampling and analysis
- Measures environmental and crop health indicators
- Operates autonomously across varying field conditions



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WHAT IS A

Cloud-based web platform



A user-friendly, open-access digital platform providing farmers and consultants with real-time soil and crop data.

KEY FEATURES

- Real-time access to field data
- Centralised platform for decision-making
- Supports farmers, advisors, and researchers



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WHAT IS A

Decision support system



An intelligent tool that integrates real-time soil and crop data to support decision-making for sustainable and site-specific farming practices.

KEY FEATURES

- Analyzes soil and crop data in real time
- Recommends optimized input use
- Supports sustainable and cost-effective decisions



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WHAT IS A

Automatic soil sampler for biological quality analysis



A field-deployable system that automatically collects soil samples and analyzes them for biological indicators of soil health.

KEY FEATURES

- Automates soil sampling in the field
- Targets biological quality metrics (e.g. microbial activity)



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Reflectance acquisition of undisturbed soil surface

A non-invasive technique that uses light reflectance to analyze soil properties in the field — without disturbing its structure.

KEY FEATURES

- Measures soil characteristics on-site
- Maintains natural soil structure
- Enables rapid, repeatable assessments
- Reduces lab time and increases efficiency



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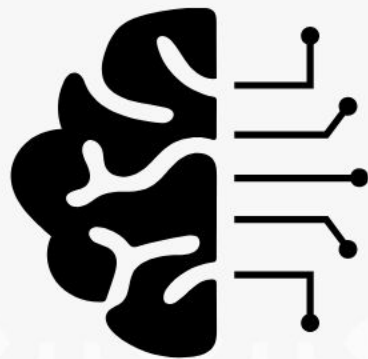
ML engine for soil contamination detection



A machine learning-powered engine that uses spectral data to detect contaminants like heavy metals and hydrocarbons in soil.

KEY FEATURES

- Analyzes soil spectra for contamination signatures
- Detects heavy metals, hydrocarbons, and more
- Learns and improves accuracy over time



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