COLTIVARE

2025 Product Catalog

Intelligent Tools for

a Growing World

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A Message from Our CEO, Dr. Eleanor Vance

"Welcome,

Farming is in my blood. I grew up understanding that our land is both a gift and a profound responsibility. At Coltivare, we carry that same ethos into everything we build.

*We believe technology should feel like a trusted farmhand—it should be reliable, intuitive, and always working to make your job easier. This catalog showcases the tools we've developed not just in a lab, but in collaboration with farmers like you. Our goal is simple: to help you **increase profitability, enhance sustainability, and build a stronger legacy** for the generations to come.*

Thank you for your partnership."

Dr. Eleanor Vance Founder & CEO, Coltivar*e*

The Coltivare Ecosystem

Data, Insight, Action

The Coltivare Ecosystem is a fully integrated solution that gives you a complete picture of your farm's health. Our devices collect precise data, which is then analyzed by our powerful software to give you simple, actionable recommendations.

1. **Collect Data (Hardware):** Our rugged **TerraSense Probes** and **AeroScout Drones** capture millions of data points on soil, water, and plant health.

2. **Analyze & Predict (Software):** The **Coltivare Command Platform** processes this data in real-time, using AI to identify patterns and predict issues before they become problems.

3. **Act with Confidence (Your Farm):** You receive clear alerts and create variable-rate maps for irrigation and fertilization, ensuring you apply resources exactly where and when they're needed most.

Hardware | TerraSense Soil Probe

TerraSense Soil Probe

The **TerraSense Probe** is a multi-depth soil sensor that gives you a real-time understanding of the conditions below the surface. Stop guessing and start knowing precisely what your crops need.

Key Features

- **Multi-Depth Sensing:** Measures soil moisture, salinity, and temperature at three distinct root depths (15cm, 30cm, 60cm).

- **Nutrient Analysis:** Provides in-place readings for critical macronutrients (N-P-K), reducing the need for frequent lab sampling.

- **All-Weather Durability:** Built with industrial-grade materials to withstand any season (IP67 rated).

- **"Set & Forget" Installation:** Easy to install and powered by a 5-year solar-assisted battery.

Technical Specifications

- **Connectivity:** Cellular LTE-M / LoRaWAN

- **Battery Life:** 5+ years (Solar-assisted)

- **SKU:** CS-TS45-25

- **Price:** Inquire for enterprise pricing.

Hardware | AeroScout Imaging Drone

AeroScout Imaging Drone

The **AeroScout Drone** provides on-demand aerial imagery to help you spot issues you can't see from the ground. Identify crop stress, pest pressure, and irrigation problems early to protect your yield.

Key Features

- **High-Resolution Multispectral Camera:** Captures NDVI, NDRE, and RGB imagery to create detailed crop health maps.

- **Autonomous Flight Planning:** Easily map flight paths in the Coltivare Command app. The drone will take off, fly the mission, and land on its own.

- **Plant-Level Detail:** 2cm/pixel resolution allows for accurate stand counts and weed identification.

- **Rapid Data Processing:** Images are automatically uploaded and processed, with health maps available in under an hour.

Technical Specifications

- **Flight Time:** 35 minutes per battery

- **Coverage:** Up to 250 acres per flight

- **SKU:** CS-AD12-25

- **Price:** Inquire for enterprise pricing.

Software | Coltivare Command Platform

Coltivare Command Platform

Coltivare Command is the intelligent hub where all your farm's data comes together. It transforms raw numbers from your probes and drones into a clear, actionable plan for your entire operation. It's accessible from any computer, tablet, or smartphone.

Key Features & Modules

- **Unified Farm Map:** View all your fields in one place, layered with data from soil sensors, drones, and satellites.

- **Smart Irrigation Scheduling:** Get recommendations on when and how much to water based on soil moisture data and weather forecasts.

- **Fertility Management:** Create precise, variable-rate prescription maps for fertilizer application, cutting costs and environmental impact.

- **Health Alerts:** Receive automatic notifications on your phone when the system detects potential issues like water stress or nutrient deficiencies.

Success Story

Success Story: Oak Valley Farms

Challenge: Oak Valley Farms, a 3,000-acre corn and soybean operation, was struggling with inconsistent water retention across their fields, leading to high irrigation costs.

Solution: They deployed 50 **TerraSense Probes** and used the **Coltivare Command Platform** to create variable-rate irrigation plans.

Result:

*"For the first time, we weren't just guessing. The Coltivare system showed us exactly where our water was going. In the first year alone, we **cut our water usage by 22%** and saw a **15% increase in yield** in our most problematic fields. It paid for itself in one season."*

- David Chen, Owner, Oak Valley Farms

Support & Partnership

We Grow With You

When you partner with Coltivare, you get more than just technology—you get a dedicated team of experts.

Dedicated Onboarding Specialist

From day one, a specialist will help you with installation, setup, and training to ensure your team is confident using the entire Coltivare ecosystem.

24/7 Technical & Agronomic Support

Our support team is available around the clock. Whether it's a technical question about a sensor or an agronomic question about the data you're seeing, we're here to help.

Continuous Improvement

We provide free software updates for life. As we develop new technology and features, you'll be the first to benefit.

Contact

Ready to Take Command of Your Field?

Let's discuss how the Coltivare ecosystem can be tailored to your operation's unique needs.

Schedule a Free, No-Obligation Demo Today.

Our product specialists can provide a live walkthrough of the Command Platform and build a custom hardware quote based on your acreage and crop types.

Visit Us Online www.coltivare-ag.com

Email Our Sales Team sales@coltivare-ag.com

Call Us 1-800-555-AGRI (2474)

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- **Purdue University, College of Agriculture.** (2024). "Impact of Multi-Depth Soil Sensing on Irrigation Efficiency in the American Midwest." *West Lafayette Agricultural Press.*

- **Chen, David & Schmidt, Anja.** (2023). "Comparative Analysis of UAV-based NDVI Imaging for Early Crop Stress Detection in Soybeans." *Journal of Precision Agriculture*, 15(2), 45-59.

- **Coltivare Labs.** (2025). "A 3-Year Longitudinal Study on Yield Increases with Integrated Agronomic Systems." *Coltivare Internal White Paper CS-2025-01.*