



# Total Crop Intelligence One Simple System

Accelerate research trials  
and maximize production  
of high-quality seeds  
with hassle-free  
in-field weather and  
crop monitoring.



# Better Data. Smarter Decisions. Greater Returns.

With in-field weather, plant, soil, and irrigation data at your fingertips, you can spend less time guessing and more time optimizing productivity, sustainability, and profitability.



## Standardize Your Global Data with a Maintenance-Free, In-Field Sensing and Monitoring System.

### Weather

- Temperature
- Precipitation
- Pressure
- Humidity
- Wind
- Vapor Pressure Deficit
- Dew Point Temperature
- Solar Radiation
- Forecasts
- Frost/Heat Alerts

### Plant

- Daily Crop Photos
- Growing Degree Days
- Growth Stages
- Evapotranspiration (ETc & ETo)
- NDVI
- Leaf Wetness
- Crop Water Balance
- Canopy Temperature
- Heat Stress
- Chlorophyll Index
- Chill Hours

### Soil & Irrigation

- Soil Moisture
- Soil Salinity
- Soil Temperature
- Hours to Irrigate
- Applied Irrigation
- Start & End Times
- Total Run Times



# Arable for **Seed Breeding**

Advance the right cultivars with greater confidence and less effort using one simple envirotyping system.

## ➤ Comprehensive Data

Accurate weather, plant, soil, irrigation, and forecast data, as well as crop images, provide total visibility into plant response to environmental drivers.

## ➤ Characterization History

Comprehensive historical data and insights result in improved varietal advancement and trial site selection.

## ➤ One Global System

Standardized hardware and data sets across global research sites help better understand varietal performance and eliminate subjectivity in crop inspections.

## ➤ API Integration

Data seamlessly integrates into 3rd-party platforms and proprietary agronomic models.

**Make Evidence-Based Advancement Decisions.  
Deliver Profitable Production Outcomes.**

# Arable for **Seed Production**

Optimize quality and yields with in-field weather and crop insights at your fingertips.

## ➤ Irrigation Management

Crop-level ET (ETc) calculations use spectral NDVI data for an accurate measurement of the crop's unique water requirements. Rain measurements and forecasts combined with soil moisture data quantify water inputs and crop water demand on a field-by-field basis.

## ➤ Labor Planning

In-field weather and forecasts, daily images from the field, crop growth stage tracking, and spray timing recommendations allow for better scheduling of field work.

## ➤ Advanced Analytics

Standard and customizable dashboards deliver unique insights into plant performance and environmental variables and provide deep analysis for end-of-season reviews, reporting, site and crop comparisons, and more.

## ➤ Supply Chain Visibility

Crop growth stages and weather data lead to more accurate harvest timing and yield projections. Visibility into contract growers' in-field data and performance results in optimized seed production.





# Arable Mark 3:

## So Much More Than a Weather Station

### ► Simple

- Installs in under 5 minutes with one-button activation
- Lightweight and portable
- Maintenance-free with no moving parts
- Cloud-based data storage; no data logger required

### ► Reliable

- Continuously improving data accuracy via a global, research-based calibration/validation network
- Solar powered with long-lasting battery for low sunlight conditions
- High-powered antenna and robust cellular connectivity to monitor remote locations
- Farm-tough durability; IP67-rated for protection against water and dust ingress

### ► Complete

- Built-in 5MP camera for daily contextualized photos
- Pre-integrated sensor suite for comprehensive environmental and plant data collection
- 22 narrow-band spectrometer to monitor plant health
- Ultrasonic wind anemometer
- Seamless integration with third-party sensors

