

Reach your R&D objectives with Arable's accurate data, powerful agronomic models, and simple, state-of-the-art design.

### BETTER DATA IS AVAILABLE, AND IT'S EASIER THAN YOU THINK

- **Simplify and consolidate in-field data capture** with a single easy to install, maintenance-free all-in-one device.
- Make better advancement decisions with accurate, continuous data analytics.
- Run more effective trials and market products more effectively.
- **Use an evidence-based approach** to verify when products and solutions are optimized for specific environmental conditions.
- Rely on one consistent data set across research stations to understand relative product performance from around the globe.





"Leveraging Arable's easy-to-use, accurate technology, we can further optimize our selection process and give growers the best traits for their unique environments."

- Mike Graham, Head of Plant Breeding at Bayer's Crop Science Division

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# Environmental Monitoring

Research-grade accuracy for field-level microclimate weather data including precipitation, humidity, dew point, leaf wetness and temperature.

#### **Plant Development**

Identify changes in the plant development process affected by nutrition and environmental stressors through NDVI and chlorophyll content data.

## Disease and Pathogen Assessments

Identify disease risk and fungal pathogen tolerance windows with daily sunlight hours and temperature ranges.

## **Phenotype Performance**

Easily measure microclimate and crop productivity to monitor and evaluate phenotype performance under varying environmental conditions.

#### **Crop Growth**

Track accumulated heat units to evaluate plant performance and crop growth stages using field-level growing degree days (GDD).



## **Arable Mark 2 Specifications**



### **Precipitation**

Rainfall to +/- 6%/hr Dew detection



### **Temperature**

Temp to +/- 0.8°C at solar noon Relative humidity to +/- 5% Pressure < 0.5 kPa



#### **Evapotranspiration**

Dynamic Kc Forecasted crop ET



#### **Harvest Timing**

Growing degree days (GDD)



### **Radiation**

Solar radiation



#### **Integrations**

Soil moisture probes Wind direction and speed Pressure switch



### **Plant Health**

NDVI

Chlorophyll index 7-band spectrometer



## **Cellular Connectivity**

LTE-M

NB-IoT\*

2G

\*Availability varies by location

