

An all-in-one weather station and crop monitor, the Arable Mark 2 synthesizes climate and plant data for actionable insights in all growing conditions. A full sensor suite delivers 40+ climate and plant metrics. A global network of 30 calibration-validation sites covers 12 climatic zones to improve machine-learning models for accurate, reliable data. The device features a robust sensor suite, rugged durability, and cutting-edge global cellular connectivity.



## Hardware Specifications

<b>SKU #</b>	880-0001-007
<b>Input Power</b>	Integrated Solar Module 6V DC (External Solar) Optional: 12V DC (Expansion Connector)
<b>Communications</b>	LTE-M NB-IoT (availability dependent on location)
<b>Included in Box</b>	Arable Mark 2 Arable Solar 12V AC/DC Adapter Bird Spikes
<b>Device Dimensions</b>	195mm diameter 35mm height (device body) 195mm height (w/antenna)
<b>Package Dimensions</b>	27.3 x 27.3 x 20.3 cm
<b>Package Weight</b>	2.3 kg / 5 lbs
<b>Accessories</b>	Arable Bridge Arable Telescoping Pole Arable Ground Anchor



## Measurements

<b>Precipitation</b>	Range	0 to 100 mm/hr		
	Rain rate resolution	0.1 mm		
	Accuracy	±6%		
	Precipitation type	Rain, mixed drizzle/rain (sleet, snow and hail excluded)		
<b>Temperature</b>	Range	Calibrated -18° C to 45° C		
	Accuracy	Within calibrated range: ±0.8° C / Outside calibrated range: ±1.5° C		
	Measurement interval	5 minute		
	% Daily exceedance	≤ 5% 2° C 0.1% > 5° C		
<b>Relative Humidity</b>	Range	1 to 100% RH		
	Resolution and units	.1% RH		
	Accuracy	±5%		
	Nominal drift	<0.25% RH/year		
<b>Pressure</b>	Range	50 kPa to 110 kPa absolute pressure; tested 95 to 102 kPa		
	Resolution and units	±0.1 kPa		
	Accuracy	< 0.5 kPa		
	Nominal drift	±0.1 kPa/year		
<b>Radiometry</b>	Range	0 to 1200 W/m2		
	Resolution and units	1 W/m2		
	Accuracy	±10% of full scale (Reference: Apogee at 1000 W/m2)		
	Cosine response	±25% for angle of incidence from 0° to 75°		
<b>Spectrometry</b>	<b>Waveband</b>	<b>FWHM range</b>	<b>Sensor peak response</b>	<b>Band ID</b>
	Blue	420 - 480 nm	430 nm	Band 1
	Green	490 - 560 nm	550 nm	Band 2
	Yellow	560 - 610 nm	590 nm	Band 3
	Red	640 - 700 nm	670 nm	Band 4
	Red-edge	730 - 760 nm	745 nm	Band 5
	NIR 1	800 - 855 nm	840 nm	Band 6
	NIR 2	920 - 965 nm	940 nm	Band 7