

An all-in-one weather station and crop monitor, the 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

SKU #	880-0001-07
Input Power	Integrated Solar Module 6V DC (External Solar) Optional: 12V DC (Expansion Connector)
Communications	LTE-M NB-IoT* 2G
Included in Box	Arable Mark 2 Arable Solar 12V AC/DC Adapter Bird Spikes
Device Dimensions	195mm diameter 35mm height (device body) 195mm height (w/antenna)
Package Dimensions	27.3 x 27.3 x 20.3 cm
Package Weight	2.3 kg / 5 lbs
Accessories	Arable Bridge Arable Telescoping Pole Arable Ground Anchor

*Availability dependent on location.

Measurements

Precipitation	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)		
Temperature	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		
Relative Humidity	Range	1 to 100% RH		
	Resolution and units	.1% RH		
	Accuracy	±5%		
	Nominal drift	<0.25% RH/year		
Pressure	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		
Radiometry	Range	0 to 1200 W/m ²		
	Resolution and units	1 W/m ²		
	Accuracy	±10% of full scale (Reference: Apogee at 1000 W/m ²)		
	Cosine response	±25% for angle of incidence from 0° to 75°		
Spectrometry	Waveband	FWHM range	Sensor peak response	Band ID
	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

Arable Solar is an external solar panel for improved power reliability at all latitudes. The 3.5 watt 6 volt panel is lightweight, waterproof, and designed for long term outdoor use in any environment. Arable Solar features a robust custom mounting plate and clips that firmly and easily attach to the Mark's mounting pole.



Hardware Specifications

SKU #	850-0022
Output Power	Open Circuit Voltage: 7.7V Peak Voltage: 6.5V Peak Current: 550mA Peak Power: 3.5W Power Tolerance: +/-10%
Materials	High-efficiency monocrystalline solar cells 3mm aluminum-plastic composite substrate UV- and scratch-resistant urethane coating
Compatible With	Arable Mark 2 Arable Bridge Arable Telescoping Pole
Included in Box	Arable Solar w/ Mounting Plate and Clips Solar-to-Bridge Connector Cable Quick Start Guide
Product Dimensions	21 cm height 11.3 cm width 5 cm depth (including clamps)