

Osmo is an advanced, temperature compensated, soil moisture sensing solution. Capable of measuring every 6 inches of depth, Osmo delivers real-time insights across all soil types. With rugged durability and cutting-edge connectivity options, Osmo is engineered for seamless operation in challenging environments, empowering users with actionable data to monitor crop data.



Hardware Specifications

Unit of Measure:	<ul style="list-style-type: none"> • VWC 0%-100%
Temperature Accuracy:	<ul style="list-style-type: none"> • 0.1° C
Operating Voltage:	<ul style="list-style-type: none"> • 3.3V – 16V (Modbus: 3.3V – 8V; SDI-12: 9-16V) • Reverse Polarity protection • 25V over voltage protection
Standard Interfaces:	<ul style="list-style-type: none"> • SDI-12 • RS485 (Modbus)
Design Stability:	<ul style="list-style-type: none"> • Designed to provide consistent data over a wide range of field environments • Temperature compensated calibration • Characterized from 14°F to 140°F (-10°C to 60°C) • Calibration data stored onboard
Measurement Depths:	<ul style="list-style-type: none"> • Architecture supports 1 – 16 measurement segments* • 6 inch segment lengths to support granular soil moisture measurements • 2 ft and 4 ft standard offerings
Measurement Speed:	<ul style="list-style-type: none"> • Segment readings performed in <0.5 seconds
Power Management:	<ul style="list-style-type: none"> • Low sleep power consumption • <100mW while measuring • <10mW in standby mode
Rugged Design:	<ul style="list-style-type: none"> • IP67 rating • Designed for easy and safe installation and extraction
Warranty:	<ul style="list-style-type: none"> • 24 months