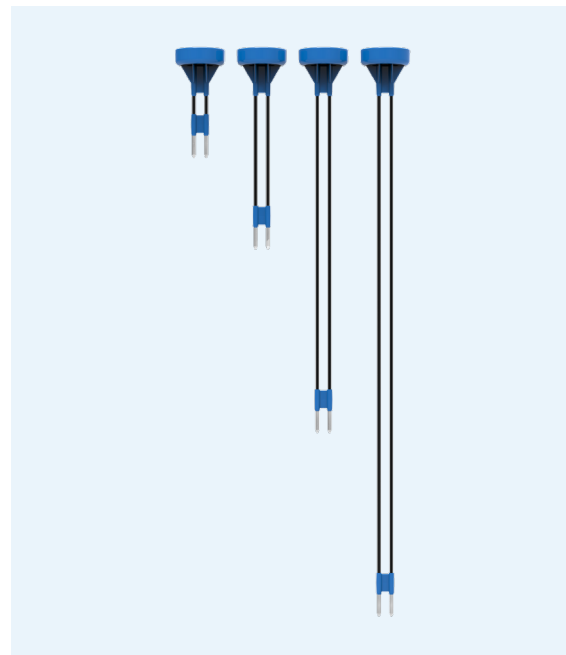


Single Depth Soil Moisture Probe

GENERAL				
Measurement	Soil moisture			
Measurement depths	15 cm / 6"	30 cm / 12"	60 cm / 24"	90 cm / 36"
Dimensions	20x8x8 cm 7.8x3x3"	35x8x8 cm 13.8x3x3"	65x8x8 cm 25.6x3x3"	95x8x8 cm 37.4x3x3"
Weight	0.23 kg 0.50 lbs	0.28 kg 0.61 lbs	0.37 kg 0.81 lbs	0.44 kg 0.97 lbs
Power	Internal Lithium battery included (built-in)			
Operating voltage	3.0 V			
Life expectancy	5 - 8 years			
Operating environment	- 20 to + 60°C			
Waterproof enclosure	IP67+ suitable for outdoor environments			
Installation requirements	By hand or rubber hammer (hammerable)			
Certification	LoRa Alliance / FCC / CE			

SOIL MOISTURE	
Soil moisture measurement protocol	Impedance (soil resistivity and capacitance) <i>patented</i>
Soil moisture measurement output	<ul style="list-style-type: none"> Volumetric Water Content (VWC%) Sensoterra Index (SI)
Soil moisture measurement volume	6.2 cm ³ (2.44 inch ³)
Soil moisture resolution	Reported to the nearest 0.1 %
Measurement Range	From 0% to the maximum water capacity of the soil by total volume - e.g. 53% for clay or 40% for sand.
Accuracy	±1.5 moisture percentage at pF : ≥ 2, when using a Sensoterra calibration curve that matches the soil type
Supported soil types	There are 20+ common soil types available as standard calibrations. Standard calibrations are continuously added and/or updated to include new soil types & compositions. Custom specified calibration available on request.



COMMUNICATION	
Wireless protocol	LoRaWAN 1.0.4, ADR & OTAA enabled
Supported frequencies	Europe: EU868 North America: NA915 Australia: AU915 Asia Pacific: AS923 India: IN865
Transmit power	Up to 14 dBm
Transmission rate	24 uploads per day (default)
Memory	Last 6 measurements
Data interface	Web browser (Sensoterra Monitor), iOS or Android app
Export data	<ul style="list-style-type: none"> Excel download REST API, SenML HTTP Push notifications GeoRSS feed
LoRaWAN connectivity	Annual fee for LoRa connectivity, ST cloud services and ST monitor app/ API
Data security	<ul style="list-style-type: none"> LoRa communication: end-to-end AES-128 encryption Applications & API: TLS/SSL Hosting: ISO-27001 & SOC ½ Type II