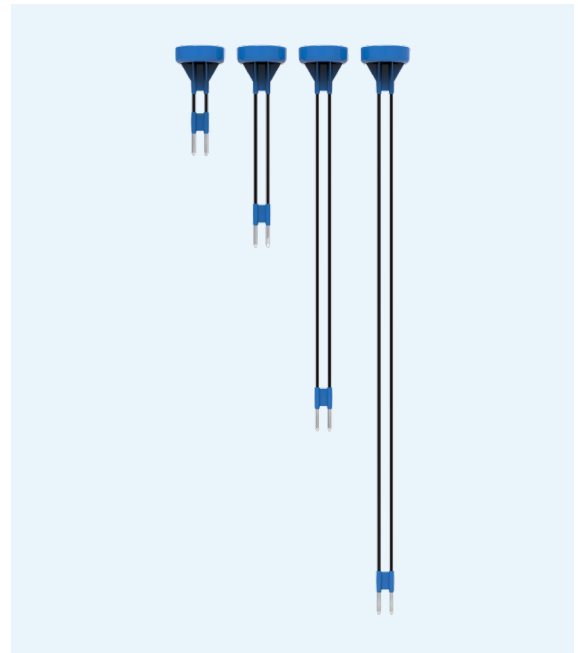


# Single Depth Soil Moisture Probe

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



SOIL MOISTURE	
<b>Soil moisture measurement protocol</b>	Impedance (soil resistivity and capacitance) <i>patented</i>
<b>Soil moisture measurement output</b>	<ul style="list-style-type: none"> <li>Volumetric Water Content (VWC%)</li> <li>Sensoterra Index (SI)</li> </ul>
<b>Soil moisture measurement volume</b>	6.2 cm <sup>3</sup> (2.44 inch <sup>3</sup> )
<b>Soil moisture resolution</b>	Reported to the nearest 0.1 %
<b>Measurement Range</b>	From 0% to the maximum water capacity of the soil by total volume - e.g. 53% for clay or 40% for sand.
<b>Accuracy</b>	±1.5 moisture percentage at pF : ≥ 2, when using a Sensoterra calibration curve that matches the soil type
<b>Supported soil types</b>	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	
<b>Wireless protocol</b>	LoRaWAN 1.0.4, ADR & OTAA enabled
<b>Supported frequencies</b>	Europe: EU868 North America: NA915 Australia: AU915 Asia Pacific: AS923 India: IN865
<b>Transmit power</b>	Up to 14 dBm
<b>Transmission rate</b>	24 uploads per day (default)
<b>Memory</b>	Last 6 measurements
<b>Data interface</b>	Web browser (Sensoterra Monitor), iOS or Android app
<b>Export data</b>	<ul style="list-style-type: none"> <li>Excel download</li> <li>REST API, SenML HTTP</li> <li>Push notifications</li> <li>GeoRSS feed</li> </ul>
<b>LoRaWAN connectivity</b>	Including 2 years connectivity, cloud services, platform & API, and technical support.
<b>Data security</b>	<ul style="list-style-type: none"> <li>LoRa communication: end-to-end AES-128 encryption</li> <li>Applications &amp; API: TLS/SSL</li> <li>Hosting: ISO-27001 &amp; SOC ½ Type II</li> </ul>