



# Odyssey® Xtream Buried Multi-Profile Soil Moisture Logger and Sensor Datasheet

The Xtream Buried multi-profile soil moisture logger system measures the moisture ( by capacitance ) and temperature of the soil at up to five depth levels. The logger itself also measures the ambient temperature. The readings are stored in the internal non-volatile memory along with the ambient temperature (measured inside the logger) and a timestamp. When in range, the logger wirelessly communicates to the Odyssey® Xtract software application ( download free from Play Store or App Store ) on your android phone or tablet and stores the readings on your device. When the Xtract application detects a network connection, it sends the data to the cloud database servers. Using any standard internet browser, connect to our Odyssey® Xpert Web portal to analyse your data.



## Features

- Soil Moisture Measurement at 5 depth levels
- Temperature Measurement at 5 depth levels
- Percentage saturation or Volumetric.
- Internal Ambient temperature reading.
- Not visible when Installed underground.
- Calibrated temperature (traceable to NIST standards)
- Wireless Communications
- Variable logging Interval

**Specification:** ( typical conditions, Battery Voltage 3V, Temperature 22°C )

Moisture Range	0.00 to 100.00% of Saturation or Volumetric.
Moisture Stability ( constant temperature )	±0.01%
Moisture Resolution	0.01%
Moisture Detection Radius	8.5cm
Soil salinity sensitivity	Less than 0.25% per 1000uS/cm.
Temperature Accuracy (factory calibrated)	±0.15°C (sensors in Probe), ±0.2°C ( in Logger)
Temperature Resolution	0.01°C
Calculated Battery Life – (Extended / Standard) – (Industrial)	2+ Years. Based on 15min recording interval for 5 sensors 5+ Years ( Dependent on average temperature )
Memory Capacity	~17,800 For 5 level soil moisture sensor including temperatures
Water Proof	IP68 ( Forever @ 1m )
Dimensions – Logger – Sensor / with access tube	46mm OD, 160mm Length 17.5mm OD, 1.25m long (max) / 21.5mm OD, 1.4m long (max)
Operating Temperature - (Standard) – (Extended / Industrial)	-20 to 55°C ( Standard battery with reduced life below 0°C ) -20 to 60°C / -30 to 85°C
Wireless Communications	<b>Bluetooth® LE</b>
Supported Phone/Tablet	<b>Android™</b> V8.0 or greater. <b>Apple IOS®</b> V9.3.6 or greater.
Battery ( 2 per logger ) (standard)	Alkaline AA 1.5V ( Energizer Max® E91 )
Approvals	FCC, CE, RCM, ISED, MIC, KC, NCC, SRRC, WPC