

ML3

Soil Moisture and Temperature Sensor

The new ThetaProbe has extra features, improved performance and a new design. With its 1 % accuracy the ThetaProbe continues to set the standard for soil moisture as well as temperature measurement.



The ML3 with the addition of a thermistor sensor enables the simultaneous logging of soil temperature with soil moisture. A new cabling system makes it simple to extend or replace the cables. With a choice of 1 m, 5 m, 10 m and 25 m extensions, flexible configurations are now possible.

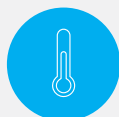
ML3 cables and connectors are buriable (environmentally protected to IP 68). The sensors's salinity response has been improved - its output has been characterised at EC values up to 2000 mS.m⁻¹. The temperature range has also been improved with tests demonstrating that the ML3 can operate at temperatures as low as -40 °C.⁽¹⁾

Data logging and readout

The ML3 can be logged by any logger that can provide 5 to 15 V DC excitation power and will accept the 0 to 1 V output signal.



Soil moisture with ±1 % accuracy



Built-in temperature measurement



Adaptable cable system



White body



Improved performance in saline soils

Water content

Accuracy	±0.01 m ³ .m ⁻³
Range	0 to 0.5 m ³ .m ⁻³
Salinity range	<ul style="list-style-type: none"> < 0.035 m³.m⁻³ 50 to 500 mS.m⁻¹

Temperature

Accuracy	<ul style="list-style-type: none"> ±0.5 °C, 0 to +40 °C ±0.75 °C, -20 °C to +60 °C ⁽²⁾
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General

Output	0 to 1.0 V differential
Power	5 to 15 V, 20 mA for 1s
Sample vol.	~60 x 30 mm diameter

⁽¹⁾ Non-flexing cables

⁽²⁾ Figures apply to sensor only and exclude logger or cabling error

Size	170 x 40 mm diameter
Operating range	–20 °C to +60 °C
Environmental	IP 68, –40 °C to +70 °C