

Profile Probe soil moisture content sensor



The PR2 Profile Probe uses newly patented sensing technology to measure soil moisture content in a range of soil types and across a wide range of nutrient levels, including saline soil conditions.

Choose between the PR2/4, measuring at 4 depths down to 40 cm, or the PR2/6 measuring at 6 depths down to 100 cm. The nominal sensing depths are 10, 20, 30, 40, 60 and 100 cm.

The PR2 access tube requires an installation hole 27mm in diameter, allowing easy installation and minimal soil disturbance. Access tubes are manufactured to strict tolerances and are exceptionally strong and durable in the soil.

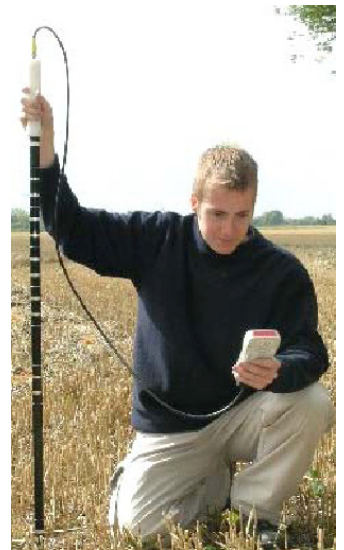
Correct installation is essential and we recommend the use of our specially designed augering equipment.

The PR2 is constructed from the highest grade components and materials to ensure robustness in harsh environments.

Reliable, environmentally sealed, IP68 connectors enable a wide range of cable length and connectivity options to be supported. This flexibility makes sensor connection and disconnection quick and easy.

A PR2 combined with an HH2 readout unit enables a single probe to be used at different locations, providing a low cost multi-site solution.

The PR2 can be permanently installed and teamed with a dedicated MEA data logger for continuous soil moisture monitoring. Alternatively, for multi-probe applications, MEA can design a cable or radio linked network, handling combinations of Profile Probes and other environmental sensors.



PR2 Profile Probe Specifications

Model types	PR2/4	PR2/6
Sensing depths	10, 20, 30, 40 cm (nominal)	10, 20, 30, 40, 60, 100 cm
Measurement	Volumetric soil moisture content ($m^3.m^{-3}$ or % vol)	
Range	Accuracy figures apply from 0 to $0.4 m^3.m^{-3}$ Full range is from 0.0 to $1.0 m^3.m^{-3}$	
Accuracy	$\pm 0.06 m^3.m^{-3}$ in the range 0.0 to $0.4 m^3.m^{-3}$ at 0 to 40°C	
Salinity errors	Included in above accuracy figures	
Soil sampling volume	Vertically: ~95% sensitivity within $\pm 50mm$ of upper ring of each pair. Horizontally: ~95% sensitivity within a cylinder of radius 100mm.	
Environment	0 to 40°C for full accuracy specification, -20 to +70°C full operating range. IP67 rated when installed in access tube.	
Response time	Full accuracy achieved within 1 second	
Power requirement	Minimum: 5.5V DC with 2m cable, 7.5V with 100m. Maximum: 15V DC.	
	PR2/4 consumption: < 80 mA	PR2/6 consumption: < 120 mA
Outputs	0 to 1.0V DC corresponding to 0 to $0.6 m^3.m^{-3}$	
Construction	25.4mm polycarbonate with pairs of stainless steel rings.	
Size / weight	Length: 750mm Weight: 0.6kg	Length: 1350mm Weight: 0.9kg