

DIELECTRIC WATER POTENTIAL SENSOR

The new MPS-1 Dielectric Water Potential Sensor is the perfect fit for all your *in situ* monitoring needs. Integrating a high performance ceramic with the new dielectric circuitry, the MPS-1 can measure a wide range of soil suctions while never needing any user maintenance. No wasting precious time doing individual calibration. In the field, the MPS-1 can be quickly installed down-hole by inserting the sensor and packing wet soil around it. Measuring and recording data is also simple as it can be easily plugged into an Em50 port or any other compatible datalogger. A factory calibration allows the sensor to read out in soil suction, regardless of the soil type it is in, while the high frequency dielectric circuit minimizes soil electrical conductivity sensitivity.

MPS-1 Specifications (R2.07)

- **Range:**
0 to -500 kPa
- **Accuracy:**
±5 kPa from 0 to -40 kPa
±30% of reading from -40 to -500 kPa
- **Resolution:**
1 kPa from 0 to -100 kPa
4 kPa from -100 to -500 kPa
- **Operating temperature:**
-40 C to +50 C
- **Sensor dimensions:**
75 mm x 32 mm x 15 mm
- **Cable length:**
3.5 mm plug: 5 m standard, extension cables available

Datalogger Compatibility (not exclusive)

- **Decagon:** Em50, EM50R
- **Campbell Scientific:** CR10X, 21X, 23X, CR1000, CR3000, etc.
- **Other:** Any data acquisition system capable of switched 2 to 5 V excitation and single ended voltage measurement at 12 bit or better resolution.

Benefits

- Pre-calibrated continuous measurement of soil suction in all soil types.
- No complicated programming.
- No maintenance required after installation.

