

Decagon MPS-2 Dielectric Water Potential

IM5041D

SAR19

ECH500

ECH510

ECH5TM

ECH5TE

ECH511

MD510SM

AQ600

TNS103..7

SEN12512

SEN13512

100SMT

ECH870E

ECH871E

ECH874E

WM-BUS

TNS100


ECH511

The MPS-2 is a maintenance-free water potential and temperature sensor. The MPS-2 measures a wide range of soil water potentials (-10 to -500 kPa (pF 1.71 to pF 3.71)) without user maintenance.

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|---|--|
| Accuracy Soil Water Potential Soil Temperature | $\pm 25\%$ of reading from -10 kPa to -100 kPa $\pm 1^\circ\text{C}$ |
| Resolution Soil Water Potential Soil Temperature | 0.1 kPa 0.1 $^\circ\text{C}$ |
| Range Soil Water Potential Soil Temperature | -10 to -500 kPa (pF 1.71 to pF 3.71) -40 $^\circ\text{C}$ to 50 $^\circ\text{C}$ |
| Measurement Speed | 150 ms (milliseconds) |
| Equilibration time | 10 min to 1 hr depending on soil water potential |
| Sensor Type | Frequency domain with calibrated ceramic discs, thermistor |
| Output | RS232 (TTL) with 3.6 volt levels or SDI-12 communication protocol |
| Operating Environment | -40 $^\circ\text{C}$ to 50 $^\circ\text{C}$ |
| Power | 3.6 - 15 VDC, 0.03 mA quiescent, 10 mA max during 150 ms measurement |
| Cable Length | 5 m, custom cable lengths available |
| Sensor Dimensions | 9.6 cm (l) x 3.5 cm (w) x 1.5 cm (d) |
| Part.no. ECH511 | Decagon MPS2 water tension probe |
| Interface | Necessary Interface to connect this sensor with iMetos: ECH870E / ECH871E / ECH874E |