

MPS-6 Calibrated Water Potential Sensor



ECH512

The **MPS-6** is a matrix water potential sensor that provides long term, maintenance-free soil water potential and temperature readings at any depth without sensitivity to salts. The range of the MPS-6 goes from field capacity to air dry. Lab and field tests indicate that it can make accurate measurements at water potentials at least as dry as permanent wilting point.

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|---|---|
| Accuracy Soil Water Potential Soil Temperature | $\pm(10\% + 2 \text{ kPa})$ from -9 to -100 kPa $\pm 1^\circ\text{C}$ |
| Resolution Soil Water Potential Soil Temperature | 0.1 kPa 0.1°C |
| Range Soil Water Potential Soil Temperature | -9 to -100,000 kPa-40° to 60°C -40° to 60°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° to 60°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. ECH512 | Decagon MPS6 water potential sensor |
| Interface | Necessary Interface to connect this sensor with iMetos ECH870EXT / ECH871EXT / ECH874EXT or ECH870INT / ECH871INT/ ECH874INT |

IM5041D

SAR19

ECH-GS1

ECH500

ECH510

ECH5TM

ECH5TE

ECH512

MD510SM

GS3

TNS103..7

AQ600

100SMT

SEN12512

SEN13512

ECH870EXT

ECH871EXT

ECH874EXT

WM-BUS

TNS100