METER
ENVIRONMENT

TEROS-21 Soil Water Potential Sensor

- Easy to use
- Improved accuracy comes from the six-point factory calibration
- Tough, long-lasting body
- No recalibration
- Low salt sensitivity
- Affordability
- Excellent range (sensitivity from -9 kPa all the way to air dry [-100,000 kPa])
- Onboard temperature measurement
- Plug and play capability
- SDI-12 compatible



The **TEROS-21 is** incredibly easy to use. It requires no maintenance, and it's accurate enough for most applications. In fact, the TEROS-21 provides an even more accurate soil moisture picture than measuring water content alone. A water content sensor only shows the percentage of water in the soil, but add a TEROS-21, and you'll know if that water is available to plants and where it will move. Plus, unlike water content, matric potential isn't dependent on soil type, so you can compare moisture between different sites. Not only that, the TEROS-21 is surprisingly affordable, especially when you consider it measures across a wide range, including dry values.

SPECIFICATIONS

Accuracy	Soil water potential: ±(10% + 2 kPa) from -9 to -100 kPa; Soil temperature: ± 1 °C NOTE: The TEROS 21 is not well calibrated beyond -100 kPa. Therefore, we do not specify an accuracy beyond this range. For more information on using the TEROS 21 beyond this range, see user manual.
Resolution	Soil water potential: 0.1 kPa Soil temperature: 0.1 °C
Range	Soil water potential: -9 to -100,000 kPa Soil temperature: -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	Sensors come standard with 5 m cable. Custom cable lengths available. Maximum cable length of 75 m.
Cable connectors type	3.5 mm "stereo" plug or stripped and tinned lead wires (3)
Sensor dimensions	9.6 cm (l) x 3.5 cm (w) x 1.5 cm (d)
Data logger compatibility	METER data loggers (ZL6, EM50/60 series), ProCheck (rev 1.53+), Campbell Scientific, any SDI-12-capable data logger

מטאו-טק שירותים מטאורולוגיים בע"מ

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