



TEROS-22 SOIL WATER POTENTIAL SENSOR

METER



Continuous monitoring with seasonal flexibility

Choose an instrument that conforms to your installation needs instead of compromising your research. While trenching at installation and removal works for some, it is limiting for research areas such as agricultural environments and geotechnical engineering projects. That's why the TEROS 22 is designed with the flexibility to be installed with a drill-mounted masonry bit or the traditional trenching method, making water potential measurements available to just about any application. Keep the sensor in place for years at time for continuous monitoring or remove seasonally, giving you the flexibility to adapt to changing plans and work around seasonal agricultural schedules.

A true full-range water potential sensor that's low maintenance and low cost

The TEROS 22 water potential sensor is incredibly easy to use. It requires no maintenance, and it's accurate enough for most applications. In fact, the TEROS 22 provides an even more accurate soil moisture picture than measuring water content alone. Plus, unlike water content, matric potential isn't dependent on soil type, so you can compare moisture between different sites. Just like the TEROS 21, the TEROS 22 is surprisingly affordable and measures all the way from near saturation to air dry (0 to -100,000 kPa) making them both true full range water potential sensors.

Features

- Improved accuracy comes from the six-point factory calibration
- Tough, long-lasting body
- No recalibration
- Low salt sensitivity
- Affordability
- Excellent range (sensitivity from 0 kPa all the way to air dry [-100,000 kPa])
- Onboard temperature measurement
- Plug and play capability
- Use with the ZL6 for remote access to data on the cloud
- SDI-12 compatible



BILMAR BİLİMSEL ARAŞTIRMA VE MÜHENDİSLİK ANONİM ŞİRKETİ

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Specifications

MEASUREMENT SPECIFICATIONS

Dielectric measurement frequency	70 MHz
Water Potential	Range: 0 to -100,000 kPa (1.70 to 6.00 pF) Resolution: 0.1 kPa Accuracy: $\pm(10\%$ of reading + 2 kPa) from -100 to -5 kPa Note: TEROS-22 can read up to 0 kPa when on a wetting path. The air entry of the soil limits the performance of the sensor to -5 kPa on the drying curve. Note: TEROS 22 is not well calibrated beyond -100 kPa. For more information on using the TEROS 22 beyond this range, see Section 3.3.3 in the user manual
Temperature	Range: -40.00 to 60.00°C Resolution: 0.10°C Accuracy: $\pm 1.00^\circ\text{C}$

COMMUNICATION SPECIFICATIONS

Output	DDI serial or SDI-12 communication protocol
Data logger compatibility	METER data loggers (ZL6, EM60) or any data acquisition system capable of 4.06-15 VDC power and serial or SDI-12 communication.

PHYSICAL SPECIFICATIONS

Dimensions	Diameter: 1.7 cm Length: 17 cm Length with optional extentions: 40, 80, 120 cm
Cable length	5 m (standard) 75 m (maximum custom cable length)
Connector types	3.5-mm stereo plug connector or stripped and tinned wires
Operating Temperature Range	Minimum : -40°C Maximum : 60°C



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