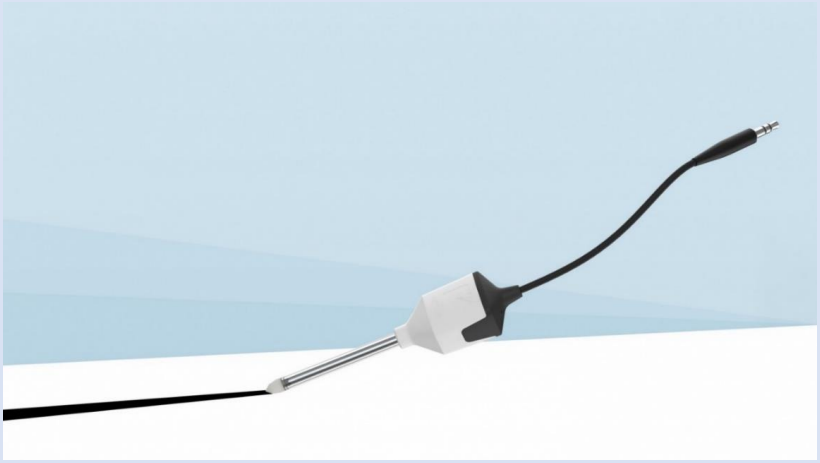
METER
ENVIRONMENT

TEROS 31 TENSIOMETER

WATER POTENTIAL IN THE LAB



- Laboratory tensiometer
- Easy data visualization in real time: plug and play with ZL6 logger and ZENTRA Cloud
- Small and fast
- Little soil disturbance
- Extended range
- Install tensiometer in any position or orientation
- Bubbles easily detectable through the transparent shaft
- Output signals are balanced
- Accurate zero-tension reading

The TEROS 31 tensiometer combines METER world-renowned precision technology with the power of ZENTRA Cloud, giving you easier, faster water potential data in near-real time. And it's plug and play with the ZL6 data logger, making setup a breeze.

MEASUREMENT SPECIFICATIONS

Water potential	Range: –85 to +50 kPa (up to –150 kPa during boiling retardation) Resolution: ±0.0012 kPa Accuracy: ±0.15 kPa
Temperature	Range: –30 to +60 °C Resolution: ±0.01 °C Accuracy: ±0.5 °C NOTE: If the sensor unit is not buried, measured temperature may diverge from soil temperature.

COMMUNICATION SPECIFICATIONS

Output	DDI serial SDI-12 communication protocol TensioLINK communication protocol Modbus™ RTU communication protocol
Data logger compatibility	METER ZL6, EM60, and Em50 data loggers or any data acquisition system capable of 3.6–28.0 VDC excitation and SDI-12, ModbusTM RTU, or tensioLink communication.

PHYSICAL SPECIFICATIONS

Dimensions	Width: 23.5 cm (0.93 in) Depth: 17.5 cm (0.69 in) Height: 49.0 cm (1.93 in) Max. overpressure ± 300 kPa
Tensiometer shaft diameter	5 cm (0.19 in)
Tensiometer shaft length	2, 5, 7, 10, 15, or 20 cm
Operating temperature range	Minimum: 0 °C Maximum: 50 °C
Materials	Ceramic: Al_2O_3, bubble point 500 kPa Shaft: PMMA Sensor unit: PMMA and TPE minus shaft/cup length: 1 cm = 0.1 kPa
Cable length	1.5 m
Cable diameter	0.165 ± 0.004 (4.20 ± .10 mm) with minimum jacket of 0.030 (0.76 mm)
Connector types	3.5-mm 4-pin stereo plug connector
Stereo plug connector diameter	3.50 mm
Conductor gauge	22 AWG/24 AWG drain wire

ELECTRICAL AND TIMING CHARACTERISTICS

Supply voltage (VCC to GND)	Minimum: 3.6 V Typical: 12.0 V Maximum: 28.0 V
Power line slew rate	Minimum: 1.0 V/ms
Current drain (during measurement)	Minimum: 18.0 mA Typical: 25.0 mA Maximum: 30.0 mA
Power up time (SDI-12)	Minimum: 125 ms Typical: 130 ms Maximum: 150 ms
Measurement duration	Minimum: 60 ms Typical: 65 ms Maximum: 70 ms
COMPLIANCE	Manufactured under ISO 9001:2015 EM ISO/IEC 17050:2010 (CE Mark)

מטאו-טק שירותים מטאורולוגיים בע"מ

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