



# **TEROS 31**

Lab Tensiometer

#### TINY TENSIOMETER TACKLES BIG PROBLEMS

If you need spot measurements of water potential in soil columns, soil cores, or sampling rings, there aren't a lot of options. Until now. With the TEROS 31, we put our 25 years of expertise to work in the smallest space possible: a ceramic tip with a surface area of only 0.5 cm<sup>2</sup>.

#### SMALL TENSIOMETER—HUGE BENEFITS

For more than a quarter century, METER has been the leading expert in the development of tensiometers with over 10,000 sold. Nobody in the world makes an instrument this small, this simple, or this precise. Trust the TEROS 31 lab tensiometer for fast, accurate spot measurements in all your tightest spaces.

### **FEATURES**

- · 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

## **SPECS**

Water Potential	Range: —85 to +50 kPa (up to —150 kPa during boiling delay) Resolution: ±0.0012 kPa Accuracy: ±0.15 kPa
Temperature	Range: –30 to +60 °C Resolution: ±0.01 °C Accuracy: ±0.50 °C
	NOTE: If the sensor unit is not buried, measured temperature may diverge from soil temperature.
Output	DDI serial SDI-12 communication protocol TensioLINK™ communication protocol Modbus™ RTU communication protocol
Data Logger Compatibility	METER ZL6 and EM60 data loggers or any data acquisition system capable of 3.6- to 28.0-VDC excitation and SDI-12, Modbus RTU, or TensioLINK communication.
Dimensions	Width: 23.5 mm (0.93 in) Height: 49.0 mm (1.93 in) Depth: 17.5 mm (0.69 in)
Tensiometer Shaft Diameter	5 mm (0.19 in)
Tensiometer Shaft Length	2, 5, 7, 10, 15, or 20 cm
Materials	Ceramic: Al <sub>2</sub> O <sub>3</sub> , bubble point 500 kPa Shaft: PMMA Sensor Unit: PMMA and TPE
Operating Temperature Range	Minimum: 0.00 °C Maximum: 50.00 °C
Cable Length	1.5 m
Cable Diameter	3.0 mm (0.12 in)
Connector Types	4-pin stereo plug connector
Stereo Plug Connector Diameter	3.5 mm
Conductor Gauge	31 AWG drain wire