



TEROS 32

Advanced Field Tensiometer

TENSIOMETER TENSION

The tensiometer is, indisputably, the most accurate way to directly measure water potential in the wet range. But measuring with a tensiometer is complicated. Most require sophisticated wiring and complex programming, not to mention the constant maintenance, checking, and refilling. Now there's a new way. Introducing TEROS 32.

NOW, SIT BACK, AND RELAX

TEROS 32 is a simple, plug-and-play soil tensiometer that combines METER's legendary German precision engineering with the power of ZENTRA Cloud, giving you easier, faster, more accurate water potential data in near-real time. Just install it and plug it in. It's that easy. With ZENTRA Cloud software, you can review data as it happens from the comfort of your office, ensuring every tensiometer is working as expected. No more worrying if your tensiometer has cavitated. Combine the TEROS 32 with the TEROS 12, and you'll know the best time to go out and refill. Plus, you can use both sensors to generate *in situ* moisture release curves.

FEATURES

- Ultra-reliable outdoor precision tensiometer
- · Direct measurement with no need for calibration
- Measures both positive and negative pore pressure
- Plug and play with ZL6 data logger. Also compatible with third-party loggers
- See/share data in near-real time with ZENTRA Cloud
- 10-year warranty on the high-quality ceramic
- More affordable than its predecessors
- · Integrated temperature sensor
- UV-resistant, durable shaft material
- Seals and screw connectors are watertight according to IP 68
- · Extremely robust construction
- Year-round operation when installed deeper than 30 cm
- Can be refilled or emptied without removing from the soil

SPECS

Water Potential	Range: -85 to +50 kPa
	Resolution: 0.0012 kPa Accuracy: ±0.15 kPa
Temperature	Range: -30 to +60 °C
	Resolution: ±0.01 °C Accuracy: ±0.1 °C between –20 and +40 °C (±1 °C outside of this range)
Output	DDI serial and SDI-12 communications protocol
	 3- or 4-wire cable version (Figure 3 in Integrator Guide). RS-485 4-wire cable version (Figure 5 in Integrator Guide).
	Modbus RTU and tensioLINK serial communications protocol
	 3- or 4-wire cable version (Figure 4 in Integrator Guide). RS-485 4-wire cable version (Figure 6 in Integrator Guide).
Data Logger Compatibility	METER ZL6 and EM60 data loggers or any data acquisition system capable of 4.0- to 28.0-VDC power and serial interface with SDI-12 and/or RS-485 interface, Modbus RTU, or tensioLINK.
Dimensions	Diameter: 2.5 cm (0.98 in) Length: 40.0 cm (15.75 in)
	80.0 cm (31.50 in)
	120.0 cm (47.24 in)
Materials	Ceramic: Al2O3 , bubble point 1,500 kPa Shaft: PMMA
	Corpus: POM GF Refilling Tubes: Stainless steel
 Installation Angle	10° to 80° from horizontal (downward)
mstattation Angle	–10° to –80° from horizontal (upward)
Operating Temperature	Minimum: –30 °C (0 °C for water-filled tensiometer)
	Typical: NA Maximum: 50 °C
Cable Length	5 m (standard)
	75 m (maximum custom cable length)
	NOTE: Contact Customer Support if a nonstandard cable length is needed.
Cable Diameter	Stereo Plug 4.2 \pm 0.2 mm (0.16 \pm 0.01 in) with minimum jacket of 0.8 mm (0.031 in) M12 Plug 5.5 \pm 0.2 mm (0.22 \pm 0.01 in) with minimum jacket of 1.0 mm (0.039 in)
Connector Size	3.50 mm (diameter) 14.4 mm (diameter M12)
Connector Types	Stereo plug connector or stripped and tinned wires 4-pin M12 connector or stripped and tinned wires
Conductor Gauge	Stereo Plug 22-AWG / 24-AWG ground wire M12 Plug 22-AWG