# MONATORING

# **T5 TENSIOMETER**

# **DESCRIPTION**

T5 Tensiometer is the smallest space possible: a ceramic tip with a surface area of only 0.5 cm2. The T5's minor footprint allows major advantages over larger tensiometers such as very little soil disturbance and an incredibly fast response time. Not only that, because of its small size, it's the only tensiometer in the world that can extend its measuring range. No more trying to handle selective measurements in the field or small samples with oversized tensiometers. The T5 is small enough and precise enough to perform excellent point to point measurement of water potential in even the tightest spaces.



### **T5 TENSIOMETER**

#### **FEATURES**

- Laboratory tensiometer
- Small and fast
- Little soil disturbance
- Extended range with T5x model
- Install in any position or orientation
- Bubbles easily detectable through the transparent shaft
- Output signals are balanced
- Accurate zero-tension reading

#### **ACCESSORIES**

- Replacement Shaft.
- Refill Kit and Tool Set.
- Soil Coring Device
- M12 Connector to 4-Wire Pigtail

# **T5 TENSIOMETER**

The T5 Tensiometer has a superheroic response time of only 5 seconds for a pressure change of 0 to -85 kPa. It reacts much faster to changing soil conditions because of its small water volume, enabling you to measure even the most minute changes in water potential-something lowerquality tensiometers cannot do. It measures matric potential exactly within the range of most water movement, helping you understand whether water will move and where it will go.

## Contact info



## **Monitoring MENA**

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SPECIFICATIONS	
Total length 4 cm + shaft length	
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Current consumption	~1.3 mA (at 10.6 V)
Shaft with cup	Various lengths available (standard 70 mm)  **Please indicate shaft/cup length on your order**
Power supply	10.6 VDC (5 - 15 VDC), stabilized
Diameter	Shaft diameter: 5 mm Body diameter: 20 mm
Electronic principle	Asymm. Wheatstone full bridge
Shaft material	Acrylglass
Sensor	Piezoresistive pressure transducer Max. overpressure ± 300 kPa
Stability	Typical shift < 0.5% p.a.
Cable	Various lengths available (standard 5 m) **Please indicate cable length on your order**
Temperature shift	Temperature-compensated, typical shift 0.5% FS over 25 K
Range	100 to -85 kPa (ca. pF 2.9) minus shaft/cup length: 1 cm = 0.1 kPa
Resolution	0.1 kPa
Accuracy	± 0.5 kPa
Impedance	~2.5 kOhm
Signal	100 kPa = -100 ± 3 mV -85 kPa = 85 ± 3 mV at 10.6V excitation  Accurate values according to the calibration certificate. Galvanic sensor insulated from soil water. Depending on the installation orientation of the T5, the hydrostatic potential
Data logger	of the shaft length has to be considered
Data logger compatibility	Campbell Scientific, Infield 7
Measurement principle	Soil water tension, transmitted via ceramic cup into the tensiometer, onto the water and pressure transducer, producing a continuous analog signal

This Instrument is manufactured by our principle company