



# **TEROS 22**

Soil Water Potential Sensor

#### INSTALL AND REMOVAL JUST GOT EASIER

The newest generation of matric water potential sensor is now the quickest water potential sensor to install and remove, with the same high accuracy and low maintenance you've come to expect and trust from METER. Over 40 years of experience has brought us to the next evolution of simple and precise water potential measurements — Introducing the TEROS 22.

## 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.

### **FEATURES**

- · Easy to install and remove
- Install via 16 mm (5/8 in) drill hole or in the side of a trench
- · Tough, long-lasting body
- No recalibration needed
- Low salt sensitivity
- Affordable
- 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 data logger for remote access to data on the cloud
- DDI Serial and SDI-12 compatible

### **SPECS**

Water Potential	Range: 0 to -100,000 kPa (1.70 to 6.00 pF) Resolution: 0.1 kPa Accuracy: ±(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 21 beyond this range, see Section 3.3.3 in the user manual
Dielectric Measurement Frequency	70 MHz
Temperature	Range: -40.00 to +60.00 °C Resolution: 0.10 °C Accuracy: ±1.00 °C
Communication Output	DDI serial or SDI-12 communication protocol
Data Logger Compatibility	METER ZL6 and EM60 data loggers or any data acquisition system capable of 4.0- to 15-VDC power and serial or SDI-12 communication
Dimensions	Diameter: 1.7 cm (0.67 in) Length: 17 cm (6.7 in) Length with optional extensions: 40, 40, and 120 cm (15.7, 31.5, and 47.3 in)
Sensor Diameter	1.7 cm (0.67 in)
Operating Temperature Range	Minimum: –40.00 °C typical: NA Maximum: +60.00 °C
	NOTE: Sensors may be used at higher temperatures under certain conditions; contact Customer Support for assistance.
Cable Length	5 m (standard) 75 m (maximum custom cable length)
	NOTE: Contact Customer Support if a nonstandard cable length is needed.
Connector Types	Stereo plug connector or stripped and tinned wires
Connector Size	3.50 mm
Conductor Gauge	22-AWG \ 24-AWG ground wire