



# TEROS 11 + TEROS 12 ADVANCED SOIL MOISTURE SENSING

METER



## SUPPORT

Have a question or problem? Our support team can help.

We manufacture, test, calibrate, and repair every instrument in house. Our scientists and technicians use the instruments every day in our product testing lab. No matter what your question is, we have someone who can help you answer it.

### NORTH AMERICA

Email: [support.environment@metergroup.com](mailto:support.environment@metergroup.com)  
Phone: +1.509.332.5600

### EUROPE

Email: [support.europe@metergroup.com](mailto:support.europe@metergroup.com)  
Phone: +49 89 12 66 52 0

# TEROS 11/12 QUICK START

## Preparation

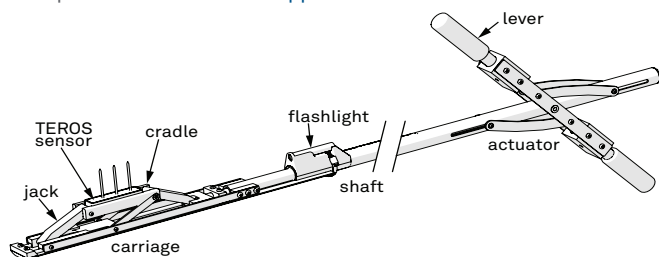
Inspect and verify the sensor components (TEROS 11 Soil Moisture and Temperature or TEROS 12 Soil Moisture, Temperature, and Electrical Conductivity). The TEROS verification clip gives the best assessment of proper sensor function and accuracy. The TEROS 11/12 should read 0.332 to 0.363 m<sup>3</sup>/m<sup>3</sup> on the verification clip. If a verification clip is not available, test basic sensor functionality in air and water. The TEROS 11/12 will read ~0.70 m<sup>3</sup>/m<sup>3</sup> in water and a slightly negative value in air.

**NOTE:** The sensors are optimized to read in soils, therefore the sensor will not read 100% in pure liquid water. Values above use the mineral soil calibration.

## Installation Tool

Proper installation of the sensors is critical for proper operation. Refer to the [TEROS 11/12 User Manual](#) for details.

For easy installation, use the borehole installation tool. The installation tool (shown below) is available for rent from METER Group. Contact [Customer Support](#) for more information.



## What is soil moisture?

Soil moisture is a key variable in controlling the exchange of water and heat energy between the land surface and the atmosphere through evaporation and plant transpiration.

[Learn more at metergroup.com](http://www.metergroup.com)

## ⚠ ATTENTION

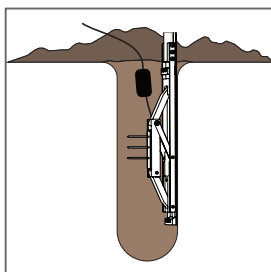
For best results, use the latest versions of METER software and firmware for the computer or mobile device, products, and sensors. Please use the software Help menu to find updates. Consult the sensor user manual for more troubleshooting tips.

## Installation

### 1. Insert Sensor

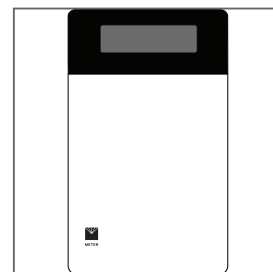
Auger or trench a hole to the desired sensor depth. Insert the sensor into the undisturbed soil.

When using the borehole installation tool, load the TEROS 11/12 as shown. Lower the tool into the hole or trench with the back of the tool supported by the far wall. Pull on the lever to activate the jack and insert the sensor into hole wall.



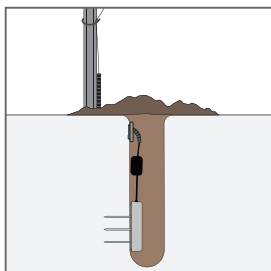
### 2. Check Sensor Operation

Plug the sensor into the data logger and use the **SCAN** function in the software to do a quick check of sensor operation before backfilling.



### 3. Repack Soil and Protect Cables

Secure and protect cables with PVC casing or flexible conduit and backfill the trench or hole.



### 4. Plug Sensor In and Configure Logger

Plug the sensor into the data logger. Use data logger software to apply appropriate settings to the sensors plugged into each data logger port.

