



# TDR-350

portable water content, EC & temperature

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## overview

- Portable, easy to use, soil moisture, EC & temperature meter
- Measure volumetric water content or relative water content
- Measure surface temperature with infra-red temperature sensor
- In-built data logger, Bluetooth downloads to mobile maps, and email data from the field
- Integrated GPS for mobile mapping of soil moisture, EC and temperature

When precision irrigation decisions count, the TDR-350 Soil Moisture Meter Series offers growers a tool to eliminate the guesswork. Based on proven time-domain measurement technology, these portable units accurately measure soil moisture across the full range of soil moisture conditions. Select from the 3.8, 7.5, 12 or 20-cm probe rods to suit your desired depth measurement. Install PVC access tubes and take readings deeper in the soil profile for permanent crops like apple, grapes, and nut crops.

### more details

The TDR-350 has two volumetric water content modes; one for standard soils and one for higher clay soils. In volumetric water content (VWC) mode, the meter converts a measured electrical signal into percent soil moisture content using an equation valid over a wide range of mineral soils. In irrigation mode, the meter displays a relative water content (RWC) on a scale of 0 to 100 corresponding to a user-defined upper and lower soil moisture reference level. Water deficit, the amount of water needed to bring the soil moisture content up to the upper reference level, is also calculated and displayed. The reference levels are

easily programmed into the meter with the accompanying software. Create up to 2 management sites based on your soil types and crop needs. Use the raw reading mode (measurement period in microseconds) to do soil-specific calibrations.

## features

- Instantaneous readings of root zone soil moisture
- Introducing the new FieldScout Bluetooth Device, connects to the FieldScout Mobile App, instantly see your data on your smart phone or tablet (more information below)
- Connects to any GPS receiver with serial output\*\*
- Equipped with internal data logger and RS-232 port
- Records 3,250 measurements (1,350 with added GPS/DGPS option)
- Configure and download meter with FieldScout software (included)\*
- Compatible with SpecMaps online web-mapping application
- TDR-350 meter includes soft-sided carrying case (Item 6430CASE)
- Rods sold separately
- Firmware chip not required for new purchases – only if your TDR is pre-January 2012. Firmware version 6.5 or higher required for FieldScout Bluetooth Device connection

## FieldScout mobile app



FieldScout Mobile App  
Pro Version  
Showing TDR 300 data  
(concept image)

Use the FieldScout Mobile app to instantly collect and display data. Collects data from the new FieldScout® TDR 350 Soil Moisture Meter using Bluetooth Smart connection. Visualize real time readings on a Bluetooth Smart Ready smartphone or tablet in the field

- Color coded to represent a scale of moisture, EC, surface temperature or turf

firmness

- E-mail relevant information to communicate results with others
- Free download from Apple App Store or Android Google Play

### **Pro Mode requires a SpecConnect subscription**

- Google Maps dynamic satellite image shows readings data overlaid on your property
- Guided Mode allows for taking grid readings without interacting with the phone
- Freeform Mode plots a point for each reading, and stores its data independently
- Automatic wireless upload to SpecConnect for further analysis from your personal web portal
- Eliminates the need for a computer, cable and GPS accessory
- SpecConnect provides complete data overview at once, overlaid on a satellite map
- Color Gradient Mapping of data points within custom selected areas or groupings
- Export your data from SpecConnect into an Excel document for deeper analysis

## **specifications**

<b>feature</b>	<b>specification</b>
Measurement Principle	Time Domain Reflectometry (TDR)
Measurement Units	Volumetric water content (% VWC)   relative water content (% RWC)   raw values (microseconds)
Resolution	0.1% volumetric water content
Accuracy	±3.0% VWC with manufacturer's calibration   ±0.0% VWC with custom calibration
Range	0% to 100% with custom calibration
Power Supply	4 x AAA alkaline batteries; approximately 12-month battery life
Data Logger Memory	3,250 measurements without GPS   1,350 with GPS

## **manual & docs**



## manual

- [TDR-350 Meter Manual](#)

## articles & guides

- [Irrigation Management with Portable Moisture Kit](#)
- [How to Determine Relative Water Content with the TDR-300](#)
- [A Soil Postcard of Plant Available Water](#)

## related products

- [TDR-150 Portable Hand Held Soil Moisture Meter](#)
- [ProCheck Portable Moisture Meter](#)
- [FOM/mts TDR Field Meter](#)
- [Diviner-2000 Portable Profile Moisture Probe](#)
- [Soil moisture sensors, probes & meters](#)