

TRIME TDR Soil Moisture Measurement Devices and Equipment

TRIME-FM



The Portable TRIME®-FM displays direct %vol moisture content and TDR level at the touch of a button

Compact and lightweight device for field use

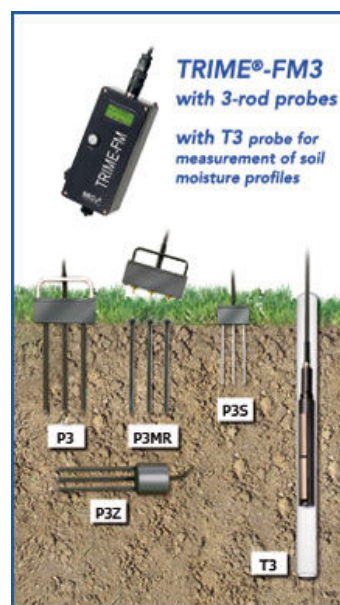
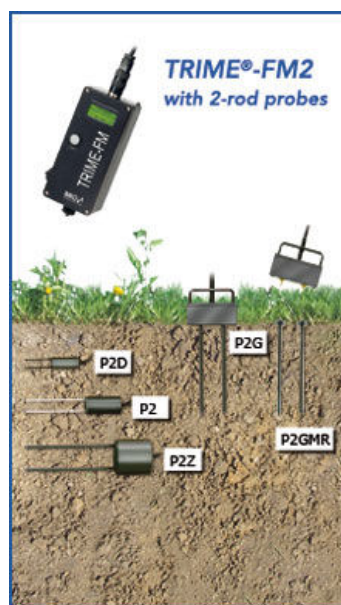
Compatible with wide range of 2-rod, 3-rod and special probes

TRIME®-FM

The TRIME-FM is the standard field-measuring device for volumetric moisture in porous materials. The intelligent automatic TDR-curve reading electronics are housed in the robust and waterproof (IP 67) aluminum housing, withstanding even the demands of all-day field use. The simple one-button operation with automatic battery optimization displays the water content in % by volume, and TDR-level (as a measure of salinity). In less than 10 seconds. The data is displayed clearly on a clear 4-line LCD panel.

Engineered to allow maximum flexibility and extension potential, a wide variety of probe types can be connected to the FM-device. A built-in EEPROM in the probe connector case stores all probe parameters such as type and cable length.

The TRIME-FM2 version is designed for the 2-rod probes and the FM3 version for all other TRIME 3-rod and special probe types. Every probe must be adapted to the FM prior to use. 2-rod probes are not compatible with FM3 versions and vice versa. The TRIME-FM has a RS232/V24 for an external power supply (7..15V/DC, 250mA) and connection to a PC. The 0..1V analogue output allows optional connection to external devices such as a TRIME Data Pilot.



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Technical Data

TRIME[®]-FM

Manual operation with 4-line-LCD panel for showing water content, TDR-level (conductivity) and device mode.

Power supply: 7V..15V-DC, 600mA/h battery capacity. Full battery is sufficient for up to 300 measurement cycles.

Supply current: 8mA standby, 250mA during 10..15sec. measuring time

Resolution: 0.1%

Repeating accuracy: 0.3%

Temperature range: -15°C...50°C, wider temperature ranges on request!

Temperature caused value drift: max. +/-0.5%

Standard interface: 0..1V analogue output and RS232/V24

Calibration data: calibrated for mineral soils, but individually adaptable per software

Case: weatherproof, robust aluminum diecast (IP67)

Dimensions: 210 x 90 x 60mm, 875g

For information on the measuring accuracy and range as well as the tolerable range of bulk electrical conductivity, please refer to the corresponding probe.