

Aquaprobe™

NDT
JAMES INSTRUMENTS
Non Destructive Test Equipment

Test Well. Build Well.

A microwave meter for rapid determination of moisture content in different types of soils



Product Information

The **James Aquaprobe™** represents a break-through in modern moisture measurement technology. By utilizing the latest microwave and microprocessor technology, the **Aquaprobe™** can determine the soil moisture content of different types of soils and other fine aggregate. Simply insert the five prongs in the soil to be measured and review the percentage moisture on display. A special guide is supplied to assist the user with inserting the prongs in particularly dense soil.

The **Aquaprobe™ Microwave Soil Moisture Meter** uses a five prong sensor to measure the complex dielectric constant of the material encompassed by the outer four prongs. As the dielectric constant of water is four to eight times greater than most natural soil types, changes in water content directly affect the sensor output. This output is then converted by the integrated microprocessor and moisture content is displayed directly as a percentage of dry weight. An average of five to ten readings is normally taken in order to ensure a valid reading, especially as water does not distribute itself evenly for many types of materials.

The basic unit comes pre-calibrated for Lean Clay, Silt, Sand (Ottawa Sand and SP sand) and general type of Silty

Sandy soil. These soils represent the most commonly found types. This makes the basic unit the economical choice when evaluating soil moisture levels.

The complete system includes equipment to create custom calibration curves for different types of soil. The instrument can be programmed with up to ten different materials by the user. For highest accuracy, the unit should be programmed for the material being tested. Simple to use Windows™ software is provided for calibrating the unit to the various materials.

Finally, the **Aquaprobe™** instrumentation unit can store over 150 readings. Storage is complete with the time and date for future reference. Data can be recalled via USB interface to a personal computer running Windows™.

Features & Benefits

- Fast and easy to use.
- No hazardous chemicals.
- Accurate.
- Completely portable.
- Easy to read display.
- Instantaneous readings

Strength

Locators

Ultrasonics

Corrosion

Moisture

Aquaprobe™



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Applications

- Highway and Road Contractors
- Geotechnical Engineering
- Foundation Engineering
- Golf Courses
- Earth Moving Works
- Agriculture



Aquaprobe™ In Use (Left)



Specifications (probe)

Measurement Range	0 - 15% by Dry Weight
Frequency	50 Mhz
Power	2 AA Batteries
Display	4 x 16 Char. Trans - reflective
Data Link	USB
Weight	4 lbs. (1.8kg)

Sales Numbers

- T-S-30** Aquaprobe™ Soil Moisture Meter Complete System
- T-S-37** Aquaprobe™ Soil Moisture Meter Calibration Kit (upgrade for Basic System to Complete System)
- T-S-31** Aquaprobe™ Meter Assembly
- T-S-32** Aquaprobe™ Sensor Unit with Cable

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