

The James T-M-170 Moisture Master

A Hand Held Instrument for Fast Accurate Measurement of Moisture Content in Solid Materials.

Applications:

Locate leaking pipes in walls & floors.

Locate seeping water in basements & masonry tanks.

Check moisture level of material before applying coatings or adhesives.

Curing condition of wood, stucco, and other construction materials.

Features and Benefits

- Direct read out of moisture content, no charts or tables required.
- Separate modes for concrete, brick, different woods, and gypsum.
- Measures moisture in most solid materials.
- Color coded LED indicates moisture condition of material
- Alarm values can be set by user.
- Pin mode for low density materials, capacitive mode for high density materials.

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Technical Specifications



Technical

The James Instruments Moisture Master utilizes the latest electronic technology to measure the quantity of water within its sensing field. The unit has two modes of operation the pin mode, and search mode. In the pin mode, two pins are pushed into the material and a high frequency field is created between these two pins. In the search mode the unit uses a high frequency capacitive sensor to sample a large volume of the material, instantaneously. Changes in this electromagnetic field are directly proportional to the dielectric constant of the material through which it passes. As the dielectric constant of water is almost two orders of magnitude greater than most non-metallic materials, variations in this parameter can be correlated to the moisture content. After extensive testing of various materials, relationships between the change in this field and moisture content have been determined. These relationships have been digitized and implemented using the latest in micro-computer technology, thereby allowing the user the direct readout of moisture content for concrete, masonry, hard wood, soft wood, gypsum, and brick. The pin method has been found to be most effective in low density materials such as fir wood or pine wood. The search mode has been found to be most effective for higher density materials such as brick, masonry, gypsum and concrete.

Sales Numbers

T-M-170 Moisture Master

Specifications

Size: $165 \text{mm} \times 62 \text{mm} \times 26 \text{ cm} (6.5 \times 2.4 \times 1 \text{ in})$

Weight: 175 gr (6 oz) **Measurement Range:** 0 - 80.0%Resolution: 0.1% Batterv: 4 x 'AAA' Temperature Range: 0° to 50° C







