

Moisture Instruments

Pinless Non-destructive Detection of Moisture in Materials

- **No probes or pins to damage surfaces**
 - Use low-frequency electronic signals
- **Detects moisture through:**
 - Ceramic Tile
 - Drywall
 - Carpet
 - Vinyl Flooring
 - Vinyl Composition Tile
 - Floor Laminates
 - Wall Coverings
 - Roofing Membranes and Coatings
- **Instant, accurate, and repeatable readings**
- **Small and lightweight**
- **Advanced Survey model features**
 - Built-in micro-controller that uses temperature and built-in materials library to calculate moisture content
 - High-capacity non-volatile memory chip that stores up to 625 readings in 25 files that are downloadable to a PC
- **Large, easy-to-read scales**
- **Battery-operated**
 - 9-V alkaline battery
- **Provide percentage moisture readings for wood**
 - Provide relative readings for other construction materials



Survey Encounter Meter provides automatic correction for density and temperature

Description

An essential tool for microbial IAQ investigations, moisture meters detect excess moisture in materials that is often not visible and that can quickly lead to microbial growth and IAQ problems. It is important to determine the source of moisture quickly and accurately and to identify areas for remediation and control. Traditional moisture meters use small probes that penetrate the material to be tested (conductive testing). Encounter meters use a non-destructive technology to measure moisture through ceramic tiles, vinyl flooring, VCT, floor laminates, wall coverings, drywall, carpet, roofing membranes, coatings, and concrete.

Encounter meters operate on the principal of non-destructive impedance measurement. Parallel coplanar electrodes are fitted on the base of the instrument. During operation, low-frequency signals are transmitted into the material being tested to measure the change in impedance caused by the presence of moisture. This reading is translated by the instrument into a moisture content reading.

Moisture Encounter Plus

The Moisture Encounter Plus provides non-destructive accurate readings of the percentage of moisture in wood and relative readings of moisture in drywall, roofing, plaster, and brick. Three sensitivity ranges make moisture measurement quick and easy.

- **Deep signal penetration**
 - Up to 1.25 inches
- **Wide measurement range**
 - 5 to 30% wood
 - 0 to 100 comparative for other materials
- **Hold function freezes reading**



Moisture Encounter Plus provides quick and accurate moisture readings.



Advanced Survey Encounter

The advanced Survey Encounter detects moisture beneath surfaces quickly and accurately. Soft conductive electrode pads on the base of the meter run smoothly over the test surface and immediately identify moisture without scratching or drilling. Survey Encounter features a powerful micro-controller, real-time clock, temperature sensor, and high-capacity non-volatile memory chip. The micro-controller processes readings and uses existing temperature and the specific gravity information contained in its built-in library to accurately calculate moisture content for specific materials.

The built-in library contains 32 wood species, three wall types, and three roofing types. Additional wood species can be accessed through the provided software. Store and download data to a PC for analysis or reporting.



Survey Encounter provides automatic correction for density and temperature.

Concrete Encounter CMEXpert II

The new handheld CMEXpert II concrete moisture meter instantly measures moisture content up to 7% in concrete, gypsum cement, and other slabs and screeds according to ASTM F 2659 without damaging the surface. Moisture content is displayed on a large LCD. When used with an RH probe accessory, the CMEXpert II can be used to test concrete slabs according to ASTM F 2170 (in situ) or ASTM F 2420 (RH hood) and complies with BS Standards 5325 and 8203. A wood moisture pin-type probe accessory is also available for measuring from 7 to 40% moisture content in wood.



Concrete Encounter CMEXpert II provides instant readings of moisture in concrete.

MRH III Moisture/Humidity Meter

The high-performance MRH III digital display moisture meter instantly measures moisture content in wood and other building materials using a non-destructive impedance method. An optional wood moisture probe provides accurate pin-type measurements of moisture content in wood to determine correct moisture level for installation. An optional RH probe changes the MRH to hygrometer mode to measure humidity (displays in both %RH and mixing ratio [grains/pounds or grams/kg]), temperature, and dew point in structural materials such as concrete and drywall as well as environmental conditions within a structure. The RH probe also allows testing of concrete slabs using the in situ method (ASTM F2170) or RH hood method (ASTM 2420), BS 5325, and BS 8203 standards.



MRH III Moisture/Humidity Meter provides instant readings of moisture in wood and other building materials.

Performance Profile

Measuring method: Non-destructive signal (impedance)

Frequency:

Plus model: 5 to 25 KHz

Survey model: 125 KHz

Electrodes:

Non-invasive capacitive coplanar conductive rubber

Measuring range:

Plus and

Survey models:

5 to 30% for wood

0 to 100 comparative for other materials

Concrete model:

up to 7% in concrete

7 to 40% for wood

Moisture reading accuracy:

Plus and

Survey models:

± 1% up to 15% for wood

± 1.5% from 16 to 25% for wood

Relative readings for other materials

Data storage:

Survey model:

625 readings can be stored in 25 files (25 readings per file)

Dimensions:

Plus model:

6x3.2x1.2 in (15.2x8.1x3.0 cm)

Survey model:

6 x 3.2 x 1.4 in (15.2 x 8.1 x 3.5 cm)

Concrete model:

6 x 3 x 1.5 in (15.2 x 7.6 x 3.8 cm)

Weight:

Plus model:

9 oz (255 gm)

Survey model:

9.6 oz (272 gm)

Concrete model:

10.5 oz (298 gm)

Battery:

9-V alkaline

Ordering Information

Description	Cat. No.
Moisture Encounter Plus includes meter with battery, operating instructions, and vinyl carry pouch	759-103
Concrete Encounter CMEXpert II includes meter with battery, operating instructions, and vinyl carry pouch	759-110
Survey Encounter includes meter with battery, software, computer cable, operating instructions, and vinyl carry pouch	759-101
MRH III Moisture/Humidity includes meter with battery, operating instructions, and vinyl carry pouch	759-104
MRH Relative Humidity Probe, converts CMEXpert II and MRH III meters to a digital hygrometer	759-105
MRH Wood Moisture Probe, for CMEXpert II and MRH III meters, allows invasive pin-type measurement with digital readout	759-109

Test blocks with known moisture content are available to check instrument calibration. Contact SKC.

SKC Limited Warranty and Return Policy

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