

# MMS2 Complete Protimeter Moisture Measurement System

The all new MMS2 represents the latest Protimeter technology in one intuitive, robust and fully functional design. If you're surveying buildings, inspecting a home, drying a building after a flood, or testing concrete moisture for a flooring application, the MMS2 is the solution for you.

- Pin moisture measurement
- Non-invasive moisture measurement
- Non-contact IR temperature measurement
- Fast responding relative humidity and temperature measurement

#### **Benefits**

- Full building moisture diagnostics on easy-touse instrument
- Fast responding hygrometer speeds up building surveys
- No need to plug in multiple accessories



#### **Features**

- Intuitive user interface with color screen
- Data logging
- Firmware upgradable
- Psychrometric calculations
- Surface non-contact temperature measurement with laser pointer



# Four-In-One Moisture Measurement System

Measures moisture in wood and wood floors, drywall, concrete and concrete block, stucco, plaster, masonry and other building materials.

**Measure** (pin mode) diagnoses the extent of moisture intrusion for damage assessment and monitor drying out of building structures.

- Use built-in pin or plug in the heavy duty moisture probe for measuring in hard-to-reach areas
- Use deep wall pin-type probes to measure moisture in walls, wall cavity insulation, sub and surface structures
- Use accessories such as hammer probes to measure at depth

**Search** (non-invasive mode) behind ceramic tile, fine finishes, water stains, tile and vinyl floor coverings, wood, drywall, plaster, masonry, concrete and concrete block.

- Non-invasive pinless radio frequency finds moisture up to 3/4 in (19 mm) below surface
- Search mode not adversely affected by surface moisture

**Hygrometry** measures or monitors buildings for adequate ventilation affecting indoor air quality and moisture problems.

- Measures relative humidity and temperature, dew point and surface temperature, surface proximity to dew point (condensation) and grains per pound, as well as multiple psychrometric calculations
- Allows measurement of equipment such as dehumidifiers
- Measures equilibrium relative humidity in concrete floors using the in situ probe method
- Use to detect conditions for mold and fungus growth, that can lead to unhealthy living conditions

**Surface Temperature (IR)** checks surface temperature, utilizing laser pointer, calculates proximity to dew point.



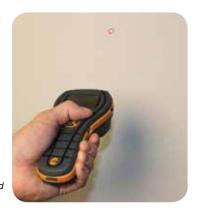
Measure



Search



Hygrometry

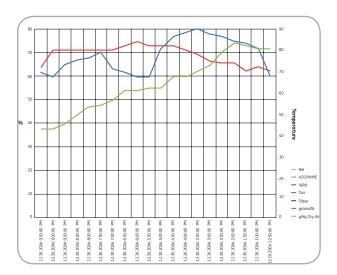


Infrare

## **Data Storage Functions**

When concise and accurate environmental readings need to be reported, the MMS Plus gets the job done. The ability to record readings instantly at the push of a button, and to continuously log when left on site, makes this instrument ideal for many applications including:

- Building survey
- Fire and flood restoration
- Concrete floor moisture measurement
- Indoor air quality
- Environmental health



# **Humidity Probe Options**

The MMS Plus may be used with three styles of interchangeable humidity probe, the Hygrostick, the Quikstick and the Quikstick ST. The Hygrostick (grey POL4750) can be used for high moisture applications such as concrete measurement. Quikstick (black POL8750) is a general purpose, fast-responding full range sensor.

# Concrete Floor Moisture Measurement

MMS2 can be used for measuring equilibrium relative humidity directly in concrete slabs. Protimeter pioneered this more accurate method, which includes drilling holes in the concrete, inserting a humidity sleeve and measuring the equilibrium humidity in the concrete. If excessive moisture is found, simply replace the sleeve cap for future retesting. This method also permits normal construction without disturbing the test surface.

A small hole is drilled in the concrete. Next, a humidity sleeve is inserted and capped flush with the floor. The relative humidity of the air in the test hole is now at the same moisture level as the concrete around it. Flooring product manufacturers normally recommend RH readings between 75% and 85% depending on the permeability of the product being installed.

Readings from multiple Hygrosticks can be taken and recorded with ease. Humidity readings can be taken with the use of humidity sleeves or humidity box. Hygrosticks, not Humisticks, should be used for this test.



Quikstick ST POL78751, standard with all MMS2 kits and with the same performance as the standard Quikstick. A Quikstick ST can remain connected to the MMS 2 while using the pins.



Hygrostick part number POL4750, for high moisture applications.

# MMS2 Specifications

#### **Gross Weight**

10 oz (283 gms)

#### **Dimensions (LxWxH)**

7.5 in x 3.7 in x 2.2 in (190.5 mm x 94 mm x 56 mm)

#### **Maximum Needle Depth**

0.4 in (10 mm)

#### **Display**

Color LCD

#### **Batteries (Included)**

9 V

#### **Warranty**

24 months on mechanical or manufacturing defects. Does not include wearing part or accessories

#### **Moisture Measurement Range**

Pin (% WME) 8% to 99, readings over 30% are relative

Non-invasive (RF) up to 3/4 in (19 mm) deep 60 to 1000 (relative)

#### Plug in Temperature Probe Surface Temperature Probe - BLD5805

Range 32°F to 158°F (0°C to 70°C) Accuracy at 77°F (25°C) +/- 1.3°F (0.7°C)



#### **Infrared Surface Temperature Range**

IR Based – With 12:1 (D:S) Ratio Range -4°F to 176°F (-20°C to 80°C) Accuracy ±3.6°F (±2°C)

#### **Hygrostick Data (Nominal)**

30% to 40% RH (±3% RH) at 68°F (20°C). 41% to 98% RH (±2%) at 68°F (20°C). Range 32°F to 122°F (0°C to 50°C) ±0.6°F (±0.3°C)

#### **Quikstick and Quikstick ST Data (Nominal)**

0% to 10% RH, ±3% RH at 68°F (20°C), 10% to 90% RH, ±2% RH at 68°F (20°C), 90% to 100% RH, ±3% RH at 68°F (20°C), Range 32°F to 122°F (0°C to 50°C) ±0.6°F (±0.3°C) Nominal response 30% to 90% and back to 30% RH in 45 seconds @ 68°F (20°C)

#### **Data Storage**

Store up to 8,000 results with date and time stamp from all instrument functions with the push of a button. Store 6100 results with automatic logging.

### **Options**

Protimeter MMS2 Description	Part number	MMS instrument	Quikstick ST	HD MC probe	Hygrostick	Hygro/quick ext lead	HD Hammer	4xHammer Pins	Deep Wall probes 5" (127 mm)	Deep Wall probes 9" (229 mm)	Surface temp sensor	Cal check	Instructions	Software + Cable	Canvas carry pouch	Hard carry case
Part Number		POL8800	POL8751	BLD5060	POL4750	BLD5802	BLD5055	BLD05297	BLD5018	BLD5020	BLD5808	BLD5086	INS8800	BLD7758	Pou5800-01	BLD5910
Basic; instrument in pouch	BLD8800	у	у	у	n	n	n	n	n	n	n	у	у	n	у	n
Basic survey; instrument & primary accessories in pouch	BLD8800-S	у	у	у	у	у	n	n	У	n	n	у	у	у	У	n
Standard Kit; instrument in Hard Case	BLD8800-C	У	У	у	n	n	n	n	n	n	n	у	у	у	n	у
Survey kit; instrument & primary accessories in hard case	BLD8800-C-S	у	У	у	у	у	n	n	У	n	У	У	у	У	n	У
Restoration kit; instrument, accessories and Hammer electrode in hard case	BLD8800-C-R	у	У	у	n	n	у	У	У	n	n	у	у	у	n	У



www.amphenol-sensors.com

© 2015 Amphenol Corporation. All Rights Reserved. Specifications are subject to change without notice. Other company names and product names used in this document are the registered trademarks or trademarks of their respective owners.