

# Protimeter BLD9800 Moisture Measurement System MMS3

•Wood •Drywall •Building Materials •Concrete



It takes the "all-in-one" concept to a whole new level.

Complete Moisture Measurement System with Wireless Capability.

Now with wireless capability! The Protimeter MMS3 represents the latest in moisture measurement technology. Its ergonomic 4-in-1 design allows for fast and accurate full building diagnostics both on and below the surface, from new building construction to refurbishing projects in existing buildings.

Also, with built-in hygrometric capabilities and an infrared (IR) laser thermometer, the MMS3 also assesses indoor air quality conditions.

All Protimeter instruments have a two-year warranty.

## Benefits

- Fast responding hygrometer speeds up building surveys
- Replaceable humidity and temperature sensor
- No need to plug in multiple accessories
- Non-invasive measurement not adversely affected by surface moisture
- Highly accurate

## Features

- Pin moisture measurement with built-in calibration check
- Improved non-invasive moisture measurement with sensitivity mode feature and simple field calibration
- Non-contact surface temperature measurement with Infrared (IR) laser pointer
- Fast Response
- Manual and automatic data logging up to 10,000 records
- File viewer mode to view logged data
- Data reporting and processing through Protimeter PC software
- Live data stream over Bluetooth, data log into file or embedded into an image in Protimeter app
- Web interface to view the logged data
- Easy-to-use interface with color display and multi-language capability
- Firmware upgradable



## Technical Specifications

Part Number	Description
BLD9800	Protimeter BLD9800 Moisture Measurement System MMS3®
Gross Weight	Instrument only with batteries 309 g
Regulatory Compliance	CE RoHS ETL UKCA
Plug-In Temperature Probe	(BLD5806) Range: 0°C to 70°C Accuracy: $\pm 0.7$ °C $\pm 25$ ° C
Display	2.4" TFT Color LCD 320x240 Resolution Backlight with adjustable brightness Outdoor Mode
Batteries (Included)	2 x AA Alkaline Batteries ~ 2700mAH
Warranty	Standard Limited Warranty for 24 months on mechanical or manufacturing defects. Does not include wearing part or accessories., which have a 12 month warranty for normal use.
Moisture Measurement Range	Pin (% WME): 6% to 100% (Readings over 30% are relative.) Non-Invasive (RF): 60 to 999 Relative, up to 19mm deep in standard mode and up to 12cm deep in sensitivity mode (varies with material under test.)
IR Temperature Probe Range	LASER Pointer: 12:1 (D:S) Ratio Range: -20°C to 80°C Accuracy $\pm 2$ °C
Hygrostick Data (Nominal)	30% t 40% RH ( $\pm 3$ % RH) at 20°C 41% to 98% RH ( $\pm 2$ %) at 20°C. Range 0°C to 50°C $\pm 0.3$ °C
Quickstick Data (Nominal)	0% to 10% RH, $\pm 3$ % RH at 20°C, 10 to 90% RH, $\pm 2$ % RH at 20°C, Range 0°C to 50°C $\pm 0.3$ °C Nominal response 30% to 90%
Data Storage	Manual and Automatic Logging: Store up to 10,000 results in the device with date and timestamp from all instrument functions. Store results of interest in cloud from live data on the Protimeter app into a file or embed into an image to be accessed through phone/tablet and/or web interface.

## Packing List

Protimeter BLD9800 Moisture Measurement System MMS3
Auxiliary HD MC Probe
Case Shoulder Strap
Wrist Strap
Calibration Check Device
Protimeter Hard Carry Case
1 x 9V
Two Spare Pins
Instruction Manual



## Options

MMS3 Description		MMS Instrument	Quikstick ST	HD MC Probe	Hygrostick	Hygro/Quik Ext Lead	HD Hammer Electrode	4x Hammer Pins	5" Deep Wall Probes (127 mm)	9" Deep Wall Probes (229 mm)	Surface Temp Sensor	Quick Start Guide	Canvas Pouch	Hard Carry Case
Part Number		POL9800	POL8751	BLD5060	POL4750	BLD5802	BLD5055	BLD05297	BLD5018	BLD5020	BLD5808	711-194	POU5800-01	BLD5910
Basic (Instrument in pouch)	BLD9800	•	•	•								•	•	
Basic Survey (Instrument and primary accessories in pouch)	BLD9800-S	•	•	•	•	•			•			•	•	
Standard Kit (Instrument in hard case)	BLD9800-C	•	•	•								•		•
Survey Kit (Instrument and primary accessories in hard case)	BLD9800-C-S	•	•	•	•	•			•		•	•		•
Restoration Kit (Instrument, primary accessories and HD Hammer Electrode in hard case)	BLD9800-C-R	•	•	•			•	•	•			•		•

## Four-In-One Moisture Measurement System

### 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 20 mm below surface
- Search mode not adversely affected by surface moisture

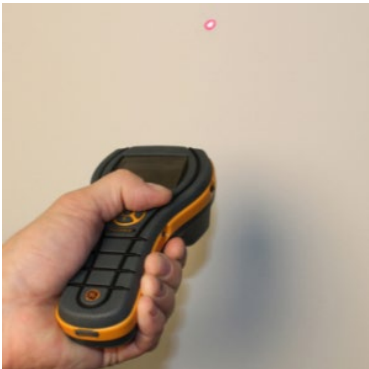
**Hygrometry**

*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 mould and fungus growth, that can lead to unhealthy living conditions

**Surface Temperature (IR)**



- Checks surface temperature, utilizing laser pointer, calculates proximity to dewpoint

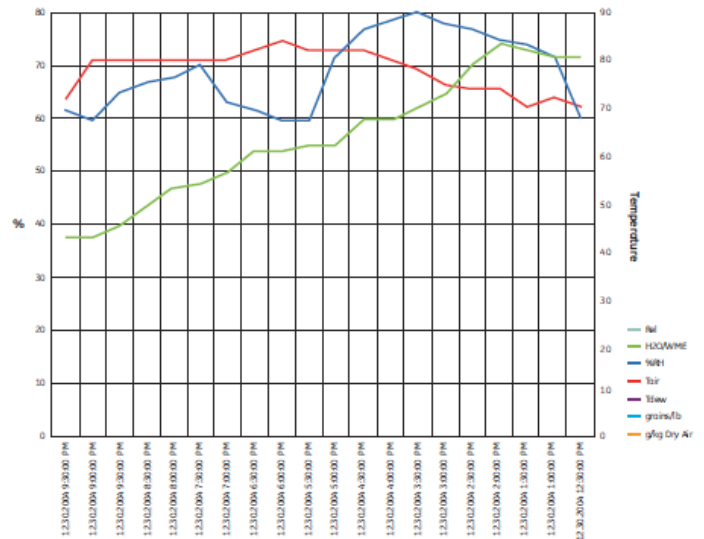
**Data Storage Functions**

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 MMS2 while using the pins.

Hygrostick part number POL4750, for high moisture applications.