

USERS MANUAL

PM6831A Pinless Moisture Meter



As products are constantly being upgraded,The pictures in the manual are subject to the actual product.

CE

Before using the instrument,please read this manual carefully,and save it well for future using.

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General Instructions / Safety Instructions

General Instructions

This section provides important tips for using this document. This document contains essential information for the safe and effective use of the product. Before using the product, read this operation manual thoroughly and familiarize yourself with the operation of the product. Keep this manual in a safe place for future reference.

1. Safety Instructions

This section describes general rules that must be followed for the safe use of the product.

To avoid personal injury or instrument damage:

>Do not use this measuring instrument and sensors to perform measurements on or near live electrical parts.

>Do not store the measuring instrument/probe with solvents, and do not use any desiccant.

>Operate the measuring instrument within the parameter ranges specified in the technical data.

>Always use the measuring instrument in the correct manner and for its intended purpose. Do not apply excessive force.

>Do not expose the handle and cable to environments exceeding 70 ° C unless explicitly approved for high temperatures. The temperature indicated on the probe/sensor relates only to the sensor's measurement range.

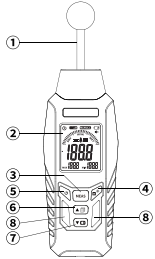
>The instrument may only be opened for maintenance purposes when explicitly described in the documentation.

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Product Descrip

>If the battery symbol on the display lights up, the battery must be replaced.

2. Product Description



Instrument Components

①Sensor Probe

②LCD Display

③Measurement Key

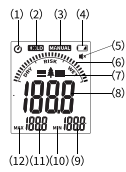
④Data Save and Backlight Key

⑤Power On/Off Key

⑥Mode Key and Page Up Key

⑦Mute Key and Page Down Key

⑧Three-Color Indicator Light



LCD Display Symbols

(1)Auto Power Off Symbol

(2)Data Hold Symbol

(3)Manual Setting Symbol

(4)Low Battery Symbol

(5)Mute Symbol

(6)Humidity Level Symbol

(7)Measurement Mode Symbol

(8)Measurement Reading

(9) Minimum Measurement Reading

(10)Minimum Symbol

(11)Maximum Measurement Reading

(12) Maximum Symbol

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Features / Technical Parameters /Operating Instructions

3. Features

●Rapid measurement of target moisture

●Data Hold function

●Max/Min function with alarm indication

●Low battery warning

●Backlight LCD display

●Three-color indicator light

●Preset modes or manual setting of alarm thresholds

●Mute function supported

4. Technical Parameters

Measuring Range: 0-100.0

Measuring Depth: 5mm-40mm

Power Supply: 2x1.5V AAA batteries

Weight: 186g

Dimensions: 239.6*66.3*32mm

5. Operating Instructions

5.1 Power On/Off

Press the  key briefly to turn the instrument on. Press it briefly again to turn it off.

5.2 Auto Power Off / Cancel Auto Power Off

After powering on, the  Symbol appears on the LCD, indicating the instrument will automatically power off after approximately 30 minutes of no key operation.

To cancel the auto power-off function, press the  key and then press and hold the  Key for 2 seconds. The LCD will

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Operating Instructions

display "APO OFF" and the  symbol will disappear.

5.3 Zero Calibration

The first time the **MEMS** key is pressed after powering on, the instrument performs zero calibration. The LCD displays a flashing "CAL" character, the three-color indicator lights cycle on and off sequentially, and the buzzer sounds intermittently, indicating calibration is in progress.

After **CAL** calibration is completed, briefly pressing the **MEMS** key during use will reset all readings to zero once. Press and hold the **MEMS** key to perform zero calibration again.

Note: When initiating zero calibration, release the **MEMS** key.

Keep the hand posture as consistent as possible during the calibration process and maintain the same posture during measurements.

Caution: If the displayed reading is greater than 1.0 when not measuring, perform calibration again. Recalibration is also required after changing the measurement environment.

5.4 Data Hold / Backlight

Press the  key briefly to turn the Data Hold function on or off.

Press and hold the  key to turn the backlight on or off. The backlight will automatically turn off after approximately 30 seconds.

5.5 Mode Switching

Briefly press the  Key to cycle through modes:  →  → 

→MANUAL.

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Operating Instructions

Press and hold the  Key to enter manual setting mode. Set the Risk (RISK) and Wet (WET) thresholds sequentially. Press the  key to switch to the next threshold. During setting, RISK and WET flash alternately. Use the  Key to increase the value and the  Key to decrease the value. In manual setting mode, the  symbol on the LCD is not displayed, and the "MANUAL" character is shown.

5.6 Mute Function

When not in manual setting mode, briefly press the  Key to disable the buzzer in all states. The  Symbol appears on the LCD. Press the key again to re-enable the buzzer.

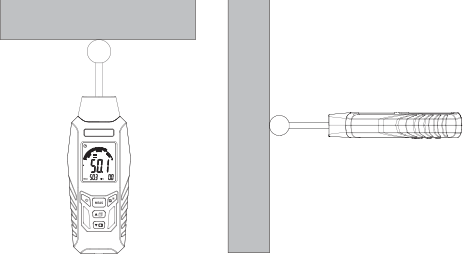
5.7 Measurement Usage

Before use, calibrate the instrument to zero (refer to 5.3). Ensure there are no objects within 50cm of the instrument, and keep it away from equipment generating electromagnetic fields.

During use, position the instrument probe at a 90-degree angle to the material surface and press it firmly against the surface, as shown in the following diagram:

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Operating Instructions



The following factors may affect measurement results:

Factor	Ideal Condition
Measurement Depth	The thickness of the measured object should be greater than 50mm. Note: The material surface can influence measurement results more easily compared to the material interior.
Material Surface	As level as possible, as the probe should be placed vertically on the material surface.
Material Properties	As uniform as possible, without holes, gaps, or cracks.
Moisture Distribution	As uniform as possible.
Metal and Electric Fields	Avoid presence if possible.

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Readings and Material Parameter Table

6. Readings and Material Parameter Table

Material	Display Values	Moisture Grade	Indicator Color	Sound
Cement 	<25	DRY	Green	Silent
	25-50	RISK	Yellow	Slow Beep
	>50	WET	Red	Fast Beep
Gypsum Wallboard 	<30	DRY	Green	Silent
	30-60	RISK	Yellow	Slow Beep
	>60	WET	Red	Fast Beep
Tree 	<50	DRY	Green	Silent
	50-80	RISK	Yellow	Slow Beep
	>80	WET	Red	Fast Beep

※ Users can set different humidity alarm thresholds for various materials. The above values are for reference only and are not binding.

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Instrument Reading and Moisture Content Conversion Table

7. Instrument Reading and Moisture Content Conversion Table

Instrument Reading	Gypsum Wallboard (Mineral) Moisture Content (CM%)	Cement Moisture Content (CM%)	Tree Moisture Content (CM%)
15			
20			10.00
25			12.00
30	0.25		15.00
35	0.30	2.50	17.00
40	0.40	2.65	20.00
45	0.65	2.85	23.00
50	1.00	3.20	25.00
55	1.40	3.55	
60	1.70	4.00	
65	1.90	4.30	
70	2.05	4.70	
75	2.20	5.10	
80	2.35	5.45	
85	2.50	5.75	
90	2.65	6.10	

※ The instrument reading is a unitless value from 0 to 100. These values differ from the CM% (Calcium Carbide Method) moisture content. (For reference only and not binding.)

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EMC&LVD  

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双面印刷

折页前尺寸 600*150

折页后尺寸 100mm*150mm