

## Soil Moisture Meter

ATO-PMS710

Soil moisture meter PMS710 is used for measuring moisture content of soil, sand and cement, especially for soil moisture testing . It applicable of agriculture planting, building, industry production, science experience and other relevant industry.

battery Dimensions:  
140mm×60mm×22mm  
Needle: 280mm  
Weight:210g  
(not including batteries)

### 3.PANEL DESCRIPTIONS

- 1-1 Buzzer
- 1-2 % symbol
- 1-3 Low battery
- 1-4 LCD display
- 1-5 Testing symbol
- 1-6 Testing value
- 1-7 Warning light
- 1-8 Function key
- 1-9 Zero/inc key
- 1-10 Backlight key
- 1-11 Battery cover
- 1-12 Testing sensor
- 1-13 Testing probe
- 1-14 Hold/dec key
- 1-15 Power key

### 1.FEATURES

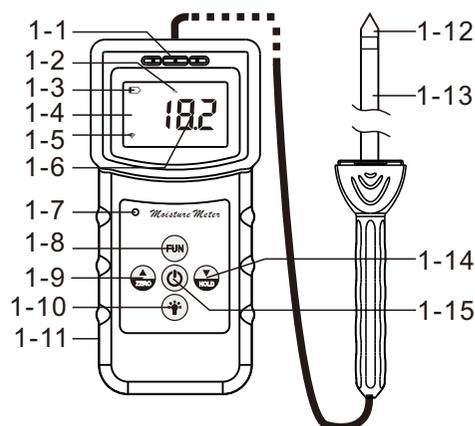
- 1.1 It is portable, compact, easy to use and the moisture measurement readings are instant.
- 1.2 Digital display with back light gives exact and clearly reading although you stay at the somber conditions.
- 1.3 It will save time and expense by monitoring dryness and helps to prevent deterioration & decay caused by moisture whilst in storage, therefore processing will be more convenient and efficient.
- 1.4 The moisture meter operates by electrical

resistance and has automatic temperature compensation.

- 1.5 Manual off at any time .Auto power off after 5 minutes from last operation.
- 1.6.Data hold function.
- 1.7.Low battery alert.

### 2.Specification

Display:4 digital LCD  
Measuring range :0-50%  
Operation condition:  
Temperature:0-60°C  
Humidity:<85%RH  
Resolution:0.1  
Accuracy: ± 2%  
(Non- saturation condition)  
Power supply:  
4x1.5 AAA size (UM-4)



### 4.OPERATION PROCEDURE

- 4.1 Turn on the power key, the symbol "0" will be showed on display,(and the testing symbol also showed at the same time). It will need zeroing if showed other
- 4.2 Hold the instrument and probe with your hands, insert the needle into the soil straightly , and then depress Hold Key for sting,

value, please depress ZERO key while the probe sensor **without touch anything**, or zeroing is not efficient. **The front of probe sensor near the insulating ring about 2cm above PMS710 must been keep clean by clean paper before zeroing.** Zeroing can decrease the effect from the temperature and humidity in the air, but **no need to zeroing often.**

- 4.2 Hold the instrument and probe with your hands, insert the needle into the soil straightly , and then depress Hold Key for sting,

depress Hold Key for testing, the reading will showed on display. If you want to gain the second reading, then insert the sensor into the other place in soil again and depress HOLD key to get the stable value as the soil moisture content.(please keep the same depth when testing several times.)

- 4.3 When the testing result is big difference with the accurate value, please Depress FUN key and not release until "Adj" Showed on Display, then you can choose the adjust code by

testing value, The probe is deeper, the value is bigger; so please keep the same dept in the same material.

- 3.there have different elements in soil, just like salt, mineral, so the readings will have small effect by them. High electronic ion will enlarge the testing values.
- 4.Don't put our needle in full water, or the needle will be damaged.
5. Please take out the batteries if the instruments without used for a long time.

depress "▲" "▼" to decrease the error, finally you can Repress FUN key confirmed.

- 4.4 Back Light Setting.  
Please depress the light key to open up if you stay in dark condition; the back light will be closed when you repress the light key again.

- 4.5 Power Off.  
The simple way is depress the power key .Another way is: depress FUN key and not release until the OFF showed on Display(It will take 3s to finish this operation). Auto power off after about 5 minutes from last key operation.

- 4.6 Replace batteries  
When battery symbol showed on display, it must replace the batteries in time. Slide the batteries cover , put the batteries into the hole correctly.

## 5. WARNING SETTING

- 5.1 Depressing key 1-8 and don't release until "AL2" showed on display(it will takes 5 seconds to complete operation),then press "▲" key or "▼" key to choose your suitable value according to your needs, press FUN key again back to the operation state.

- 5.2 Setting the "AL1" just the same ways as "Al2".

- 5.3 Usually , "AL2" must larger than "AL1",if the "AL2" less than "AL1" during setting process, then the instrument will be returned back the factory setting, just to say, AL1=13,AL2=18.

### Notes:

- 1.Since the difference moisture content in the soil ,so the readings also showed different in different place.
- 2.The depth of the needle will directly affect the