

# High-Frequency Moisture Meter

## DM400

Needle: 300mm  
Weight: 200g (not including batteries)  
Guarantee: 1 year

### 1. Applicable scope

High Frequency moisture meter DM400 is used for measuring moisture content of soil, silver sand, chemical combination powder, coal powder and other powder materials. The instrument is widely used in chemical industrial, mining industry, planting and other industries requiring quick measurement of moisture.

### 2. Work principle:

This instrument adopted the high frequency principle based on the introduction of the most advanced technology from foreign country. In other words, there is a fixed frequency inside the equipment. Once the moisture of the detected objects carried, the frequency through the sensor will be different. The deference between the frequencies will be displayed in figure after the conversion by current-frequency converter.

### 3. Features of the instrument

- 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. This instrument adopted the high frequency principle based on the introduction of the most advanced technology from foreign country.

### 4. Technical parameters

#### Specification

Display:	Digital LCD with backlit
Measuring range:	0-2%&0-90%
Operating conditions:	
Temperature:	0-60°C
Humidity:	5%-90%RH
Resolution:	0.01 or 0.1
Accuracy:	± 0.5(1+n)%
Power supply:	9V battery
Dimensions:	172×66×28(mm)

### 5. Attentions

- 1). This Moisture meter works relying on touching the object. The premise of the measurement is fully insert the probe into the targeting object. (the sensitive part is within 10mm of the probe).
- 2). As the high frequency is of great penetration, if there was metal around the object, the measuring result may be not accurate. Therefore, during measurement, there should be no metals or magnetic objects around the probe.

### 6. Operation Instruction

- 1). Hold the instrument in hand and install the probe on the instrument at first. Press the button **ON/OFF**, The LCD screen displays a figure within  $00.0 \pm 0.5$ . Otherwise, zeroing knob **ZERO** should be adjusted slowly until the figure is less than  $0 \pm 00.5$ . Press **S/D** can change the show value between 0.1 and 0.01 if the moisture content less than 2%.
- 2). Hold the device and insert the probe into the measuring object. Once the displayed figure maintain stable, then the figure is the moisture value of the object.
- 3). When measuring the moisture of coal, chemical powder, soil, the testing result needs to be verified. For example, when measuring some object, the moisture of the sample object is 15%, then adjust the gear until the measuring result is the same as the sample 15%. If Gear 7 was used for the final result of 15%, then always use gear 7 in the measurement of the same object in the future.
- 4). replacement of the battery: When the knob (zero) can not be regulated within  $0 \pm 00.5$  or the figure increased irregularly, or the LOBAT is displayed on the upper left of the screen, then replace the battery with a new one of 9V (6F22). (Low quality battery also can result in this question).
- 5). If the display can not adjusted within  $00.0 \pm 0.5$  when battery keep working. Slide open the cover of the instrument, use a screw driver to adjust the small brass screw on the side of the battery compartment till is shows within  $00.0 \pm 0.5$ . (it effected by temperature and humidity in environment.)