

This unit is used for fast and accurate measurement of moisture and temperature in the process of allotment, acquisition, storage and machining of packed grains. It uses an exclusive one chip MICRO-PROCESSOR that offers wide-range and highly accurate measurements.

The use of durable, long-lasting components, including a strong, lightweight, ABS-plastic housing, assures maintenance-free performance for many years. This ergonomically designed housing has been molded to fit comfortably in either hand.

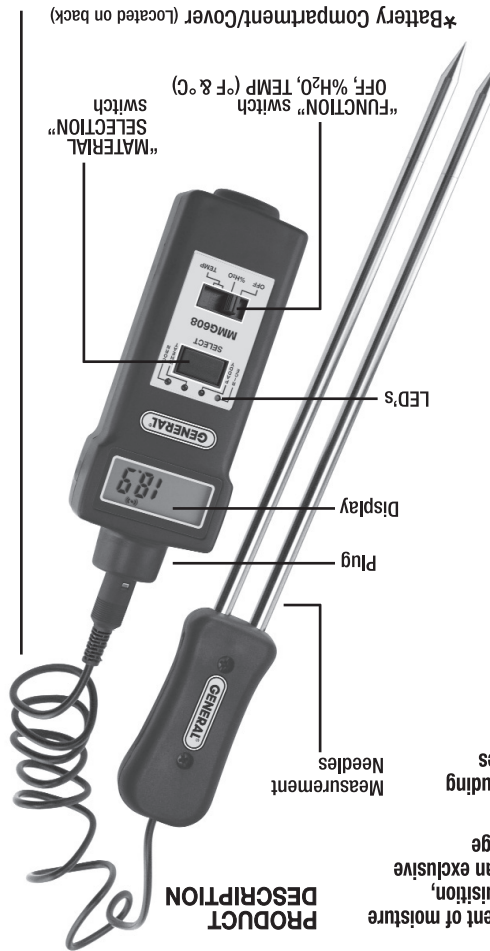
**FEATURES:**

- Digital display gives an exact reading with no guesswork or errors
- Compact, lightweight and easy operation
- Ideal for measuring packed grains, feedstuff and feedstuff

**SPECIFICATIONS:**

- Range: Moisture content: 8 to 20%
- Temperature: 14 to 131°F (-10 to 55°C)
- Operation Temp: 32 to 122°F (0 to 50°C)
- Operation Humidity: <math>\leq 85\%</math>
- Resolution: 0.1
- Accuracy: Moisture content:  $\pm 1\%$
- Temperature:  $\pm 0.8^\circ\text{F}/^\circ\text{C}$
- Display: 4 digits, .4" (10 mm) LCD (Liquid Crystal Display)
- Power Source: 4 "AA" batteries (included)
- Dimensions: 7" x 2.7" x 1.5" (178 x 68 x 39 mm)
- Weight: 9.9oz (280 g) approximately (not including probe and batteries)

Includes: Batteries, Manual and Hard Carrying Case



**PRODUCT DESCRIPTION**

**BATTERY REPLACEMENT:**

1. When it is necessary to replace the battery (battery voltage less than approx. 5V), the "battery" symbol will appear on the display.
2. Loosen the screws on the back of the battery cover and remove the old batteries.
3. Install new batteries correctly into the case. Permanent damage to the circuit can result from incorrect installation.
4. If the instrument is not to be used for an extended period of time, please remove the batteries.

**MEASUREMENT OPERATION:**

**1. Moisture content:**

- A. Insert the plug of the probe into the socket of the meter.
- B. Hold the handle of the measurement needles and leave the needles in the air, i.e. don't let needles touch anything except air.
- C. Slide the FUNCTION switch to the "%H<sub>2</sub>O" (moisture content) position to switch on power. You will hear two clicking sounds. This is a self-calibration conducted by the instrument.
- D. Select the type of grain, feedstuff or feedstuff to be measured by pressing the MATERIAL SELECTION switch.
- E. Insert the needles into the grain to be measured. The reading on the display may change if the needles stay in the grain for an extended period of time.

**2. Temperature:**

- A. Insert the plug of the probe into the socket of the meter.
- B. Slide the FUNCTION switch to the "TEMP" (°F or °C) position to switch on power. It takes a few minutes to stabilize after inserting the steel needles into the grains, feedstuff or feedstuff before taking readings.

**NOTE:** This instrument has a very high input resistance. Every part has good insulation. Please keep it in a dry, dustproof place.

It is extremely difficult to accurately measure the moisture content of grains. This is because any grain is of organic body. The same kind of grain in different regions or states, even in the same region or state but in different soils has different characteristics. That is why we first measure the moisture content of grain by the standard oven or kiln method. This is a more accurate, but less efficient method to measure the moisture content. Then we measure the moisture content using this instrument. By calculating the bias, we can amend the measurement value. In this case, the measurement values become more accurate and more efficient.

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MMG608 User's Manual

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**GRAIN MOISTURE METER**