INSIZE

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8701
MOISTURE ANALYZER

Instruction Manual

PLEASE SCAN QR CODE TO WATCH THE OPERATION VIDEO OF PRODUCTS.

VIDEO

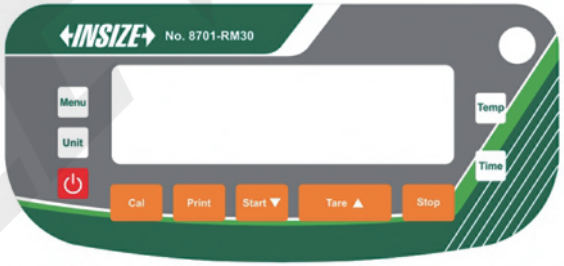
INSIZE

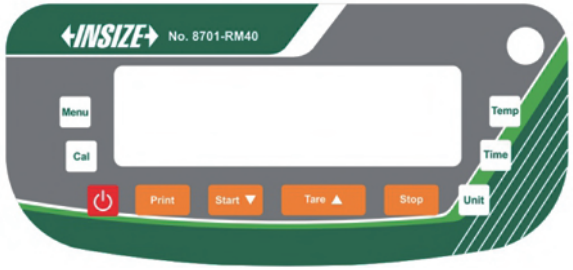
1 technical parameter

Code		8701-RM20	8701-RM30	8701-RM40
Maximum weighing		120g	120g	120g
Resolution (d)		5mg	1mg	0.1mg
Accuracy for moisture	sample<10g	±10%	±0.5%	±0.2%
	sample≥10g	±5%	±0.3%	±0.1%
Operation temperature		13~25°C		
Verification interval		2.5s		
Warm-up time		20~30 mins		
Weighing pan size		Ø90 mm		
Heating source		halogen lamp(450W)		
Range for heating temperature		60~200°C		
Heating time setting		0~99 mins		
Heating mode		standard heating, step heating, rapid heating		
Shutdown mode		automatic/manual/timed shutdown		
Output		RS232C		
Power supply		220V, 50/60Hz		
Dimension (L×W×H)		330×210×340mm		

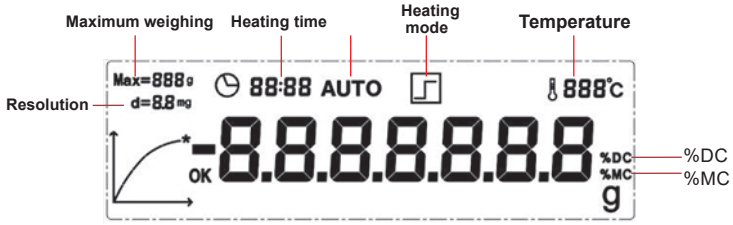
2 Sturcture

4 Key diagram





3 Screen Information



◆Attention

Place the moisture meter on a stable horizontal surface;

Do not install near the radiator or in direct sunlight to avoid the impact of extreme heat and temperature fluctuations on the instrument;

Protect the instrument from direct airflow caused by open doors and windows;

Avoid vibration during weighing;

Protect the instrument from high humidity weather, water vapor, and dust;

Do not expose the equipment to extreme humidity for a long time;

If a low temperature device is brought into a relatively warm environment, it may cause impermissible condensation (condensation of air humidity on the device). In this case, the device that needs to be disconnected is conditioned at room temperature for approximately two hours.

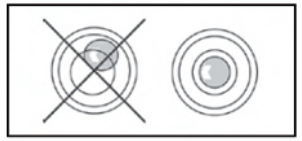
Avoid the impact of static electricity on weighing goods or weighing containers.

If electromagnetic fields or static electricity are generated, or the power supply is unstable, the display screen may produce large deviations (inaccurate weighing results). In this case, the site must be changed.

5 Operation

◆ Adjust the level

Place the instrument and the anchor screw on the same horizontal line until the horizontal bubble on the instrument is within the specified circle.



Note: Regularly check whether the instrument is in a horizontal position

◆ Turn on the power

◆ Start up and preheat for 20-30 minutes

◆ Calibration

8701-RM20

Long press and hold the [Tare] until the display screen displays "LOAD 100" ->place a 100g weight on the scale, and then press [Tare] ->for about 3-5 seconds, the display screen displays "100.000g" calibration is complete. After successful calibration, the instrument automatically returns to the weighing mode

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press [Tare] to clear -> press [Cal] -> display "LOAD 100" -> Take off the scale, put 100g weight on the triangle support frame(remove sample pan), and press [Cal] -> for about 3-5 seconds, the display will show "100.000g" at the end of calibration. After successful calibration, the instrument automatically returned to weighing mode and put back the scale

◆ Return to zero
Press the [Tare] -> Wait until the instrument shows zero

◆ Sample weighing
First press the [Tare] to return to zero, then place the weighing item into the weighing tray. Wait for the "ok" on the lower left side of the instrument to indicate that the value is stable, and then the weighing result is the object weight value

! Overload warning
Shocks and overloads that exceed the maximum load specified for the instrument (maximum range) are strictly prohibited. Please subtract a possible excess load, which may damage the instrument.If the load exceeds the maximum, the display indicates E or H. Remove weighing system or reduce sample.

◆ Setting

You can set the moisture meter to suit your personal needs. Function steps of each key in setting:Press [Menu] to enter the setting menu, select the setting option by pressing [Tare], and confirm the selected option by pressing [Start]. If you want to exit at any time, press [Tare] until ESC is displayed, and then press [Start] to confirm.

◆ Menu
*-------Factory setting ---User Setting

-------STOP ---CLOC (Time shutdown)*
---AUTO(Automatic weightless shutdown)
---ESC

-------LOSE y Weight-loss rate setting --- A1
---A2*
--- A3
--- A4
--- ESC

Note: Those marked with * are factory defaults

6 First test

In the first measurement, the equipped sample (glass fiber filter paper with water) is used to measure the water content. During the first measurement, the operation according to factory settings.

►Start up: Connect the moisture meter to the power supply, and after 5 seconds, the meter displays 0.000g

►Opening the heating chamber, press [Tare].

Start measurement
►Place the sample on the sample tray
►Close the heating chamber
►Press the [Start]key to do a drying test according to the above default settings, you can track the measurement process on the display screen, and the drying process is continuously displayed in the form of coordinate graphics.

Display the current temperature of the heating unit, the past drying time, and the current mass or moisture content after drying (press the unit conversion key [Unit] to freely switch between mass and% content)

The display shows the selected settings Press the [Stop] key to stop the drying process at any time.

After drying, you can see the moisture content of the sample displayed on the display screen (press the unit conversion key [Unit] to freely switch between the mass and various% contents)

Press the [Tare] Key to return to the normal weighing state and remove the sample

look out! Burn hazard: Samples, sample trays, and brackets are now very hot! After the drying process is completed, open the heating chamber and gently remove the sample tray using the sample tray bracket.

If using the current test method, please repeat the above steps.

7 Test

The testing of a moisture meter involves the following steps:

►Set heating method

►Set heating temperature

►Set shutdown mode（Shutdown time, automatic shutdown weightlessness rate）

► Prepare test samples

1. Place the empty sample tray on the sample tray bracket,

2. Press the [Tare Key] to remove the weight of the sample tray

3. Take out the sample tray and place the sample, preferably greater than 0.5g

4. Distribute the sample evenly on the sample tray

► Place the sample tray containing the sample back on the bracket, and the display screen displays the weight of the sample

► Close the heating chamber

► Press the [Start] key to start the measurement

► The display screen displays the current weight value, and press the [Unit Conversion Key] to convert the current measurement result

► After the measurement is completed, the display screen displays the final sample moisture content, and press the [Tare button] to return to the normal weighing mode

► Press the [Print] key to send the current measurement results to a printer or other peripheral device.

Note: You can press the [Stop] key at any time during the test to terminate this measurement.

◆ Shutdown Mode Settings

The shutdown mode is used to determine the automatic test end point of the moisture meter and display the results. The moisture meter has two shutdown modes to set: timed shutdown and automatic shutdown

■ Timed shutdown: manually set the test time according to customer needs.
Press the time button and the time symbol flashes. The hydrometer displays the default time of the system or the time set last time (minutes).

Reduce the temperature setting for 1 minute every time you press Tare, increase the temperature setting for 1 minute every time you press Start.
► Press [Time] to confirm the save.

■ Automatic shutdown: automatically set the test time according to customer needs.

ø Press [Menu] to display AUTO,
ø Press the "Start" button to confirm that the setting is successful when the letter "OK" appears in the lower left corner of the instrument, and the instrument will return to the weighing state.

(If you want to change the automatic mode to manual mode, press [Menu] the instrument displays "AUTO", then press the peel/clear key [Tare] to find "CLOCK" and press the Start key [Start] to confirm, the setting is successful when "OK" appears in the lower left corner of the instrument, and the instrument will return to weighing)

◆ Set the loss rate

A1------(5mg/20s) Suitable for rapid determination of trends

A2------(5mg/50s) Suitable for quick drying

A3------(5mg/60s) Suitable for most samples, standard Settings

A4------(5mg/90s) Suitable for medium dry sample

►Press [Menu] to enter the option and press the peel key [Tare] to select the corresponding mode
►Press the [Start] key start to confirm, and the instrument will display the graphic symbol of automatic shutdown and return to the normal weighing state.

9 Warning

Warning!

The following substances may pose a risk of fire, explosion, damage, or injury. For substances with potential safety hazards, please carefully analyze the possible hazardous consequences. In this case, the instrument should be watched by a dedicated person and wear corresponding protective devices.

1. Volatile substances

For volatile substances, it is recommended to use a rapid heating method to limit the loss of water before the sample evaporates. The test should be conducted in a safe and dry environment with a sufficiently low temperature to prevent explosion or fire. Please use 1 g or less of sample for testing.

2. Toxic substances

Contains toxic or corrosive substances and should be dried in ventilated shop windows.

3. Corrosive substances.

Heating substances that produce corrosive gases, such as acidic substances, should be tested with as few samples as possible. Because of its production

10 Maintenance

1. Disconnect the power supply when cleaning and cleaning the moisture meter

2. Ensure that no solution is allowed inside the moisture meter

3. Please ensure that the moisture meter is in the cooling state before cleaning

► Clean and clean the moisture meter regularly

►The cover surface and temperature sensor can be slightly dipped in a lint-free cloth or neutral cleaning agent scrub.

►Glass surface can be used glass cleaning agent

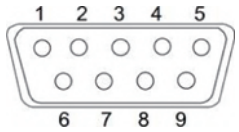
►Do not use solvents, irritating chemicals such as ammonia and abrasive solvents

11 RS232C

This instrument is equipped with RS232C interface for connecting peripherals (printers, computers).

In order to successfully connect the weighing instrument and peripheral equipment, the following conditions must be met:

· Connect instruments using cables that match peripheral interfaces
· Communication parameters (baud rate, data bits and parity bits) of the instrument and peripheral devices must match
This data exchange is asynchronous using ASCII codes.



2------TXD
3------RXD
5------GRD

9 needles	2----------2 3----------3 5----------5	9 holes
9 needles	2----------2 3----------3 4----------7	25 needles

12 Appendix

Rs232 Data communication Settings (factory default)

Baud rate: 9600

Data bit: 7

Stop bit: 1

odd-even check: none

2------TXD
3------RXD
5------GRD