

5. Replacing the batteries and storage

The instrument is equipped with a power level control unit. When the power drops below acceptable level a sign "LO BAT" appears on the left side of the LCD. This indicates that the battery has expired and should be replaced with a new one.

To replace the battery unscrew the screw on the back of the instrument and carefully remove the back panel. Store the device in a dry place.

6. Guarantee and service

TANEL Electronic warrants the Moisture Meter WIM-90 to be free from malfunction and defects in both materials and workmanship for one year (12 months) from the date of purchase.

If the Moisture Meter WIM-90 does not function properly during the warranty period due to defects in either materials or workmanship, our company will, at its option, either repair or replace the instrument without charge, subject to the conditions and limitations stated herein. Such repair service will include any necessary adjustments and replacement part.

Limitations

This warranty becomes null and void if you fail to pack your WIM-90 in a manner consistent with the original product packaging a damage occurs during product shipment.

This warranty does not cover: circumstance beyond our company's control; service required as the result of unauthorized modifications or service; misuse, abuse; failure to follow our company operating or maintenance instructions.

Repair or replacement without charge is our company's only obligation under this warranty. Our company will not be responsible for any special, consequential

or incidental damages resulting from the purchase, use, or improper functioning of this equipment regardless of the cause. Such damages for which our company's will not be responsible include, but are not limited to, loss of revenue or profit, downtime costs, loss of use of the equipment, cost of any substitute equipment, facilities of services, or claims of your customers for such damages.

Important

We recommend to prevent faulty result in measurements please check your meter reading results within a adequate time period by the dry oven test according DIN 52 183 Standard.

GUARANTEE

The manufacturer guarantees the correct functioning of the Universal Moisture Meter WIM-90 under normal use for a period of 12 months:

Serial number

Production date

Date of purchase



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UNIVERSAL MOISTURE METER WIM-90 USERS MANUAL

1. .Description and applications

The Universal Moisture Meter WIM-90 is an electronic device for measuring **air humidity and moisture contents in wood and concrete** without any tables and calculations. Such wide range of applications is possible due to a large number of electrodes that come with the instrument.

WIM-90 is widely used in wood and building industries.

2. Wood moisture contents

2.1. Technical data

Measuring range	6% - 100% of moist. cont.
No. of wood types	11
Wood temp. range	0° - 50°C
Display type	LCD
Power	1 * 9V (1 battery 6F22)

2.2. Preparing the instrument for measurements

- Before the measurements connect the instrument with the electrode. Use the cable with the BNC plugs. A secure connection can be obtained by firmly plugging the plug into the socket and turning the external ring of the plug clockwise.

- Select the correct wood type with the WOOD TYPE knob and set the TEMPERATURE COMPENSATION knob to the appropriate (measured or approximated) wood temperature.

2.3. Conducting wood moisture cont. measurements

To conduct measurements:

- Beat the electrode into the wood. A line drawn between the needles should be perpendicular to the fibers (the resistance should be measured across the fibers).
- Press the power button located near the BNC socket.
- Read the result.
(If the moisture contents is lower than 6% a sign „LO” appears on the LCD, if the moisture contents is higher than 99.9% - „HI” is displayed.)

3. Concrete moisture contents

3.1. Technical data

The measurement of moisture contents in concrete is based on the measurement of the resistance and complies with the British Standard BS.5352:1983.

Measuring range	1% - 10%
Accuracy	
within the range	
of 0% - 5%	0.5%
above 5%	1% - 1.5%

The resistance characteristics have been selected during research and development.

3.2. Preparing the instrument for measurements

Before the measurement drill two holes in the concrete floor ϕ 10 mm in diameter and 40 mm deep. The distance between the holes should be 10 cm. Put the electrodes into the holes and fasten them by tightening their nuts. The torque applied to the nut should be appropriate to the hardness of the concrete floor. The older the concrete floor (harder) the higher the torque can be. Do not crumble the concrete floor. The measurements should be conducted in several places of the floor.

3.3 Conducting concrete moisture cont. measurements

To conduct measurements:

- Connect the electrodes with the instrument using a cable with appropriate connectors.
- Set the WOOD TYPE knob to “CONCRETE”.
- Set The TEMPERATURE knob to 20°C.
- Press the power button located near the BNC socket.
- Read the result.
(If the moisture contents is higher than 10% a sign „HI” appears on the LCD)

Warning:

- For concrete moisture contents measurements the TEMPERATURE COMPENSATION knob **must** be set to **20°C**.
- With high moisture contents values (above 6 - 7%) the result may “float” a little – it will slowly decrease. The result observed 1.5 minutes after turning the device on should be considered as the final result.

4. Air humidity

4.1. Technical data

The measurement of air humidity is conducted using a chemical sensor (cellulose compound). This allows for an approximate measurement of air humidity in storage rooms, production houses etc.

Measuring range	30% - 90% RH
Accuracy	3% - 4%

4.2. Preparing the instrument for measurements

Place the SC1 sensor in the room where the air humidity should be measured at least 8 hours before the measurement.

4.3. Conducting the air humidity measurement

To conduct the measurement:

- Plug the SC1 sensor into the instrument.
- Set the WOOD TYPE knob to “AIR HUMIDITY”.
- Set The TEMPERATURE knob to 20°C.
- Press the power button.
- Read the result when it stabilizes.
(If the moisture contents is lower than 30% a sign „LO” appears on the LCD, if the moisture contents is higher than 99.9% - „HI” is displayed.)

Warning:

- For air humidity measurements the TEMPERATURE COMPENSATION knob **must** be set to **20°C**.