




## Short manual testo 606-2



- ① Protection cap: Park position
- ② Sensing electrodes
- ③ Humidity/temperature sensor
- ④ Display
- ⑤ Control keys
- ⑥ Battery compartment (on rear)
- ⑦ Test resistance contact
- ⑧ List of settable materials, for sticking into the protective cap

en

## Basic settings

Instrument off > press and hold  2s > select with  (▲), confirm with  (◀):

Unit of temperature: **°C**, **°F** > Unit of humidity: **%**, **td** (dew point), **WB** (wet bulb) >

Auto off function: **OFF**, **ON**


## Switching the instrument on

Press .

## Switching the display light on (for 10s)

Instrument on > press .

## Select display mode

Instrument on > select with .

Current reading > **Hold**: Readings are held > **Max**: Maximum values > **Min**: Minimum values

## Switching the instrument off:

Instrument on > press and hold  2s.

# Safety and the environment

## About this document

- > Please read this documentation through carefully and familiarise yourself with the product before putting it to use. Keep this document to hand so that you can refer to it when necessary. Hand this documentation on to any subsequent users of the product.
- > Pay particular attention to information emphasised by the following symbols:



With the signal word **Caution!**:

Warns against hazards which could result in minor physical injury or damage to equipment if the precautionary measures indicated are not taken.



Important.

## Avoid personal injury/damage to equipment

- > Only operate the measuring instrument properly, for its intended purpose and within the parameters specified in the technical data. Do not use force.
- > Never store the product together with solvents, acids or other aggressive substances.
- > Only carry out the maintenance and repair work that is described in the documentation. Follow the prescribed steps when doing so. Use only OEM spare parts from Testo.
- > Do not use the device in a polluted environment (heavily dusty, oil, foreign matter, volatile chemicals).

## Protecting the environment

- > Take faulty rechargeable batteries as well as spent batteries to the collection points provided for them.
- > Send the product back to Testo at the end of its useful life. We will ensure that it is disposed of in an environmentally friendly manner.

# Specifications

## Functions and use

The testo 606-2 is a material moisture, air humidity and temperature measuring instrument. It is normally used to determine the material moisture contents in wood or building materials and air humidity. The measurement procedure used is suitable for overview measurement to determine whether the material is continuing to dry out. The material moisture is given in % by weight.

## Technical data

### Measurement data

- **Sensors:**  
Electrical resistance (conductivity measurement), Testo humidity sensor, NTC temperature sensor
- **Parameters:**  
% by weight material moisture (wood, building materials), %rH, td, wb, °C, °F
- **Measuring ranges:**  
-10...50 °C, 14...122 °F, 0...100 %rH  
Material moisture: See chapter Using the Product
- **Resolutions:**  
0.1 %, 0.1 °C, 0.1 °F, 0.1 %rH
- **Accuracies (Nominal temperature 25 °C, ±1 Digit):**  
Conductivity measurement ±1 %, ±0.5 °C, ±0.9 °F, ±2.5%rH (5...95%rH)  
Long-term stability: ±1 %rF / year
- **Measuring rate:**  
0.5 s, humidity: 1 s

### Further instrument data

- Protection class: IP20
- Ambient conditions:  
-10...50 °C, 14...122 °F
- Storage/transport conditions:  
-40...70 °C, -40...158 °F
- Temperature coefficient:  
type (k=1) 0.06 %rF / K
- Voltage supply:  
2x 1.5 V type AAA
- Battery life:  
130 h (without display light)
- Dimensions:  
119x46x25mm / 4.69x1.81x0.98" (inc. protection cap)
- Weight: 90 g / 3.2 oz (inc. batteries and protection cap)

### Examinations and licenses

- As declared in the Certificate of Conformity, this product complies with Directive 2014/30/EU.

# Product description

## At a glance






## First steps



### > Inserting batteries:

- 1 To open the battery compartment, push the battery cover down.
- 2 Insert batteries (2x 1.5 V type AAA). Observe the polarity!
- 3 To close the battery compartment, push the battery cover back on.

### > Basic settings (configuration mode):

#### Adjustable functions

- Unit of temperature: **°C**, **°F**
  - Unit of humidity: **%**, **td** (dew point), **WB** (wet bulb)
  - Auto off function: **OFF**, **ON** (instrument switches off automatically if no key is pressed for 10 minutes)
- 1 When switching the instrument on, press and hold  until  and  appear on the display (configuration mode).
    - The adjustable function is displayed. The current setting flashes.

- 2 Press  (▲) several times until the desired setting flashes.
- 3 Press  (Mode) (←) to confirm the input.
- 4 Repeat steps 2 and 3 for all functions.
  - The instrument changes to measuring mode.

## Using the product

**i** To guarantee correct readings:


- Repeat the measurement at several points. The differing resistance of the wood, with or across the grain, may have an impact on the measurement result. If the injection needles are inserted with the grain, this may result in slightly higher readings because the resistance in the material is lower.
- A measurement is only implemented as far as the depth that the injection needles are inserted within the material. Insert the measuring needles as far as possible (4 to 5 mm).
- When measuring fuel moisture content, it is advisable to split the log prior to measurement and to measure at three points. Measuring points: each 5 cm away from the left and right cut edge and once in the centre of the log.
- Keep temperature and humidity sources which may falsify the measurement (e.g. hands) away from the sensor.

**i** The values displayed are highly dependent on the building material/manufacturer used, and on the ambient conditions. As the materials are natural, the same materials can vary from batch to batch.



➤ Switching the instrument on:

- > Press .
  - Measuring mode is opened.

➤ Switching the display light on:

- ✓ The instrument is switched on.
- > Press .
  - The display light goes out automatically if no key is pressed for 10 seconds.

➤ Setting the material characteristic curve:

**i** The material moisture is indicated in the top line of the display. The material symbol  (wood) or  (building

material) is displayed with the relevant material number (see enclosed sticker for the inside of the protective cap).

Settable materials	Measuring range
1. beech, spruce, larch, birch, cherry, walnut	8.8...54.8 % by weight
2. oak, pine, maple, ash-tree, douglas fir, meranti	7.0...47.9 % by weight
3. cement screed, concrete	0.9...22.1 % by weight
4. anhydrite screed	0.0...11.0 % by weight
5. cement mortar	0.7...8.6 % by weight
6. lime mortar, plaster	0.6...9.9 % by weight
7. bricks	0.1...16.5 % by weight

> Press  several times until the desired material characteristic curve appears.

➤ Testing the instrument function:

1 Press  several times until **Test:** lights up.

2 Connect sensing electrodes with the contacts of the test resistor on the top of the protection cap.

- **Test** flashes.

- **Test: ok** lights up: instrument is functioning.

**Test: ok** does not light up: test not possible, see chapter 'Tips and assistance'.

3 Press  back to measurement menu.

➤ Changing the display view:

#### Adjustable views

· Current reading

· **Hold:** Readings are held.

**i** **Max/Min**-display for air humidity and temperature only.

· **Max:** Maximum values since the instrument was last switched on or last reset.

· **Min:** Minimum values since the instrument was last switched on or last reset.

> Press  several times until the desired view appears.

➤ Resetting Max/Min values:

1 Press  several times until the desired view appears.

2 Press  and hold until - - - appears.

3 Repeat steps 1 and 2 for all values that are to be reset.

➤ Switching the instrument off:

> Press  and hold until the display goes out.

# Maintaining the product


## ➤ Changing batteries:

- 1 To open the battery compartment, push the battery cover down.
- 2 Remove used batteries and insert new batteries (2x 1.5 V type AAA). Observe the polarity!
- 3 To close the battery compartment, push the battery cover back on.

## ➤ Cleaning the housing:

- > Clean the housing with a moist cloth (soap suds) if it is dirty. Do not use aggressive cleaning agents or solvents!

## Questions and answers

Question	Possible causes/solutions
Hi or Lo	<ul style="list-style-type: none"> <li>· Readings outside the measuring range (too high, too low): Readings outside the measuring range (too high, too low): for materials that have not been specially dried or moistened, the measurement results should always be within the measuring range.</li> </ul>
	<ul style="list-style-type: none"> <li>· Residual capacity &lt;10 min: Change batteries.</li> </ul>
Testing the instrument function: <b>Test: ok</b> does not light up	<ul style="list-style-type: none"> <li>· Clean sensing electrodes and contacts on the top of the protection cap.</li> <li>· If the error message appears again, send the instrument to Testo Customer Service.</li> </ul>
Meas. electrodes defective/worn	<ul style="list-style-type: none"> <li>· Send instrument to Testo customer service.</li> </ul>

The material's measured moisture content is relative to the dry weight (0% moisture) of the relevant material. The stored material characteristic curves were determined using the Darr (wet and dry weighing) method. The specified measuring ranges are derived from this.

Conversion to percent by weight

Percent by weight = (wet weight-dry weight) \* 100 / dry weight

Example

Wet weight: 180 g

Dry weight: 150 g

Percent by weight:  $(180 - 150) * 100 / 150 = 20\%$

Conversion to water content

Water content % = (wet weight - dry weight) \* 100 / wet weight

Example

Wet weight: 180 g

Dry weight: 150 g

Water content %:  $(180 - 150) * 100 / 180 = 16.6\%$

What constitutes dry, or at risk, or damp?

The values indicated serve as guideline figures for assessing the materials. The values are typical inner area values

Characteristic curve	Material	Dry	At risk	Damp / very damp
Characteristic curve 1 or 2 inside heated	Beech, fir, larch...	< 12	12...15	> 15
Characteristic curve 1 or 2 inside unheated	Oak, pine, maple wood...	< 15	15...20	> 20
Characteristic curve 3	Cement screed	< 3	3...5	> 5
Characteristic curve 3	Concrete	< 2.2	2.2...4.4	> 4.4
Characteristic curve 4	Anhydrite screed	< 0.5	0.5...1	> 1
Characteristic curve 5	Cement mortar	< 3	3...5	> 5
Characteristic curve 6	Lime mortar	< 2	2...4	> 4
Characteristic curve 6	Gypsum	< 2	2...4	> 4
Characteristic curve 7	Brick	< 1	1...3	> 3

Guideline values for the installation moisture of wood, which sets in as an average after a certain period in use-status (DIN 1052-1 (4/88) Para. 4.2.1.):

Char. curve	Application area	Wood humidity in % by weight
1 or 2	buildings closed on all sides with heating	9 ± 3
1 or 2	buildings closed on all sides without heating	12 ± 3
1 or 2	roofed open buildings	15 ± 3
1 or 2	constructions which are open to the weather on all sides	18 ± 6

If we could not answer your question, please contact your dealer or Testo Customer Service. For contact details, please visit [www.testo.com](http://www.testo.com).