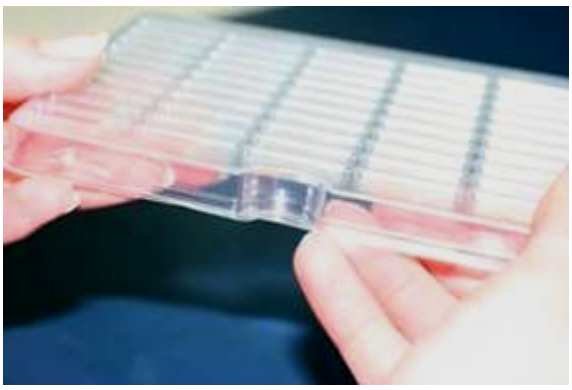
Handling guidelines wired humidity sensor

Packaging

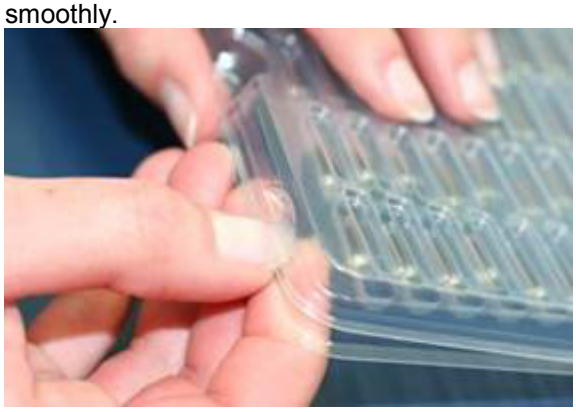
The wired humidity sensor elements are packaged in blisters. Please be careful opening the blisters to avoid damaging any of the sensors.

To avoid damage please handle as follows:

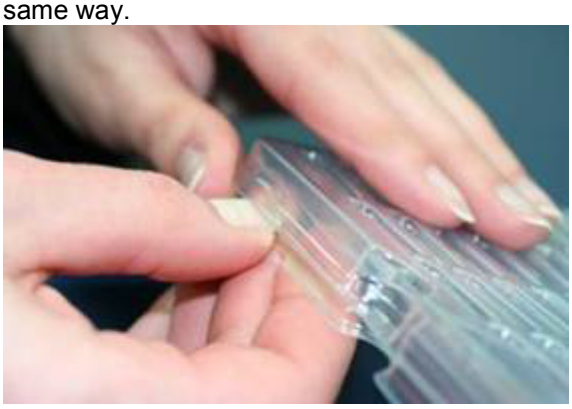
1. Side with curve has to face you.



2. Push your thumb beneath cover and press carefully lock system until cover removes smoothly.



3. Press lock system on second side on the same way.



4. Remove cover slowly.

Storage

Sensors must be stored in the original blisters.

Storage environment	-20°C...+50°C /-4...122°F (temperature range of blister)

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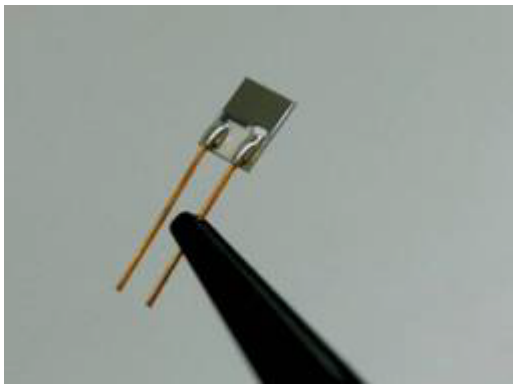
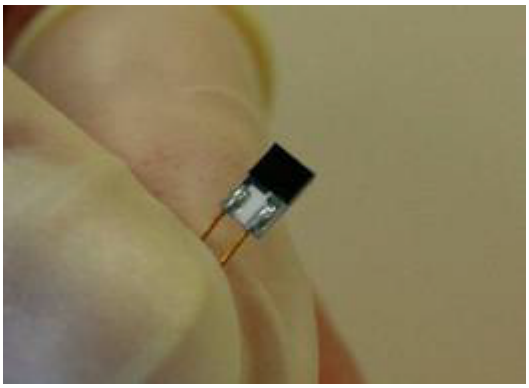
Sensor handling

Hold the sensor with **plastic tweezers** or with **gloves** on the **wires** only.



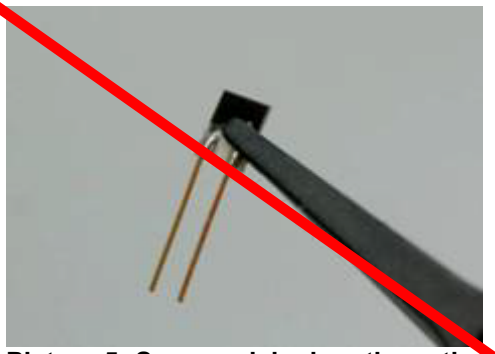
Picture 3: Sensor held on wires with plastic tweezers



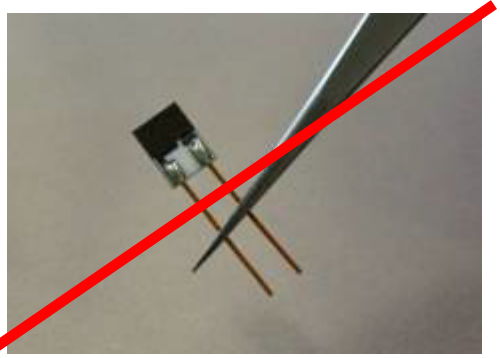
Picture 4: Sensor held with gloves

- **Do not touch the active area** of the sensor element.
- **Do not use metal tweezers** to handle the sensors.
- **Never** handle the sensor by hand **without gloves**.

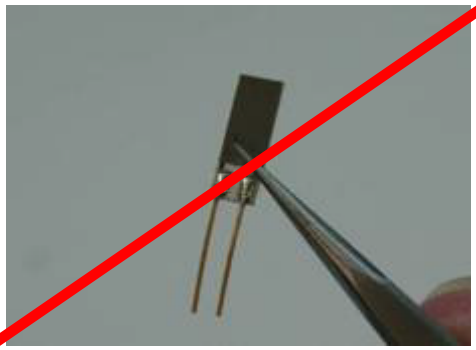
Pictures 5-8 are examples for forbidden handlings.



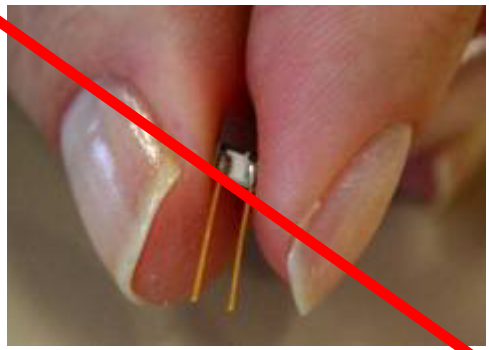
Picture 5: Sensor picked on the active area



Picture 6: Sensor picked on wires with metal tweezers



Picture 7: Sensor picked on the active area with metal tweezers



Picture 8: Sensor held with fingers without gloves on the active area

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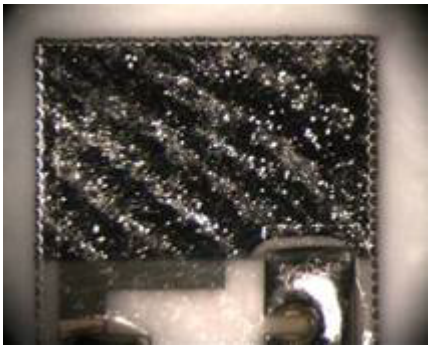
Handling guidelines wired humidity sensor

Do not touch or scratch the active area of the sensors. Scratches and contaminations can degrade the sensor characteristics (see bad samples in pictures 9 and 10 below).



Picture 9: Sensor with contaminations

Picture 10: Sensor with a scratch

- **Avoid mechanical stress** to the sensors, e.g. bending or touching with sharp objects.
- Hold the sensor elements with **plastic tweezers** on the side edges only.

Soldering of the sensor

- A maximum temperature of **320°C** for the soldering iron may not be exceeded. Maximum heat application time with the iron must be less than 10 seconds **at the very end** of the lead wires.
- **Avoid soldering flux residues** (caused by the soldering process) or any other contaminations inside the active area of the sensor. Flux residues can be easily removed with isopropanol at room temperature. The application of low ultrasonic energy might improve the cleaning process.
- The calibration of the sensors must be done **5 days after soldering, at the earliest**. This time is needed to provide a relaxation in order to compensate for the heat induction experienced during the soldering process.
- If the sensor element is mounted with glue, the active layer of the sensor element must be protected against the vapor of the glue during the curing.

Cleaning of the sensor

- Any residues can be easily removed with isopropanol at room temperature. The application of low ultrasonic energy might improve the cleaning process.
- It is possible to clean the sensor with oil-free and filtered clean air, e.g. for removing dust particles.

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V2.1-07/2011