

# Handling & Storage & Calibration of Sensoric Sensors

## General Remarks:

1. Sensoric Sensor cells must not be exposed to temperatures outside the range – 55°C to + 60°C. It is recommended to store Sensoric Sensors in the originally sealed packaging at +4°C to +10°C with the sensors gas inlet side (membrane/filter side) pointing downwards.

However, sensors should be installed as soon as possible after receiving to take maximum advantage of the specified warranty period.

In general, the sensor storage time should not exceed the following recommendations:

- 4 weeks for sensors which are provided with less than 12 month warranty
  - 8 weeks for sensors which are provided with at least 12 and less than 24 month warranty
  - 12 weeks for sensors which are provided with at least 24 months warranty
2. The Sensor must not be used in another mode than the one they are electronically designed for. For example, 3 electrode sensors must not be used as 2 electrode sensors. Performances of 3 electrode sensors used in a two electrode mode are unpredictable and therefore not covered by warranty.
  3. Sensoric Sensors must not be subjected to any pressure when handling.
  4. Sensoric Sensors must not be stored, assembled or installed in areas which contain solvent vapours. Especially at high concentrations the organic solvents are known to cause:
    - blocking of the sensing electrodes
    - creation of false baselines
    - in some cases damaging of the electrodes
    - physical damage of the sensor body
  5. Sensors must not be stacked on top of each other in order to avoid a damage of the sensing electrodes.
  6. Sensors shall be installed with the sensors gas inlet side (membrane/filter side) pointing downwards. Minimum requirement is to install the sensor with the sensors gas inlet side (membrane/filter side) in a horizontal direction. It is not advisable to install the sensor with the gas inlet side permanently pointing upwards in a fixed instrument. In a portable instrument, sensor gas inlet side should be horizontal or pointing downwards for more than 12 h/day.
  7. Soldering to pins will render your warranty void. Connection should be made via mounting socket.

## Sensor Calibration:

It is Sensoric's policy to pre-calibrate all Sensoric gas sensors prior to shipment with the target gas if technically feasible.

Typically, all shipped products are providing stable sensor characteristics as specified in the individual technical data sheets.

Nevertheless, environmental conditions in end users' application, legal requirements and the level of requested accuracy of the gas detection device towards the target gas are determining the frequency of re-calibration of the sensors. Typical ambient air monitoring of TLV levels require not more than one to two re-calibration cycles per year.

Driven by the reactive nature of some gases, a reliable calibration of sensors to the target gases under field conditions might be technically very difficult, if not impossible. More repeatable calibration results are typically obtained in controlled environments (e.g. laboratory conditions).

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## Attention:

This sensor is designed to be used in safety critical applications. To ensure that the sensor and/or instrument in which it is used, are operating properly, it is a requirement that the function of the device is confirmed by exposure to target gas (bump check) before each use of the sensor and/or instrument. Failure to carry out such tests may jeopardize the safety of people and property.

Every effort has been made to ensure the accuracy of this document at the time of printing. In accordance with the company's policy of continued product improvement Sensoric reserves the right to make product changes without notice. No liability is accepted for any consequential losses, injury or damage resulting from the use of this document or from any omissions or errors herein. The data is given for guidance only. It does not constitute a specification or an offer for sale. The products are always subject to a programme of improvement and testing which may result in some changes in the characteristics quoted. As the products may be used by the client in circumstances beyond the knowledge and control Sensoric, we cannot give any warranty as to the relevance of these particulars to an application. It is the clients' responsibility to carry out the necessary tests to determine the usefulness of the products and to ensure their safety of operation in a particular application. Performance characteristics on this data sheet outline the performance of newly supplied sensors. Output signal can drift below the lower limit over time.

## Note:

Further information is available at [www.citytech.com](http://www.citytech.com) reference Sensoric applications notes and Support.