

Handling Guideline For the SCD30 CO₂, humidity and temperature sensor

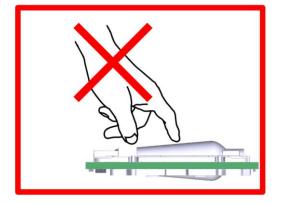
Introduction

The SCD30 CO₂, humidity and temperature sensor consists of a PCB with discrete electric components and an optical cell: The RH/T sensor is soldered on the PCB, CO₂ concentration is measured in an optical cell in a dual-channel configuration.

Force applied on the optical cell and ESD events might impact the sensor accuracy and functionality. This application note explains how to handle the SCD30 properly to guarantee optimal sensing performance and to avoid sensor damage.

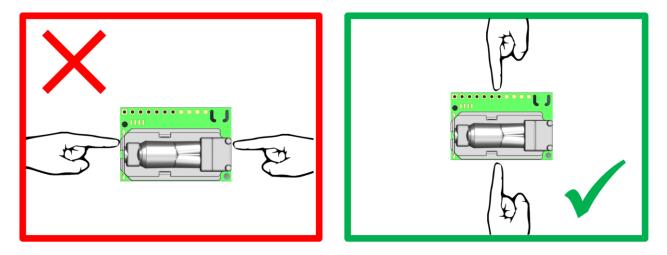
Mechanical Handling

Never touch or apply force on the optical cell. Only handle the sensor by touching the PCB. The sensor should always be handled with clean gloves in a clean environment to keep the sensor away from contaminant like dust, dirt or grease.



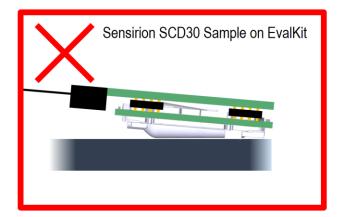
ESD Precautions

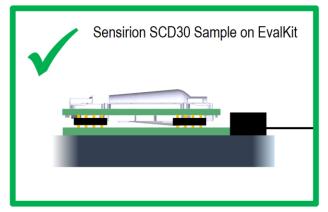
The SCD30 is an ESD sensitive product and must be prevented from electrostatic discharge events at all times. Thus, operators must always use proper ESD equipment when handling the sensor. Furthermore, the SCD30 sensor module must only be touched on the long side of the PCB to avoid contact with the metallized parts of the optical cavity.



SCD30 Sample on EvalKit

When doing measurements with an SCD30 sample on an EvalKit, the optical cell should never be in contact with an object. To avoid mechanical stress, the adapter PCB with the SCD30 on top should be facing down.





Revision history

Date	Revision	Changes
27.04.2017	1	Initial Version
14.03.2019	2	Minor revisions

Important Notices

Warning, Personal Injury

Do not use this product as safety or emergency stop devices or in any other application where failure of the product could result in personal injury. Do not use this product for applications other than its intended and authorized use. Before installing, handling, using or servicing this product, please consult the data sheet and application notes. Failure to comply with these instructions could result in death or serious injury.

If the Buyer shall purchase or use SENSIRION products for any unintended or unauthorized application, Buyer shall defend, indemnify and hold harmless SENSIRION and its officers, employees, subsidiaries, affiliates and distributors against all claims, costs, damages and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if SENSIRION shall be allegedly negligent with respect to the design or the manufacture of the product.

ESD Precautions

The inherent design of this component causes it to be sensitive to electrostatic discharge (ESD). To prevent ESD-induced damage and/or degradation, take customary and statutory ESD precautions when handling this product.

See application note "ESD, Latchup and EMC" for more information.

Warranty

SENSIRION warrants solely to the original purchaser of this product for a period of 12 months (one year) from the date of delivery that this product shall be of the quality, material and workmanship defined in SENSIRION's published specifications of the product. Within such period, if proven to be defective, SENSIRION shall repair and/or replace this product, in SENSIRION's discretion, free of charge to the Buyer, provided that:

 notice in writing describing the defects shall be given to SENSIRION within fourteen (14) days after their appearance;

- such defects shall be found, to SENSIRION's reasonable satisfaction, to have arisen from SENSIRION's faulty design, material, or workmanship; the defective product shall be returned to SENSIRION's factory at the Buyer's expense; and
- the warranty period for any repaired or replaced product shall be limited to the unexpired portion of the original period.

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