

Datasheet Evaluation Kit EK-H5

For SHT2x and SHT7x Humidity and Temperature Sensors

- Very simple Evaluation Kit
- Applicable to SHT2x and SHT7x series
- Viewer Software for download
- USB Interface

Product Summary

The evaluation kit EK-H5 is made for running Sensirion's humidity and temperature sensors and display measured values. It is held very simple: A USB dongle with USB to I²C translator capabilities connects with a sensor cable and sensor. With viewer software it is able to communicate with SHT1x, SHT7x as well as the new generation SHT2x and display measured values.

The viewer software can be downloaded from the Sensirion web page and owns some simple data-logger features.

The main purpose of the evaluation kit is demonstrating the unique performance of Sensirion's humidity and temperature sensors without any own hard or software design work.

Set Up of EK-H5

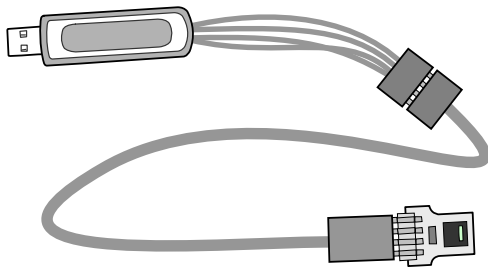


Figure 1 Schematic of Evaluation Kit EK-H5. USB Dongle with I²C to USB converter. Sensor cable is connected via plug to this USB dongle. Either SHT7x or SHT21 on PCB may be plugged to the cable. Viewer software must be downloaded from the Sensirion web page.

Pin assignment of SHT21 on PCB top view from left to right: SCL, VDD, VSS, SDA (same as SHT7x).

Material Contents

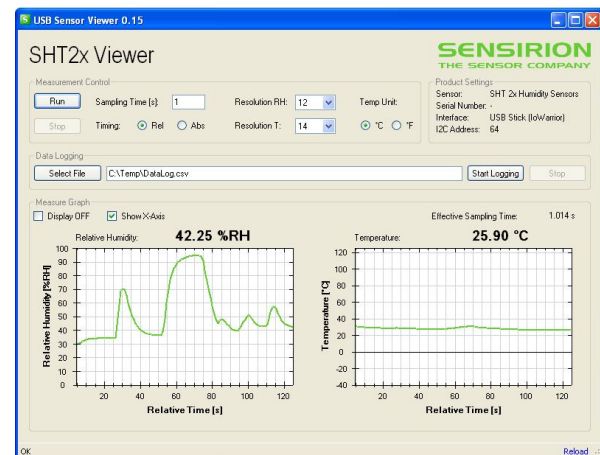
- **1 EK-H5 USB Stick:** Contains USB to I²C translator capabilities.
- **1 Sensor cable** of 1m length with plug for connecting sensors with USB dongle.
- **1 SHT21 sensor:** SMD type, DFN 3-0 packaged sensors with version 4C sensor chip mounted to small PCB with connector. Please refer to datasheet SHT21 for more details.

Device Certification

The Evaluation Kit EK-H5 is RoHS and WEEE compliant.

Viewer Software

The viewer software displays relative humidity and temperature data on two different windows. It allows for addressing all available resolutions, absolute or relative timing, free choice of measurement intervals (1 ... 1440s), and choice for displaying °C or °F. The data may be logged, stored and exported to Excel format.



Viewer Software must be downloaded from the Sensirion web page. Please find it on www.sensirion.com/ekh5. Please note that the USB stick, sensor cable and sensor must be connected to the computer before starting the software. No further software driver or any other hardware is required for running EK-H5.

When starting the viewer software, the right sensor must be selected in a first window (more sensors are given for choice). The settings must be chosen and then the measurement may be started.

Revision History

Date	Version	Page(s)	Changes
January 2010	1.0	1 – 2	Initial release

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.

This warranty does not apply to any equipment which has not been installed and used within the specifications recommended by SENSIRION for the intended and proper use of the equipment. EXCEPT FOR THE WARRANTIES EXPRESSLY SET FORTH HEREIN, SENSIRION MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCT. ANY AND ALL WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY EXCLUDED AND DECLINED.

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