

Datasheet Evaluation Kit EK-P3 For SDP600 series differential pressure Sensors

- **Evaluation Kit**
- Applicable to SDP5xx/6xx/7xx sensors
- Viewer Software for download
- Easy connection via USB Interface

Product Summary

The evaluation kit EK-P3 contains everything needed for fast evaluation and qualification of the SDP600 series differential pressure sensors. It contains a USB dongle, a SDP610 differential pressure sensor and an adapter cable to connect the sensor to the USB-donale.

Set Up of EK-P3

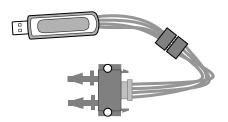


Figure 1 Schematic of Evaluation Kit EK-P3. USB Dongle with I2C to USB converter. SDP6xx sensor is connected via plug to this USB dongle. Viewer software must be downloaded from the Sensirion web page.

Material Contents

- 1 EK-P3 USB Stick: Contains USB to I²C translator capabilities.
- 1 Sensor cable of 20 cm length with plug for connecting sensors with USB dongle.
- 1 SDP610 sensor: Digital Sensor with I2C output. Please refer to datasheet for the SDP600 series for more details:

http://www.sensirion.com/en/pdf/product information/Data sheet_SDP600series_differential pressure sensor.pdf

Installation Guide

Step 1: Connect USB-stick to PC and install viewer software. Viewer Software must be downloaded from the Sensirion web page at:

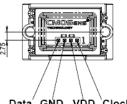
http://www.sensirion.com/en/Installationsprogramme/USB-Sensor-Viewer_Setup.msi.

Step 2: Connect the sensor via the adapter cable to the USB-stick (see figure 2).



With this equipment, first measurements can be done within a couple of minutes.

The viewer software can be downloaded from the Sensirion web page and includes some simple datalogger features.





Data GND VDD Clock Figure 2 Pin assignment of SDP6xx on PCB top view from left to right. Connect cable such that yellow cable is connected to data, black (GND), red (Vdd) and green (clock).

WARNING: Reverse polarity connection might damage sensor permanently.

Step 3: Start software. Please note that the USB stick, sensor cable and sensor must be connected to the computer before starting the software. Please choose SDP6xx series and press OK button.

Product Selection	
Sensor Product:	
SDP 6xx Series	~
COM Hardware:	
USB Stick (IoWarrior)	*
Cancel	ОК

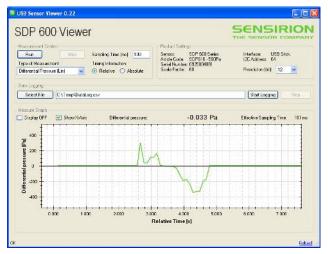
Step 4: Press run to start the measurement or chose advanced settings like described in the next section.

Viewer Software

The viewer software displays differential pressure over time. It allows selecting all available resolutions, absolute or relative timing and free choice of sampling time (sampling time is limited to 8 ms due to the USB-stick not because of the sensor). Furthermore, the output signal



may be displayed as linearized or raw data. The data can be logged, stored and exported to Excel format.



When starting the viewer software, the right sensor must be selected in a first window (please select SDP 600 series). The settings must be chosen and then the

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measurement may be started. Choose the type of measurement, the resolution and sampling time and press the run button. The software has a simple data logger feature which saves data as csv-file.

Device Certification

The Evaluation Kit EK-P3 is RoHS and WEEE compliant.

Ordering Information

Use the part names and item numbers shown in the following table when ordering the EK-P3 evaluation kit. For the latest product information and local distributors, visit <u>www.sensirion.com</u>.

Part name	Description / Output	Item number
EK-P3	SDP600 series evaluation kit	1-100766-01

Date	Version	Page(s)	Author	Changes
August 2010	1.0	1 – 3	DAT	Initial release
December 2010	1.1	2	DAT	New Link to Software



Important Notice

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;

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- 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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Headquarter and Sales Offices

Headquarter

SENSIRION AG Laubisruetistr. 50 CH-8712 Staefa ZH Switzerland

Sales Office USA:

SENSIRION Inc. 2801 Townsgate Rd., Suite 204 Westlake Village, CA 91361 USA

Sales Office Japan:

SENSIRION JAPAN Co. Ltd. Postal Code: 108-0074 Shinagawa Station Bldg. 7F, 4-23-5, Takanawa, Minato-ku Tokyo, Japan Sales Office Korea: SENSIRION KOREA Co. Ltd. Phone: +41 44 306 40 00 Fax: +41 44 306 40 30 info@sensirion.com http://www.sensirion.com/

Phone: +1 805 409 4900 Fax: +1 805 435 0467 michael.karst@sensirion.com/ http://www.sensirion.com/

Phone: +81 3 3444 4940 Fax: +81 3 3444 4939 info@sensirion.co.jp http://www.sensirion.co.jp

Phone: +82 31 440 9925~27

#1414, Anyang Construction Tower B/D, 1112-1, Bisan-dong, Anyang-city Gyeonggi-Province South Korea

Sales Office China:

Sensirion China Co. Ltd. Room 2411, Main Tower Jin Zhong Huan Business Building, Futian District, Shenzhen, Postal Code 518048 PR China Fax: +82 31 440 9927 info@sensirion.co.kr http://www.sensirion.co.kr

phone: +86 755 8252 1501 fax: +86 755 8252 1580 info@sensirion.com.cn www.sensirion.com.cn

Find your local representative at: <u>http://www.sensirion.com/reps</u>