

EK-P2

Evaluation Kit for SDP600 Series

- Sensor evaluation and qualification for OEM customers
- Easy connection to the USB port of a computer
- With 3 high performance SDP610
- Plug-and-play system
- Direct implementation into LabView environment



Product Summary

The evaluation kit EK-P2 contains everything needed for fast evaluation and qualification of the SDP600 series differential pressure sensors. It contains three sample

sensors, a USB interface box and an easy-to-use evaluation software. With this equipment, first measurements can be done within a couple of minutes.

Content of EK-P2

- 3 SDP610 sensors
(By request other SDP6xx sensor versions possible)
- National Instruments USB-8451 I²C Interface
(Customized Sensirion Version)
- Connector with voltage regulator and pull-up resistors
- Cable to connect to sensor
- CD with flow sensor sample code (for LabView) and stand alone viewer software.

This adapter allows to connect I²C flow sensors based on the SF04 chip to a PC via the USB port.

National Instruments maintains full service and warranty and provides implementation of the I²C commands into LabView.

Sensirion offers open source sample code including a full SF04 flow viewer software based on LabView. A stand alone version of this viewer software which runs without LabView license is available.

The adapter can also be ordered solely (without EK-P2).

EK-P2s (without NI USB-8451 I²C Interface)

For customers owning already a National Instruments USB-8451 I²C interface, the EK-P2s comes without the National Instruments USB-8451 I²C Interface, the rest is equal to the EK-P2.

Overview I²C to USB Adapter

Sensirion provides with the EK-P2 a customized version of the National Instruments interface box USB-8451. For compatibility reasons, only this customized version is suitable to work with the full sensor performance and resolution.



Software

The enclosed FlowViewer Software as well as the open source sample code are available for free. For updates of the software, please contact Sensirion. There is no warranty for the use of this software. Sensirion is not liable for any damages.

System requirements: Microsoft Windows (XP and Vista, other system versions on request.)

For other operating systems, a LabVIEW source code is available.

User Guide

For the communication to a personal computer, the I²C interface has to be connected to a standard USB port. For communication between the I²C interface and the sensor, appropriated connectors and cables are included in the

evaluation kit. Power to the sensor is also provided by the I²C interface. No additional components are needed. Detailed operating instructions can be found in the included "Installation Guide", which can also be downloaded from the Sensirion webpage.

Ordering Information

Use the part names and item numbers shown in the following table when ordering the EK-P2 evaluation kit. For the latest product information and local distributors, visit www.sensirion.com.

Part name	Description / Output	Item number
EK-P2	SDP600 series evaluation kit	1-100563-01
EK-P2-S	SDP600 series evaluation kit without National Instruments USB-8451 I ² C Interface	1-100564-01

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 (including death). 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 datasheet 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 "Handling Instructions" 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.

SENSIRION is only liable for defects of this product arising under the conditions of operation provided for in the datasheet and proper use of the goods. SENSIRION explicitly disclaims all warranties, express or implied, for any period during which the goods are operated or stored not in accordance with the technical specifications.

SENSIRION does not assume any liability arising out of any application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. All operating parameters, including without limitation recommended parameters, must be validated for each customer's applications by customer's technical experts. Recommended parameters can and do vary in different applications.

SENSIRION reserves the right, without further notice, (i) to change the product specifications and/or the information in this document and (ii) to improve reliability, functions and design of this product.

Copyright © 2001-2009, SENSIRION.
CMOSens® is a trademark of Sensirion
All rights reserved

RoHS and WEEE Statement

The SDP600 Series complies with requirements of the following directives:

- EU Directive 2002/96/EC on waste electrical and electronic equipment (WEEE), OJ13.02.2003; esp. its Article 6 (1) with Annex II.
- EU Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), OJ 13.02.2003; esp. its Article 4.



Headquarter and Sales Offices

SENSIRION AG
Laubisruetistr. 50
CH-8712 Staefa ZH
Switzerland

Phone: + 41 (0)44 306 40 00
Fax: + 41 (0)44 306 40 30
info@sensirion.com
www.sensirion.com

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

Phone: +82-31-440-9925-27
Fax: +82-31-440-9927
info@sensirion.co.kr
www.sensirion.co.kr

SENSIRION Inc
Westlake Pl. Ctr. I, suite 204
2801 Townsgate Road
Westlake Village, CA 91361
USA

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

SENSIRION China Co. Ltd.
Room 2411, Main Tower
Jin Zhong Huan Business Building,
Postal Code 518048
Futian District, Shenzhen, PR China

Phone: +86 755 8252 1501
Fax: +86 755 8252 1580
info@sensirion.com.cn
www.sensirion.com.cn

SENSIRION Japan
Sensirion Japan Co. Ltd.
Shinagawa Station Bldg. 7F
4-23-5 Takanawa
Minato-ku, Tokyo, Japan

phone: +81 3-3444-4940
fax: +81 3-3444-4939
info@sensirion.co.jp
www.sensirion.co.jp

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