

Description

The SDAH02 Evaluation Kit is used to assess the HS3001 High-Performance Relative Humidity and Temperature Sensor in a typical application. The battery-operated portable sensing system enables users to easily monitor the ambient relative humidity and temperature via the LCD display. A single button can be used to select different modes and plot data. The plots show relative humidity or temperature readings versus time.

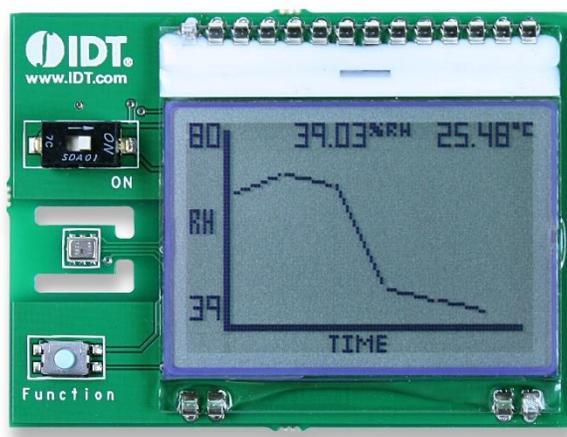
Kit Contents

- SDAH02 Evaluation Board
- CR1632 3V Battery
- *Quick Start Guide*

Features

- SDAH02 Evaluation Board with LCD display
- HS3001 Relative Humidity and Temperature Sensor mounted on the Evaluation Board:
 - RH accuracy: $\pm 1.5\%RH$
 - Operating temperature: -40 to $105^{\circ}C$
- LCD display modes:
 - Relative humidity and temperature reading
 - Relative humidity versus time
 - Temperature reading versus time

SDAH02 Evaluation Kit



Important Notes

Disclaimer

Integrated Device Technology, Inc. and its affiliated companies (herein referred to as “IDT”) shall not be liable for any damages arising out of defects resulting from

- (i) delivered hardware or software
- (ii) non-observance of instructions contained in this manual and in any other documentation provided to user, or
- (iii) misuse, abuse, use under abnormal conditions, or alteration by anyone other than IDT.

TO THE EXTENT PERMITTED BY LAW, IDT HEREBY EXPRESSLY DISCLAIMS AND USER EXPRESSLY WAIVES ANY AND ALL WARRANTIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE, STATUTORY WARRANTY OF NON-INFRINGEMENT, AND ANY OTHER WARRANTY THAT MAY ARISE BY REASON OF USAGE OF TRADE, CUSTOM, OR COURSE OF DEALING.

Restrictions in Use

IDT’s SDAH02 Evaluation Kit, consisting of the SDAH02 Evaluation Board, battery, and documentation, is only designed to provide a quick setup for taking RH% and temperature measurements with the HS3001. IDT’s SDAH02 Evaluation Kit must not be used for any mission-critical applications or measurement reference source.

Contents

1. Setup3

 1.1 Kit Hardware Setup3

 1.1.1 Installing the Battery.....3

2. Usage Guide.....3

 2.1 Measurement Settings3

3. Ordering Information.....4

4. Revision History.....4

List of Figures

Figure 1. Battery Holder on the Backside of the SDAH02 Evaluation Board3

Figure 2. SDAH02 Portable Sensing System – Relative Humidity and Temperature Readings Mode.....3

Figure 3. SDAH02 Portable Sensing System – Plotting Modes.....4

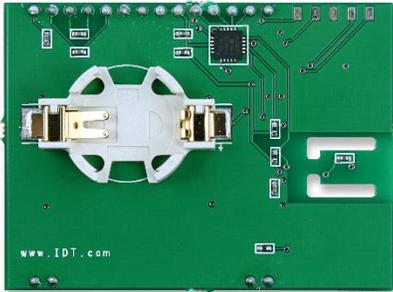
1. Setup

1.1 Kit Hardware Setup

1.1.1 Installing the Battery

A CR1632 battery is included with the kit. Insert the battery in the battery holder on the back of the board with the positive battery terminal facing away from the board

Figure 1. Battery Holder on the Backside of the SDAH02 Evaluation Board



2. Usage Guide

After the kit is turned on in the following steps, three different modes can be selected and displayed on the LCD: relative humidity and temperature readings; relative humidity versus time; and temperature reading versus time.

2.1 Measurement Settings

The following steps describe basic kit operation (see Figure 2):

1. Turn on the system by sliding the power switch to the "ON" position. Once the system is activated, the ambient relative humidity and temperature reading will be displayed.
2. Press the "Function" button to cycle through the different modes for the display (see Figure 2 and Figure 3).

Figure 2. SDAH02 Portable Sensing System – Relative Humidity and Temperature Readings Mode

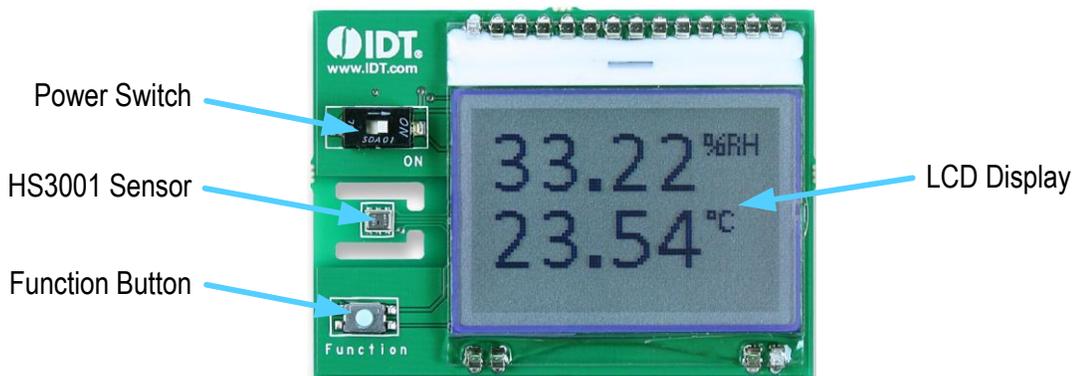
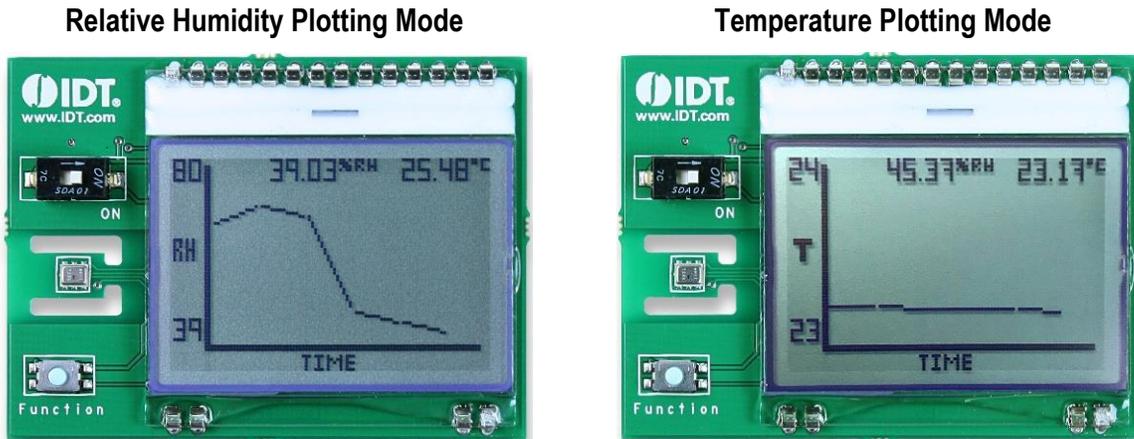


Figure 3. SDAH02 Portable Sensing System – Plotting Modes



3. Ordering Information

Orderable Part Number	Description
SDAH02	SDAH02 Evaluation Kit, including SDAH02 Evaluation Board with LCD, CR1632 battery, <i>Quick Start Guide</i>

4. Revision History

Revision Date	Description of Change
November 17, 2017	Initial release.

IMPORTANT NOTICE AND DISCLAIMER

RENESAS ELECTRONICS CORPORATION AND ITS SUBSIDIARIES (“RENESAS”) PROVIDES TECHNICAL SPECIFICATIONS AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES “AS IS” AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD-PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for developers who are designing with Renesas products. You are solely responsible for (1) selecting the appropriate products for your application, (2) designing, validating, and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. Renesas grants you permission to use these resources only to develop an application that uses Renesas products. Other reproduction or use of these resources is strictly prohibited. No license is granted to any other Renesas intellectual property or to any third-party intellectual property. Renesas disclaims responsibility for, and you will fully indemnify Renesas and its representatives against, any claims, damages, costs, losses, or liabilities arising from your use of these resources. Renesas' products are provided only subject to Renesas' Terms and Conditions of Sale or other applicable terms agreed to in writing. No use of any Renesas resources expands or otherwise alters any applicable warranties or warranty disclaimers for these products.

(Disclaimer Rev.1.01)

Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,
Koto-ku, Tokyo 135-0061, Japan
www.renesas.com

Trademarks

Renesas and the Renesas logo are trademarks of Renesas Electronics Corporation. All trademarks and registered trademarks are the property of their respective owners.

Contact Information

For further information on a product, technology, the most up-to-date version of a document, or your nearest sales office, please visit www.renesas.com/contact-us/.