# User Manual for the SDAH02 Evaluation Kit for the HS3001 Humidity and Temperature Sensor

## 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.

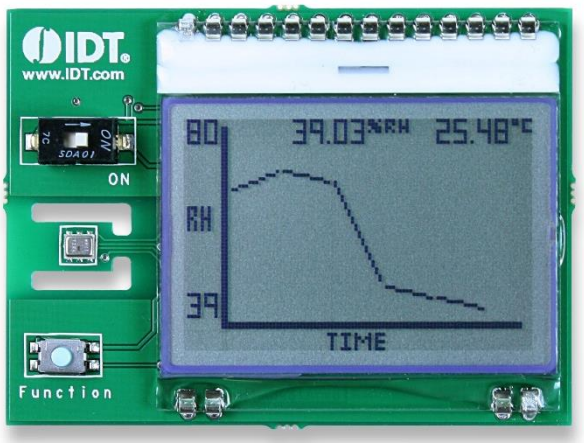
## Features

- SDAH02 Evaluation Board with LCD display
- HS3001 Relative Humidity and Temperature Sensor mounted on the Evaluation Board:
  - RH accuracy: ±1.5%RH
  - Operating temperature: -40 to 105°C
- LCD display modes:
  - Relative humidity and temperature reading
  - Relative humidity versus time
  - Temperature reading versus time

## Kit Contents

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

## SDAH02 Evaluation Kit



## Important Notes

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### 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



# List of Figures

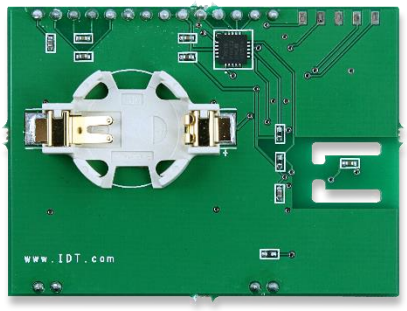
# 1. Setup

## 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**

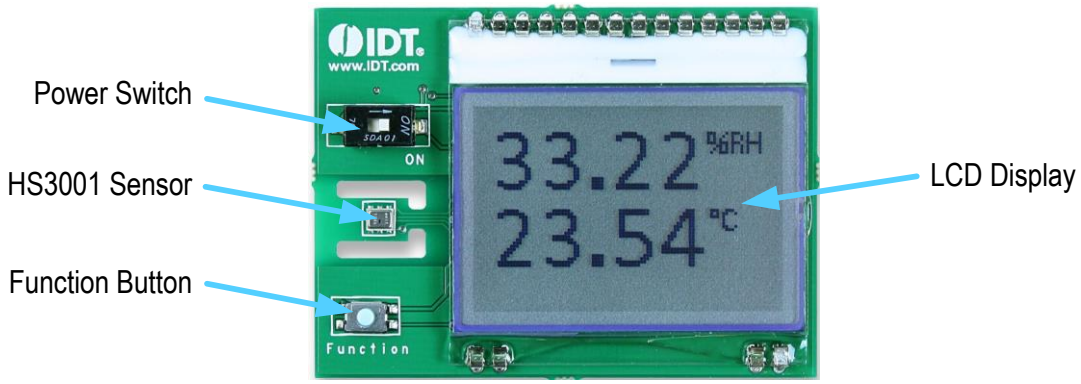
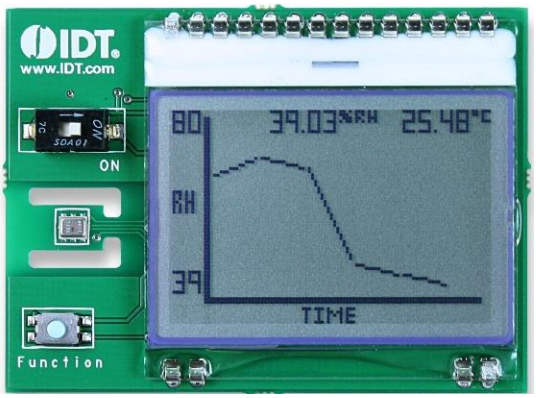
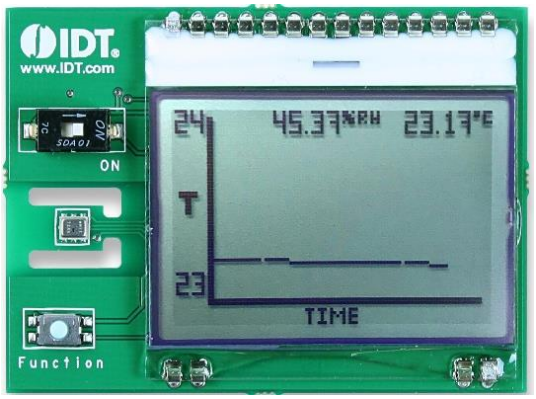


**Figure 3. SDAH02 Portable Sensing System – Plotting Modes**

Relative Humidity Plotting Mode




Temperature Plotting Mode




## 3. Ordering Information

| Orderable Part Number | Description |
|---|---|
| SDAH02 | SDAH02 Evaluation Kit, including SDAH02 Evaluation Board with LCD, CR1632 battery, *Quick Start Guide* |

## 4. Revision History

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

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