The Temperature/RH smart sensor is designed to work with smart sensor-compatible HOBO data loggers. All sensor parameters are stored inside the smart sensor, which automatically communicates configuration information to the logger without any programming, calibration or extensive user setup

HOBO® Data Loggers

T-THB-M002 and S-THB-M008 12-bit Temperature/Relative Humidity Sensors

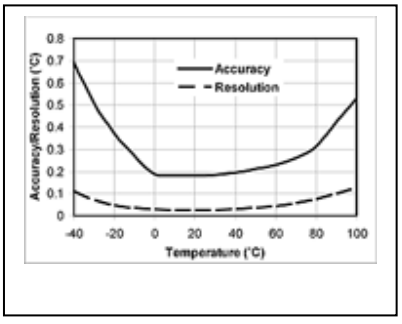
The 12-bit Temperature/RH Smart Sensor is designed to work with all Onset data loggers that accept Smart Sensors. All sensor parameters are stored inside the Smart Sensor, which automatically communicates configuration data information to the logger without any programming, calibration, or extensive user setup.
Environment:
The S-THB-M0xx sensors are for use in Indoor and Outdoor environments
Measurements:
The S-THB-M0xx sensors support the following measurements : Relative Humidity, Temperature

Measurement Range:

Temp: -40°C to 75°C
RH: 0-100% RH at -40° to 75°C; exposure to conditions below -20°C or above 95% RH may temporarily increase the maximum RH sensor error by an additional 1%

Accuracy:

Temp: +/- 0.21°C from 0° to 50°C. See Figure 1.
RH: +/- 2.5% from 10% to 90% RH (typical), to a maximum of +/- 3.5%. See Figure 2 for full range.

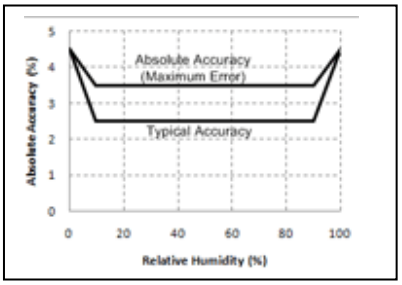


Resolution:

Temp: 0.02°C at 25°C See Figure 1
RH: 0.1% RH at 25°C (77°F)

Bits Per Sample:

Temp: 12
RH: 10



Drift:

Temp: < 0.1°C per year
RH: < 1% per year typical; hysteresis 1%

Response Time:

Temp: 5 minutes in air moving 1 m/sec
RH: 5 minutes in air moving 1 m/sec with protective cap

Tempcon Instrumentation Ltd.
Unit 19, Ford Lane Business Park, Ford Lane
Ford, Nr. Arundel, West Sussex. BN18 0UZ
Tel: ++44 (0) 1243 558270 Fax: ++44 (0) 1243 558288
Email: info@tempcon.co.uk Web site: www.tempcon.co.uk

S-THB-M0xx sensors

Operating Temperature Range: -40°C to 75°C

Environmental Rating Weatherproof: 0 to 100% RH intermittent condensing environments.

For best results, the Temp/RH Smart Sensor should be mounted inside a protective enclosure, such as a solar radiation shield.

Housing PVC cable jacket with ASA styrene polymer RH sensor cap; modified hydrophobic polyethersulfone membrane

Sensor Dimensions: 10 x 35 mm, Weight: - 110 g

Number of Data Channels: 2

Measurement Averaging Option: No

Cable Lengths Available: 2.5 m

Length of Smart Sensor Network Cable: 0.5 m

This product meets CE specification EN61326 criterion C for ESD, criterion C for Radiated Immunity, criterion C for Fast Transient, criterion B for Conducted Immunity, criterion A for Power Frequency Magnetic Fields, and Radiated Emissions Group 1, Class B. To minimize measurement errors due to ambient RF, use the shortest possible probe cable length and keep the probe cable as far as possible from other cables.

Note: Sensor requires protection from rain or direct splashing; Radiation shield (RS3) strongly recommended for use in sunlight; sensors can be used in intermittent condensing environments up to 30°C and non-condensing above 30°C.

Order Information:	**Part No:**
12-bit Smart Temperature/RH Sensor (2 metre cable)	THB-M002
12-bit Smart Temperature/RH Sensor (8 metre cable)	THB-M008

Tempcon Instrumentation Ltd.
Unit 19, Ford Lane Business Park, Ford Lane
Ford, Nr. Arundel, West Sussex. BN18 0UZ
Tel: ++44 (0) 1243 558270 Fax: ++44 (0) 1243 558288
Email: info@tempcon.co.uk Web site: www.tempcon.co.uk