HOBO® S-THB-M008 Sensor

12-bit Temperature/Relative Humidity (8m cable) Smart Sensor

The 12-bit Temperature/Relative Humidity 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.

Also available in a wireless model for use with the HOBOnet Field Monitoring System.

Supported Measurements:

Dew Point, Relative Humidity and Temperature

Key Advantages:

- Smart Sensor
- Works with all loggers that accept smart sensor inputs
- Automatically communicates configuration data to the logger

HOBO S-THB-M008 Sensor Specifications

Measurement Range
Temp: -40°C to 75°C (-40°F to 167°F)
RH: 0-100% RH at -40° to 75°C (-40° to 167°F); exposure to conditions below -20°C (-4°F) 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 (0.38°F from 32° to 122°F)
RH: +/- 2.5% from 10% to 90% RH (typical), to a maximum of +/- 3.5% including hysteresis at 25°C (77°F); below 10% and above 90% ±5% typical

Resolution
Temp: 0.02°C at 25°C (0.04°F at 77°F)
RH: 0.1% RH

Bits Per Sample
Temp: 12
RH: 10

Drift
Temp: < 0.1°C (0.18°F) per year
RH: < 1% per year typical

Response Time (typical, to 90% of change)
Temp: 5 minutes in air moving 1 m/sec
RH: 5 minutes in air moving 1 m/sec with protective cap

Operating temperature range: -40°C to 75°C (-40°F to 167°F)
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 (0.39 x 1.39 in)
Weight: 180 g (6.35 oz)
Number of data channels: 2
Measurement averaging option: No
Cable lengths available: 8 m (26.2 ft)
Length of Smart Sensor network cable: 6 m (19.6 ft)

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.

Contact Us

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