



# HOBO S-TMB-M002 12-Bit Temperature Smart Sensor (2m cable)

## Product Images



## Short Description

This 12-bit Temperature Smart Sensor provides  $< \pm 0.2^{\circ} \text{C}$  total accuracy ( $< \pm 0.36^{\circ} \text{F}$ ) and resolution of  $< \pm 0.03^{\circ} \text{C}$  ( $< \pm 0.054^{\circ} \text{F}$ ) over a range of  $0^{\circ}$  to  $50^{\circ} \text{C}$  ( $32^{\circ}$  to  $122^{\circ} \text{F}$ ). Its full measurement range is  $-40^{\circ}$  to  $100^{\circ} \text{C}$  ( $-40^{\circ}$  to  $212^{\circ} \text{F}$ ). A selectable measurement-averaging feature improves accuracy further. The sensor also features a stainless steel sensor tip and robust cable rated for immersion in water up to  $50^{\circ} \text{C}$  for up to 1 year. This model has a cable length of 2m.

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Also available in a [wireless model](#) for use with the [HOBOnet Field Monitoring System](#).


### S-TMB-M002 Key Features

- Measurement range of  $-40^{\circ}$  to  $100^{\circ} \text{C}$  ( $-40^{\circ}$  to  $212^{\circ} \text{F}$ )
- Stainless steel sensor tip
- Sensor and cable rated for immersion in water or soil up to  $50^{\circ} \text{C}$  for up to 1 year

For use in Indoor, Outdoor and Underwater environments

Supports the following measurements: Temperature, Water Temperature

## Additional Information

Explanation	<p>To see the full specifications for this product, please see the product manual found under the Resources tab.</p> <p><b>Measurement range:</b> -40° to 100°C (-40° to 212°F) sensor tip*</p> <p><b>Accuracy:</b> &lt; ±0.2°C from 0° to 50°C (&lt; ±0.36°F from 32° to 122°F)</p> <p><b>Resolution:</b> &lt; ±0.03°C from 0° to 50°C (&lt; ±0.054°F from 32° to 122°F)</p> <p><b>Drift:</b> &lt; ±0.1°C (0.18°F) per year</p> <p><b>Response time (to 90% of change):</b> &lt; 3 minutes typical to 90% in 1 m/sec air flow &lt; 30 seconds typical to 90% in stirred water</p> <p><b>Measurement averaging option:</b> Yes</p> <p><b>Environmental rating:</b> Waterproof sensor tip and cable rated for 1-year immersion in water up to 50°C</p> <p><b>Housing:</b> Stainless steel sensor tip</p> <p><b>Dimensions:</b> 5.1 x 33 mm (0.2 x 1.3 inches)</p> <p><b>Approximate weight:</b> 100 g (1 oz), 310 g (4 oz), 880 g (12 oz) — varies with cable length</p> <p><b>Cable lengths:</b> 2.0 m (6.6 ft)</p> <p><b>Number of data channels:</b> 1</p> <p><b>Length of Smart Sensor network cable:</b> 0.5 m (1.6 ft)</p> <p>* Sensor tip and cable immersion in fresh water up to 50°C (122°F) for one year. Cable electronics are rated for up to 75°C (167°F). <a href="#">Radiation Shield</a> strongly recommended for use in sunlight (part # RS3)</p> <p> - The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).</p>
Brand	Onset HOBO
Housing	Cable
Measurements	Temperature
Compatible With	U14-002 External Temperature/RH LCD Data Logger, U30-NRC USB Weather Station Data Logger, H21-USB Micro Station Data Logger, RX3000 Remote Monitoring Station Data Logger, U30-NRC-SYS-C, H22-001 Energy Data Logger