



HOBO® TMCx-HD Sensor

Air/Water/Soil Temperature Sensor

The TMC temperature probe, for use in air, soil, or water, works with the HOBO UX120-006M, MX1100, ZW series, or U-Series data loggers.



Key Advantages:

- Accuracy and resolution vary according to attached logger model
- Measurement range is -40° to 100°C (-40° to 212°F) in air or water
- **Response time in air:** 2 min. typical to 90% in air moving 1 m/sec (2.2 mph)
- **Response time in stirred water:** 30 sec. typical to 90%
- Sensor is attached to a 0.3 m (1 ft), 1.8 m (6 ft), 6.1 m (20 ft), or 15.2 m (50 ft) cable

HOBO TMCx-HD Sensor Specifications

Measurement range: -40° to 50°C (-40° to 122°F) in water; -40° to 100°C (-40° to 212°F) in air

Accuracy:

w/U12: $\pm 0.25^{\circ}\text{C}$ from 0° to 50°C ($\pm 0.45^{\circ}\text{F}$ from 32° to 122°F), insert probe 2.3 cm (0.9 inches) minimum;

w/ZW: $\pm 0.21^{\circ}\text{C}$ from 0° to 50°C ($\pm 0.38^{\circ}\text{F}$ from 32° to 122°F), insert probe 2.3 cm (0.9 inches) minimum;

w/UX120-006M, MX1104, and MX1105: $\pm 0.15^{\circ}\text{C}$ from 0° to 70°C ($\pm 0.27^{\circ}\text{F}$ from 32° to 158°F), insert probe 2.3 cm (0.9 inches) minimum;

Resolution:

w/U12: 0.03° at 20°C (0.05° at 68°F);

w/ZW: 0.02° at 25°C (0.04° at 77°F);

w/UX120-006M, MX1104, and MX1105: 0.002° at 25°C (0.003° at 77°F);

Drift: $< 0.1^{\circ}\text{C}$ ($< 0.2^{\circ}\text{F}$) per year

Response time in air: 2 min. typical to 90% in air moving 1 m/sec (2.2 mph)

Response time in stirred water: 30 sec. typical to 90%.

Operating range: Sensor tip and cable immersion in fresh water up to +50°C (122°F) for 1 year

Housing: Copper-plated sensor tip

Dimensions: 5.1 x 33 mm (0.2 x 1.3 inches)

Weight: 34 g (1.1 oz)