



# HOBO Conductivity & Temperature Sensor for MX800 Series Water Loggers

## Product Images



## Short Description

A conductivity and temperature sensor for use with HOBO MX800 Series Water Loggers.

Requires a HOBO MX801 or MX802 Data Logger, the HOBOconnect app, and a compatible mobile device or Windows computer.

## Description

The conductivity sensor is an interchangeable sensor that works with HOBO MX800 Series Water Loggers to

measure conductivity and temperature. With this sensor attached to a HOBO MX800 Series Water Logger, the logger can also calculate specific conductance, salinity, and total dissolved solids (TDS).

The conductivity sensor can be attached directly to the fully submersible MX801 model, or attached via cable to the direct read MX802 model, which doesn't require having to pull the sensor out of the water to download data.

## Features

- 4-electrode conductivity sensor provides wide measurement range for monitoring freshwater or saltwater
- Conductivity sensor is centrally located to minimize effects from stilling wells or protective guards
- 1" diameter for use in narrow wells (with cable to MX802 above the well)
- Temperature sensor placement near the sensor tip for fast response time
- Specially treated stainless steel holds up in saltwater.

Requires the free HOBObconnect mobile app (available from iTunes and Google Play).

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| Country of Manufacture | United States   |
| Explanation            | <p><b>Conductivity Measurements</b></p> <p><b>Measurement Range</b><br/>Electrical conductivity and specific conductance: 0 to 100,000 <math>\mu\text{S}/\text{cm}</math><br/>Salinity using PSS-78: 2 to 42 PSU<br/>Total Dissolved Solids (TDS): 0 to 100,000 mg/L</p> <p><b>Calibrated Range</b><br/>Electrical conductivity: 50 to 80,000 <math>\mu\text{S}/\text{cm}</math><br/>5° to 35°C (41° to 95°F)</p> <p><b>Accuracy</b><br/>Conductivity: +/-2% or 15 <math>\mu\text{S}/\text{cm}</math> whichever is greater<br/>Salinity: +/-2% of reading or 0.1 PSU, whichever is greater</p> <p><b>Resolution</b><br/>Conductivity:<br/>0.1 <math>\mu\text{S}/\text{cm}</math> from 0 to 1,000 <math>\mu\text{S}/\text{cm}</math><br/>1 <math>\mu\text{S}/\text{cm}</math> from 1,000 to 10,000 <math>\mu\text{S}/\text{cm}</math><br/>10 <math>\mu\text{S}/\text{cm}</math> from 10,000 to 100,000 <math>\mu\text{S}/\text{cm}</math><br/>Salinity: 0.01 PSU<br/>TDS: 0.1 mg/L</p> <p><b>Response Time</b><br/>1 second to 90% at a stable temperature</p> <p><b>Temperature Measurements</b></p> <p><b>Range</b><br/>-20° to 50°C (-40° to 122°F), non-freezing water</p> <p><b>Accuracy</b><br/><math>\pm 0.15^\circ\text{C}</math> (<math>\pm 0.27^\circ\text{F}</math>) from 0° to 50°C (32° to 122°F)</p> <p><b>Resolution</b><br/>0.01°C at 25°C (0.018°F at 77°F)</p> <p><b>Response Time</b><br/>3 minutes to 90% in water (typical)</p> <p><b>Drift</b><br/>&lt;0.1°C (0.18°F) per year</p> <p><b>Sensor</b></p> <p><b>Dimensions</b><br/>2.5 cm (1 inch) diameter, 17.4 cm (6.87 inches) length</p> <p><b>Weight</b><br/>144 g<br/>5.08 oz</p> <p><b>Wetted Materials</b><br/>Passivated 316 Stainless steel housing rated for use in saltwater, Viton and Buna-N O-rings, PET sensor connector<br/>Conductivity sensor: PET, platinum plating on electrodes<br/>Note: Sensor should be mounted so that it is not in contact with other metals</p> <p><b>Environmental Rating</b><br/>IP68; Waterproof to 100m</p> |
| Contents               | HOBO Conductivity Sensor  |

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|----------------------|--|
| Ideal For            | Professional   |
| Brand                | Onset HOBO   |
| Typical applications | Environmental (Outdoor), Field Research, Water Quality |
| Measurements         | Conductivity, Salinity                                 |