

# HOBO® U12 Stainless Temperature Logger

## With Food Grade Housing and Extended Temperature Range - (-40 to 125°C)

Onset's HOBO U12 Stainless Temperature Logger is ideal for food, pharmaceutical, autoclave, and other applications where high-accuracy temperature data is critical. With its broad temperature range (-40 to 125°C) and food-grade stainless steel housing, the U12 Stainless Temperature Logger withstands process conditions from pasteurization to flash freezing and washdown. The Stainless Temperature Logger records up to 43,000 temperature measurements. A new 5" probe model is ideal for monitoring internal temperatures of foods or any application where fast response is critical.



**U12-015**

Logger size: 17.5 mm diameter x 101.6 mm (0.69 x 4.0)  
Weight: 72 grams (2.5 oz)



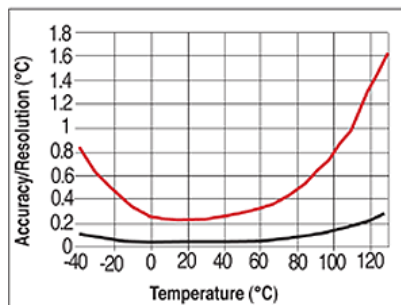
**U12-015-02**

Probe dimensions: 12.4 cm (4.9") x 0.4 cm (0.16") diameter  
Total weight: 82 grams (2.9 oz)

## Features

- Extended temperature range: -40 to 125°C (-40 to 257°F)
- Glass bead thermistor for highly stable readings
- 5" probe model with 20-second response time
- Rugged food-grade 316L stainless steel housing
- Pressure housing for autoclaves and underwater to 2200 psi (1500 meters or 4900 feet)
- Fits in standard beverage bottle necks
- 43,000 temperature readings logged in non-volatile EEPROM memory
- Battery status indication at launch
- Fast data readout via direct USB interface
- [Data Shuttle](#) for convenient in-field data readout and logger relaunch
- Easy-to-use HOBOWare® software for logger launch, data readout, and data plotting
- Patented technology (U.S. patent 6,826,664)

Accuracy/Resolution



— Accuracy  
— Resolution

## Detailed Specifications

- Accuracy: 0.22°C at 25°C (0.4°F at 77°F) (See graph)
- Resolution: 12-bit 0.02°C @ 25°C (0.04°F @ 77°F) (See graph)
- Drift: 0.05°C/yr + 0.1°C/1000 hrs above 100°C
- Response time in water (typical to 90%)
  - Internal sensor: <3.5 minutes
  - 5" Probe: 20 seconds
- Response time in air moving 1 m/sec (typical to 90%)
  - Internal sensor: <10 minutes
  - 5" probe: 2.25 minutes
- Time Accuracy: ±2 minutes per month at 25°C (77°F)
- 43,000 12-bit measurements
- Programmable Start time/date
- Construction: 316L Stainless Steel
- Pressure/depth rating: 2200 psi (1500 m/4900 ft) maximum
- Vibration: Tested to NAVMAT P-9492\*
- Communications: Direct USB interface
- Battery life: 3 years typical, factory replaceable\*\*
- [NIST certification available](#) from -30° to 120°C (-22° to 248°F)

\* Non-probe model only. Logger should be deployed to minimize repetitive, high-impact forces experienced in some environments (e.g., washing machines or dryers).

\*\* Operating at 125°C (257°F) for 60 minutes per day.

## Ordering Information

Description	Part No.
<b>1 Data Logger</b>	
U12 Stainless Temp Logger ^	U12-015
U12 Stainless 5" Probe Temp Logger	U12-015-02
<b>2 Software (includes USB Interface Cable) — Required</b>	
HOBOWare® Pro Software for Windows®	BHW-PC
HOBOWare Pro Software for Mac	BHW-MAC
HOBOWare Lite for Windows and Mac	BHW-LITE
<b>3 Optional Accessories</b>	
<a href="#">HOBO U-Shuttle</a>	U-DT-1
Factory replacement battery service - internal sensor - call for RMA	
Factory replacement battery service - 5" probe - call for RMA	
Replacement O-ring kit (Viton) — petroleum oils	U12-015-ORING-V
Replacement O-ring kit (EPDM) — hot water, steam	U12-015-ORING-E

^ Includes 3 each EPDM and Viton o-rings

\*\*\* Call to order factory replacement battery service.