# **ONSET**

## HOBO® U26-001 Data Logger

#### **Dissolved Oxygen**

Affordable, precise data logger that measures oxygen concentrations in lakes, streams, rivers, estuaries, and coastal waters. Recommended for aquatic biology and hydrology research projects, this easy-to-maintain logger uses RDO® Basic (Rugged Dissolved Oxygen) optical DO sensor technology.

The HOBO U26 Dissolved Oxygen logger was part of a multi-year evaluation of DO loggers and sensors by the Alliance for Coastal Technologies (ACT), the results of which are published here. This un-biased report describes how the HOBO U26 performs in lab and field conditions. Note that our response letter, with added recommendations, is attached at the end of the report (pgs 58-59).



#### **Key Advantages:**

- Affordable, high performance dissolved oxygen (DO) monitoring with 0.2 mg/L accuracy
- Optical DO sensor technology for long-lasting calibration with less maintenance
- HOBOware Pro's Dissolved Oxygen Assistant software corrects for measurement drift from fouling; provides salinityadjusted DO concentrations and percent saturation
- Optical USB interface for high-speed, reliable data offload
- User-replaceable DO sensor cap eliminates need to send logger back to the factory to replace membrane

**NOTE:** For DO measurements in saltwater, an adjustment for salinity is required. For waters with small changes in salinity (<2 ppt), a salinity meter reading typically provides enough accuracy. For environments with greater salinity changes, we generally recommend the HOBO U24-002-C conductivity logger. If you need DO in Percent Saturation, barometric pressure data is required, which can be logged with a HOBO Water Level Data Logger (U20-001-04).

### **HOBO U26-001 Data Logger Specifications**

Dissolved Oxygen	
Sensor Type:	Optical
Measurement Range:	0 to 30 mg/L
Calibrated Range:	0 to 20 mg/L; 0 to 35°C (32 to 95°F)
Accuracy:	$\pm$ 0.2 mg/L up to 8 mg/L; $\pm$ 0.5 mg/L from 8 to 20 mg/L
Resolution:	0.02 mg/L
Response Time:	To 90% in less than 2 minutes
DO Sensor Cap Life:	6 months, cap expires 7 months after initialization
Temperature	
Temperature Measurement/Operating Range:	-5 to 40°C (23 to 104°F); non-Freezing
Temperature Accuracy:	0.2°C (0.36°F)
Temperature Resolution:	0.02°C (0.04°F)
Response Time:	To 90% in less than 30 minutes
Logger	
Memory:	21,700 sets of DO and temperature measurements (64 KB total memory)
Logging Rate:	1 minute to 18 hours
Time Accuracy:	±1 minute per month at 0 to 50°C (32 to 122°F)
Battery:	3.6 V lithium battery; factory replaceable
Battery Life:	3 years (at 5 minute logging)
Download Type:	Optical
Depth Rating:	100 m (328 ft)
Buoyancy:	Salt water: 13 g (0.46 oz) negative   Fresh water: 20 g (0.71 oz) negative
Wetted Materials:	Black Delrin®, PVC, EPDM o-rings, silicone bronze screws; rated for saltwater use
Size:	39.6 mm diameter x 266.7 mm length (1.56 x 10.5 inches)
Weight:	272.4 g (9.61 oz)
Environmental Rating:	IP68
CE .	The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).

#### **Contact Us**

Sales (8am to 5pm ET, Monday through Friday)

- ► Email sales@onsetcomp.com
- Call 1-508-759-9500
- In U.S. toll free 1-800-564-4377
- Fax 1-508-759-9100

Technical Support (8am to 6pm ET, Monday through Friday)

- ▶ Contact Product Support www.onsetcomp.com/support/contact
- ► Call 1-508-759-9500
- In U.S. toll free 1-877-564-4377

Onset Computer Corporation 470 MacArthur Boulevard Bourne, MA 02532