



SEA-BIRD
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SeaFET V2 Ocean pH sensor

Product #: SEAFET.1S
USD Price: Contact Sea-Bird

Accurate long-term pH measurements

The SeaFET™ V2 is the next generation pH sensor, upgraded from the original SeaFET™. The sensing element is an ion sensitive field effect transistor (ISFET). This class of device has been used for pH sensing in industrial processes, food processing, clinical analysis and environmental monitoring. The advantages of the ISFET include robustness, stability and precision that make it suitable for ocean pH measurement at low pressure. The ISFET potential is measured against two separate reference electrodes: one bearing a liquid junction (internal reference) and a solid state reference electrode (external reference), providing the user with the ability to assess instrument performance and ultimately achieve a greater understanding of the state of acid/base equilibria in seawater.

The SeaFET™ V2 Ocean pH sensor has been used extensively for:

- ocean acidification research
- coral reef research
- coastal marine biology
- environmental monitoring.

The SeaFET™ Ocean pH Sensor was developed by Dr. Kenneth Johnson of the Monterey Bay Aquarium Research Institute (MBARI) and Dr. Todd Martz of the Scripps Institution of Oceanography, University of California San Diego. We collaborated with MBARI and Scripps to make the instrument commercially available to the research community. SeaFET™ sensors have now been deployed in many locations, including Canada, USA, France, UK, Australia and China.

Flexible operation

Continuous, scheduled, and polled sampling modes

Internal data storage and batteries

32 MB data storage (over 1240000 samples)

Multiple applications

Ocean acidification, coral reef physiology and sensitivity, near-shore biological research

Calibrated using natural seawater

Specifications

Current Draw: 400 mW (max)

Depth Rating: 50 m

Diameter:	11.4 cm
Input Voltage:	6 – 18 VDC
Length:	54.9 cm
pH Accuracy:	± 0.05
pH Range:	6.5–9
pH Resolution:	± 0.05
Salinity Measurement Range:	20–40 psu
Weight in air, water:	5.4, 0.1 kg