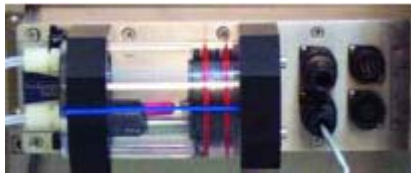


SEAKEEPER 1000™

FSIS™ (FERRYBOX SENSOR INTERFACE STANDARD)

A key design feature of the SeaKeeper 1000™ system is interchangeable modular sensors. This standardized system known as the FSIS™ is being used by an increasing group of sensor manufacturers, in some cases repackaging in-situ devices for this flow-through architecture. The FSIS™ specifications include the physical mounting template, as well as water flow rates, tubing specs, electrical and data connectors. Any interested manufacturer is encouraged to contact SeaKeepers for more information. Scientists and managers, please contact us for *specific need* sensors as there are a number in development by a variety of manufacturers, some of which are mentioned below.

EXISTING FLOW THROUGH SENSORS



IDRONAUT

6 Parameter Sensor

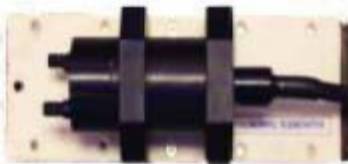
Measures Conductivity, Temperature, Pressure, O₂, pH, & Redox



SEABIRD ELECTRONICS

Thermosalinograph

Utilizing SBE electrode cell



SEAPOINT SENSORS, INC.

Fluorometer

Measures Chlorophyll "A" concentration



FSIS™

MOUNTING MODULE



SATLANTIC

ISUS Nitrate Sensor

Measures absorption spectra



GENERAL OCEANICS, Inc

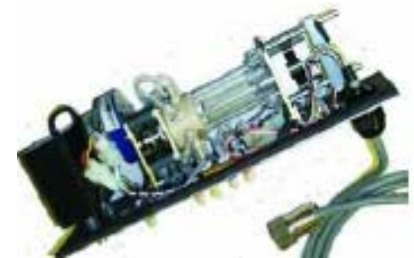
pCO₂ System

Idronaut 7P-CTD (top) and pCO₂ with Equilibrator (bottom)



IDRONAUT/CABE

Trace Metals Sensor



ENVIROTECH

Nutrient Analysis Sensor

Uses Reagents in IV Bags

Sensors In Development

as of first quarter 2006

Falmouth Scientific, Inc.
Thermosalinograph based upon inductive conductivity cell.

Mote Marine Laboratory
Optical sensor for HAB's ("Red Tide phenomenon".)

Pro-Oceanus Systems Inc.
pCO₂ sensor utilizing gas tension technique.

Turner Desings Inc.
Cyclops 7 fluorometer.

WET Labs
Optical hyperspectral flow through sensors.

SEAKEEPER 1000™

VESSEL'S WATER INTAKE & ANTIFOULING DEVICE

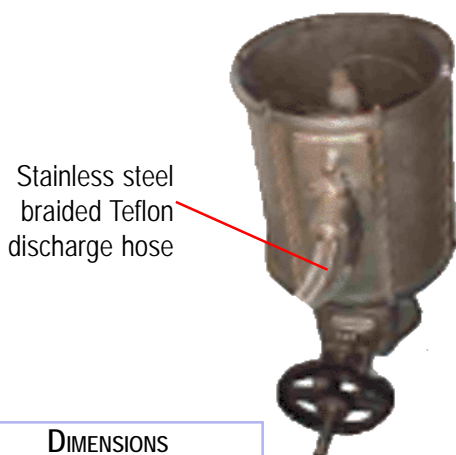
The through-hull assembly, for uncontaminated water sampling, must be installed forward of any grey, black or heated water discharges and approximately 2 meters below the water line.

The containment vessel is part of the gate valve and through-hull assembly. It contains a computer activated rotary valve which will be closed in conjunction with the pump being stopped in the event of unexplained water being detected in the instrument enclosure.

External to the gate valve is the water intake scoop, which stabilizes the end of the sampling probe away from direct contact with the hull and provides the seat for the external thermometer. It is designed to provide positive pressure when the vessel is moving to help prevent bubble formation in the sample lines.

An electro-chemical *antifouling device* (AFD) is installed within the scoop (or in the external housing of the submersible pumps for fixed platform installations) and is activated for a few minutes every twenty-four hours to reduce the effects of biological fouling.

Containment vessel with emergency shut off solenoid valve



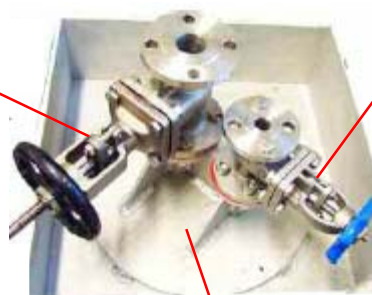
Stainless steel braided Teflon discharge hose

DIMENSIONS
Diameter: 9 inches (230 mm)
Height: 25 inches (640 mm)

Through-hull gate valves, intake (black handle) and discharge (blue handle), in optional doubler configuration

1 ½" Lloyds certified, guillotine, inlet gate valve

DIMENSIONS
Height: 6.5 in. (165 mm)
Max Dim: 15 in. (380 mm)



¾" Lloyds certified discharge gate valve

DIMENSIONS
Height: 4.5 in. (115 mm)
Max Dim: 10 in. (255 mm)

Platinum thermometer and *antifouling device* external to hull.

INQUIRY FAX FORM

Fax this form to +1-954-252-4595 or fill out online at www.seakeepers.org/inquiry

Name: _____

Position/title: _____

Organization: _____

Address: _____

City: _____ State: _____ Zipcode: _____ - _____ Country: _____

E-mail address: _____ @ _____

Phone: _____ Best time to call: _____

I am interested in:

- Possible purchase of the SeaKeeper 1000™ monitoring system(s).
- Developing sensors utilizing the FSIS™ interface standard for use in the SeaKeeper 1000™ systems or other flow through devices.
- Other: _____