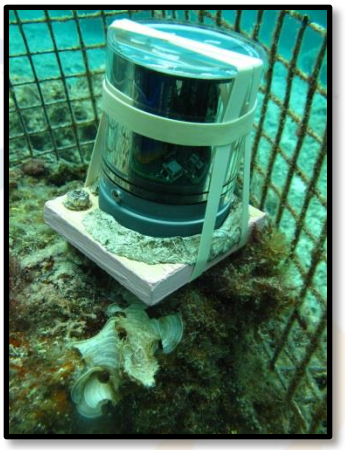
BLUE TURTLE ENGINEERING

CRS

Compact Multi-Parameter Coral Sensor

The BTE Coral Recruitment Sensor (CRS), is a low-cost, compact, diver-held sensor package for measuring coral recruitment parameters on a very small (millimeter) scale, such as in coral crevices or on experimental recruitment plates. Standard parameters include depth, temperature, light (PAR), and flow. Temperature, PAR, and flow measurements are made at the end of two small extendable stainless-steel probes. The unit is waterproof to 60m, logs data to a MicroSD card, and is controllable by a diver using a simple magnetic switch. User feedback is provided by a small blue or white OLED display.



Specifications

Depth: 0-200ft (0-60m), 10cm resolution
Temperature: -5-50°C, 0.1°C resolution
Light: PAR @ 400-700nm, 0-3000 µmol/m^2/s, 0.1 µmol/m^2/s resolution. (scalar or cosine response probes available)
Flow: 0-50cm/s (0-1kt) non-directional, 0.1 cm/s resolution. (0-100cm/s available)
Housing: PVC & Acrylic. Rated to 60msw.
3.0"(76mm) dia x 3.79"(96mm) L (std batt)
3.0"(76mm) dia x 4.22"(107mm) L (extended batt)
Probes:. 316 Stainless Steel, 0.18" (4.6mm) dia.
Extendable from 0-2.4"(0-60mm) past housing face.
Datalogging: Continuous to onboard MicroSD Card. Data is acquired simultaneously, time-stamped, and logged to a comma-delimited text file (.csv) at 1 Hz.
Battery: 2x9V (standard), or 8AA (extended). Alkaline or Ultimate Lithium ($LiFeS_2$).
Runtime: Flow ON - up to 16 hrs (std alkaline), up to 42 hrs (extended $LiFeS_2$)
Flow OFF - up to 5 days (std alkaline), up to 18 days (extended $LiFeS_2$)
Sleep - up to 1 year (std alkaline), up to 6 years (extended $LiFeS_2$)

6430 Floridana Avenue, Melbourne Beach, FL. 32951 USA
Ph: 321.917.1624 | Fax : 321.676.7772 | www.blueturtleengineering.com