HydroRad Specification

Mechanical

- Diameter: 13.3 cm (5.25")
- HR-1 and HR-2 Length: 30.5cm (12"), 35.5cm (14") including
- HR-3 and HR-4 Length: 46.6cm (18.3"), 51.5cm (20.3") incluc
- HR-1 and HR-2 Weight: 3.3 kg dry, 0.5 kg submerged
- HR-3 and HR-4 Weight: 5.3 kg dry, 1 kg submerged

Optical

- Calibrated Wavelength Range: 350 nm to 850 nm
- Spectral Bandwidth: 2.6 nm FWHM
- Pixel Resolution: 0.30 to 0.35nm
- Fiber Optics: 200 micron quartz with stainless inner jacket, Ke polyurethane outer jacket

Electrical

- Internal rechargeable batteries provide up to 18 hours of contin
- Optional external power supply: 9V to 15V, 350 mA max (4 sp
- Power/Data Connector: Subconn MCBH8M; Mate MCIL8F
- 8-Pin Male Connector Assignments:
  - Pin 1: Supply voltage (9 to 15 VDC)
  - Pin 2: Common
  - Pin 3: RS232 Instrument Receive
  - Pin 4: RS232 Instrument Transmit
  - Pin 5: Battery charging input (18 to 24 VDC)
  - Pin 6: +12v for Shutter Open or RS232 Slave Receive
  - Pin 7: +12v for Shutter Close or RS232 Slave Transmit
  - Pin 8: Battery Disable
- Optional 2-pin HydroShutter port: Subconn MCBH2F; Mate M
- Optional 8-pin slave port: Subconn MCBH8F; Mate MCIL8M
- Data Interface: RS232, selectable 9600 to 225 K baud

Environmental

- Operating Temperature: 0 to 35 C
- Maximum Depth: 200 m

Data Logging

- Nonvolatile storage of more than 30,000 full spectra, or over 1 spectra.
- Calibration can be applied to data by the HydroRad, or externa
- Variable, programmable sampling rates.
- Variable integration time: 20 ms to 30 seconds per sample.
- Sampling controlled by real-time clock or manual switch.