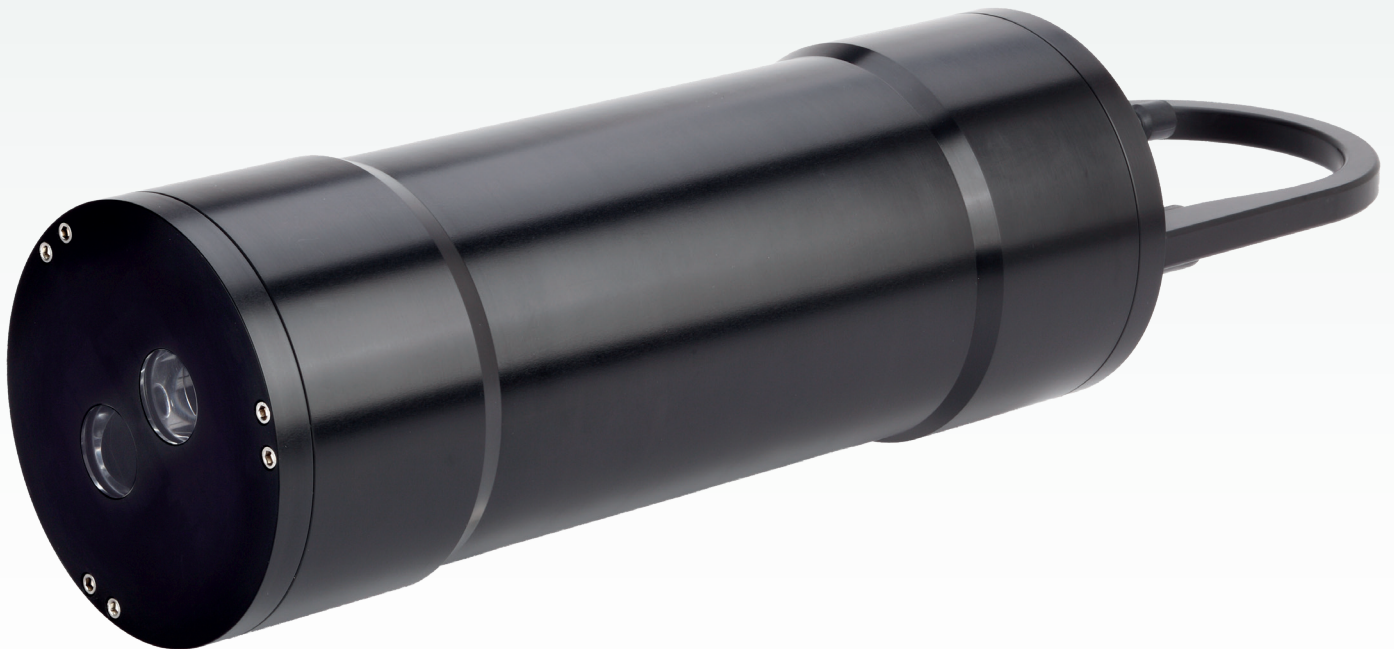


# HYPER-bb

## HYPER-SPECTRAL BACKSCATTER INSTRUMENT

Sequoia presents the world's first commercially available hyperspectral backscatter instrument, Hyper-bb. The Hyper-bb is a submersible singleangle backscattering instrument with configurable spectral channels. The primary measurement delivered by the Hyper-bb is spectral backscattering over the wavelength range 430 nm to 700 nm. Hyperbb also has high-performance depth and temperature sensors. Data is saved onboard the instrument in non-volatile memory, which can be later downloaded via the Hyper-bb software.



## FEATURES

- Spectral backscattering over the wavelength range 430 nm to 700 nm
- High-performance depth and temperature sensors
- Internal data storage
- Powered from external battery pack (optional accessory), CTD, or 2 m to 50 m power/communication USB cable

## SPECIFICATIONS (subject to change without notice)

### Optical

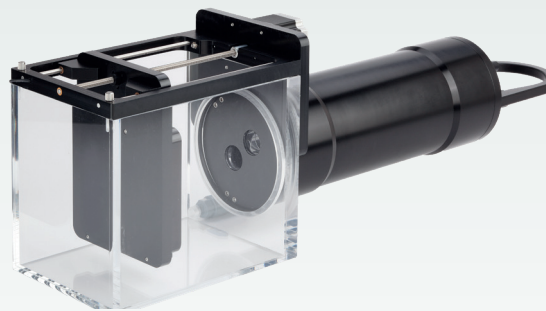
- Centroid angle ~ 135°
- Sample volume ~ 2 mL
- Beam diameter ~ 12 mm
- Spectral coverage ~ 430 nm to 700 nm
- Spectral bandwidth ~ 9 nm (blue) to ~ 17 nm (red)
- Scan speed ~ 5 s for 430 nm to 700 nm with a 10 nm channel spacing, i.e. channels @ 430, 440, 450,..., 690, 700 nm (220 measurements per channel)

### Mechanical and Electrical

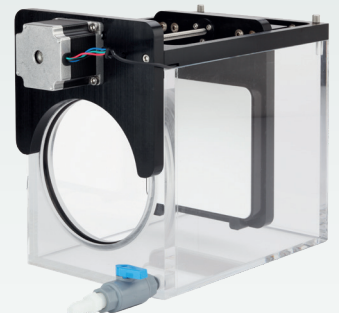
- Dimensions [Ø × L]: 13.4 cm × 51.9 cm (5.25" × 20.42") including handle
- Weight [air / water]: 6.0 kg / 1.2 kg (13.3 lbs / 2.6 lbs)
- Depth rating: 600 m
- External power input: 12 VDC nominal, 8 VDC - 26 VDC
- Communication: RS-232, 9600 baud, 115k baud for data download
- Storage: Internal datalogger with 1 GB microSD memory



Hyper-bb frame



Hyper-bb inserted in calibration tank



Hyper-bb Calibration Tank



Hyper-bb Zebra Wiper



Hyper-bb flow through chamber



Optional External Battery