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USB4000
Spectrometer

The USB4000 is a modular spectrometer that is easily configured for a wide range of absorbance, reflection and emission applications. The compact unit has a 3648-element CCD array detector with response from 200-1100 nm and an optical bench with convenient onboard electronic shutter.

Ocean Optics

At a Glance

Size: 89.1 mm x 63.3 mm x 34.4 mm

Weight: 190 g

Wavelength range: 200-1100 nm

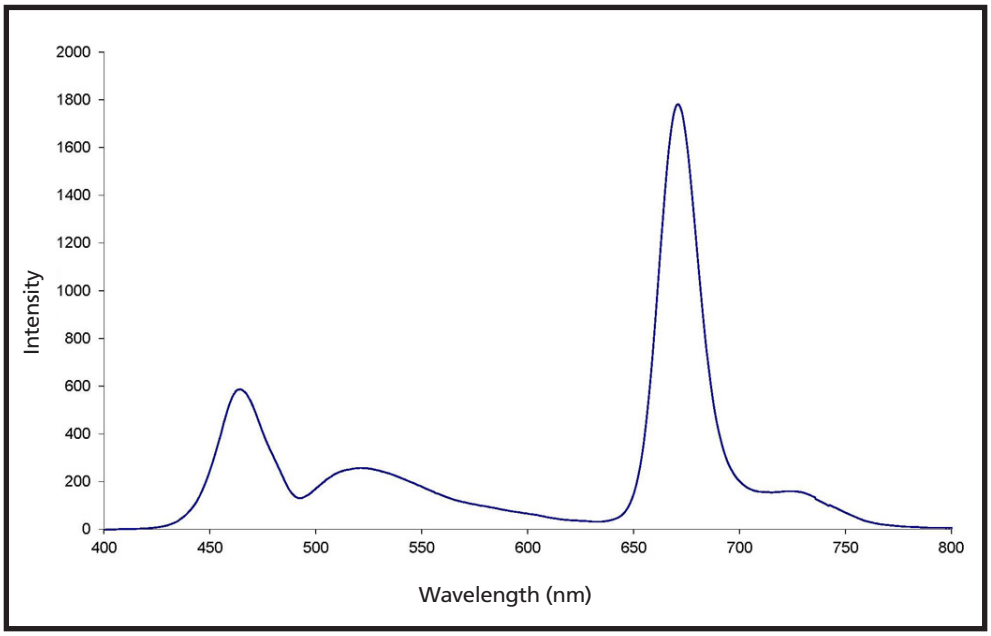
Signal-to-noise ratio: 300:1 (at full signal)

Dynamic range: 3.4 x 10^6 (system); 1300:1 for a single acquisition

Integration time: 3.8 ms - 10 sec

Robust Electronics

The USB4000 Spectrometer is distinguished by its enhanced electronics: 16-bit A/D resolution with auto nulling feature (an enhanced electrical dark-signal correction); EEPROM storage of calibration coefficients for simple spectrometer start-up; 8 programmable GPIO signals for controlling peripheral devices; and an electronic shutter for spectrometer integration times as fast as 3.8 milliseconds -- a handy feature to prevent detector saturation.



Chlorophyll in water is measured with a USB4000 configured for fluorescence. A 450 nm LED was used for excitation and a cuvette holder for the sample.

The USB4000 is a modular spectrometer. You can select a model that is preconfigured for a particular application or you can build your own. Our Application Sales Engineers help you with selection of grating, slits and optical bench accessories, as well as sampling accessories such as fibers, light sources and cuvette holders.

Features

- Reliable, robust spectrometer with good signal-to-noise performance
- Great response across the 200-1100 nm wavelength range
- Hundreds of configurations possible with modular design
- Built-to-suit wavelength range and optical resolution performance
- Triggering functions for synchronization between the spectrometer and other devices

To Order please contact us on :

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