

Ocean HR Series: HR6 Spectrometer



High Sensitivity with Great Resolution

The **HR6** is a high sensitivity, high resolution spectrometer with excellent signal to noise ratio (SNR) performance for applications including absorbance of proteins and emission of broadband sources. HR6 is compact, robust and offers excellent thermal wavelength stability to ensure accurate results, even in changing ambient conditions.

Like other HR series spectrometers, HR6 models cover UV-Vis, Vis-NIR and extended-range options within the wavelength range from ~180-1100 nm, with a choice of slit width sizes to help users manage throughput and optical resolution.

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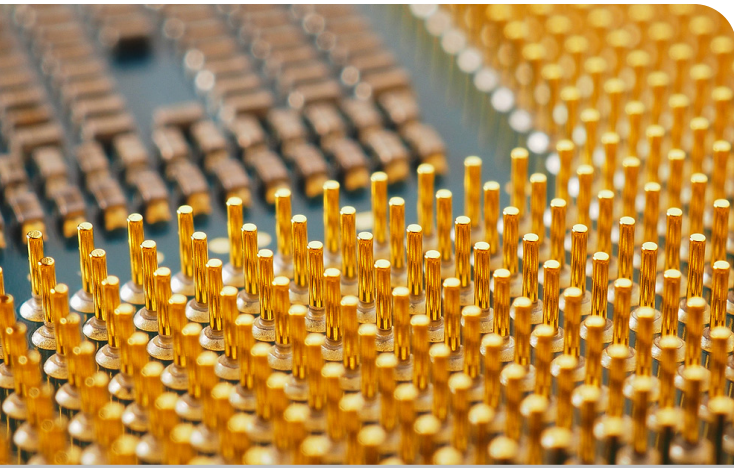
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OceanOptics



At a Glance

Wavelength range: ~180-1100 nm

Optical resolution (w/25 μ m slit): ~0.13-1.17

Dynamic range: 12000:1 (single scan)

Signal-to-Noise (1 second average w/ HSAM)
3500:1

High Speed Averaging Mode): 25800:1

Signal to Noise Ratio (single scan @ 10 ms):
400:1

Thermal wavelength drift: 0.02 nm/ $^{\circ}$ C

Interfaces: USB, RS-232, Ethernet

Connector: USB Type-C, Samtec™ TFM-108-02-L-DH, RJ45

Temperature (storage): -30 $^{\circ}$ C to 70 $^{\circ}$ C

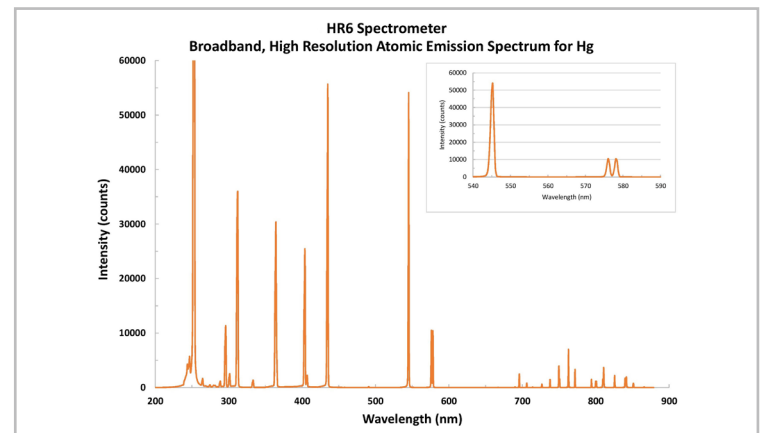
Temperature (operation): 0 $^{\circ}$ C to 55 $^{\circ}$ C

Dimensions: 149 mm (w) x 106 mm (d) x 48 mm (h)

Weight: 931 g

HR6 Anchors Your Spectral Setup

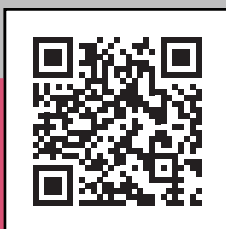
The HR6 spectrometer couples with SMA 905-terminated light sources, optical fibers and sampling accessories, allowing users to optimize setups for each application. If your measurements require sub-nanometer resolution of spectral features, HR6 is an excellent choice. For example, HR6 demonstrates high absorbance linearity when measuring biomolecules, which allows users to accurately measure samples over a wide range of concentration levels. It also eliminates the need for sample dilution steps that run the risk of introducing errors into the measurement process, helping to ensure higher quality spectra and more accurate results.



The HR6 provides broadband, high resolution performance for emission and other measurements.

Software Developers Kit Adds Value

Each HR6 spectrometer comes with OceanDirect, a powerful, cross-platform Software Developers Kit with an Application Programming Interface. OceanDirect allows users to optimize spectrometer performance, access critical data for analysis, and enable High Speed Averaging Mode, a function available with our newer-model spectrometers that dramatically improves spectrometer SNR performance.



For more information on the HR6, please contact an Ocean Optics Application Scientist today.