

SENSE

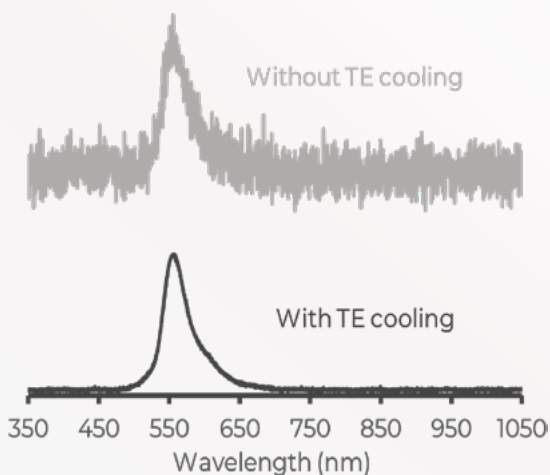
A STANDOUT SPECTROMETER WITH AN INDUSTRY-LEADING PERFORMANCE AND SENSITIVITY

- Perfect for Low-Light-Level Applications;
- User-Interchangeable Slits and Filters;
- Extreme Sensitivity with Thermoelectrical Cooling Detector;
- Wide Dynamic Range with 18-bit A/D Converter;
- Battery Pack for Field Measurements;



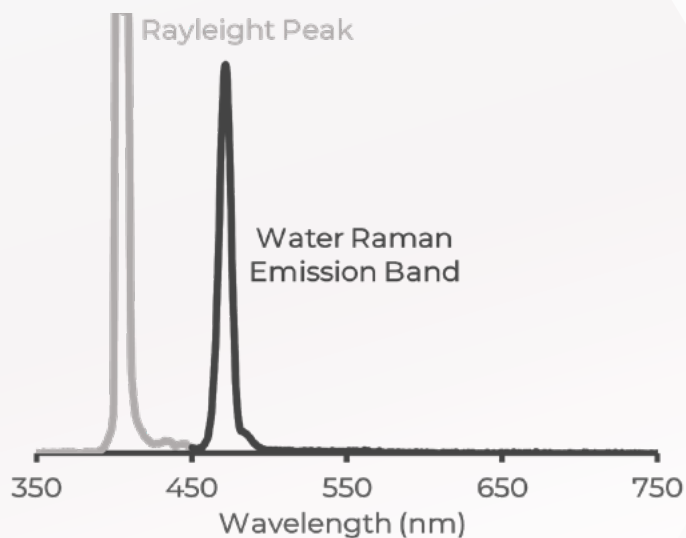
ULTIMATE SENSITIVITY

Ultimate sensitivity can be easily reached with SENSE, the ideal spectrometer for those who demand the best performance for low-light-level applications. The thermoelectrical (TE) cooled back-thinned CCD detector is a major feature that provides a great signal-to-noise ratio with low noise and dark counts.



HOW EFFICIENT IS THE THERMOELECTRICAL COOLING ON SENSE SERIES?

Cooling down the CCD detector strongly reduces the noise and dark counts of the background and increases the operational dynamic range. This feature enables low-light-level measurements with low noise for long integration times and enhances the detection limit of the system.



WATER RAMAN EMISSION BAND DETECTION

Using laser excitation, in this case 405 nm, and SENSE spectrometer in a typical fluorescence setup, it is possible to clearly observe the water Raman emission band next to the Rayleigh peak, with a maximum around 471 nm.

EASY TO INTEGRATE IN YOUR SETUP

The SMA fiber optic connector allows for a simple attachment of SENSE to a wide range of spectroscopic setups without the need for complex optical alignments. This flexibility is complemented with a number of integration tools that include triggers (trigger in/out and delays) and LabVIEW™ or DLL software packages, for software development.

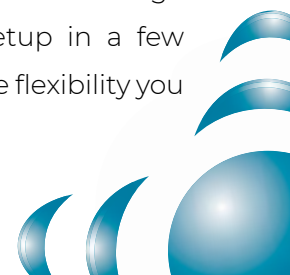
OPTIONAL BATTERY PACK

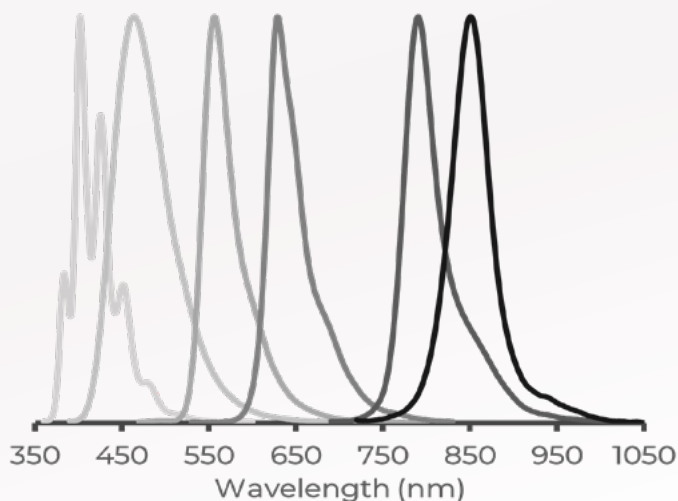
Take the best sensitivity anywhere with an optional plug-and-play battery pack.



CONTROL THE SENSITIVITY AND RESOLUTION OF YOUR SPECTROMETER

Take advantage of the user-interchangeable slits feature. Interchangeable slits offer an easy way of setting the optimal sensitivity/resolution while interchangeable filters provide the ability to narrow the operational wavelength range of the spectrometer. With these features users can change from absorbance to fluorescence setup in a few minutes. Add the Slit Kit and get all the flexibility you need.



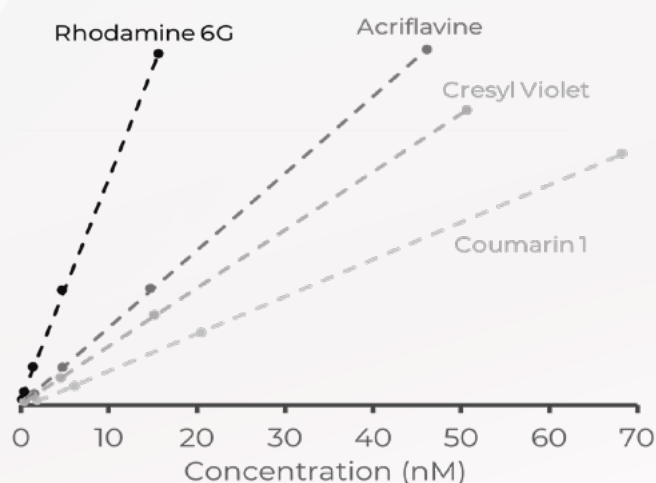


THE BEST SENSITIVITY OVER THE ENTIRE WAVELENGTH RANGE

The back-thinned CCD detector from SENSE spectrometer provides a wide spectral range with a great quantum efficiency up to 90 % (at peak). The optimum operational spectral range and resolution for each application is customizable by selecting the ideal diffraction grating from those available.

PICOMOLAR DETECTION CAPABILITY

Despite being a compact and modular spectrometer, this new SENSE series is extremely sensitive and more than capable of delivering great performance when you need to measure the fluorescence emission of dyes with concentrations as low as 50 picomolar for Rhodamine 6G and great linearity all over the spectral range.



Technical Specifications

Parameter	UV-Vis-NIR	UV-Vis	Vis-NIR
Operational Range	185-1100 nm	185-900 nm	360-1100 nm
Grating	G-UV-Vis-NIR	G-UV-Vis	G-Vis-NIR
Optical Resolution	1.7 nm (25 um slit)	1.4 nm (25 um slit)	1.4 nm (25 um slit)
Fiber Connector	SMA-905		
A/D Converter	18 bit		
Integration Time	9 milliseconds (min)		
Dimensions	192 mm (L) x 137 mm (D) x 75 mm (H) (Weight: 1.5 Kg)		

Ordering Information

Part Number	SENSE-UV-Vis-NIR	SENSE-UV-Vis	SENSE-Vis-NIR



+351 223 709 107



www.sarspec.com



info@sarspec.com

