

SENSE

A STANDOUT SPECTROMETER WITH AN INDUSTRY-LEADING PERFORMANCE AND SENSITIVITY

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



ULTIMATE SENSITIVITY

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

EASY TO INTEGRATE IN YOUR SETUP

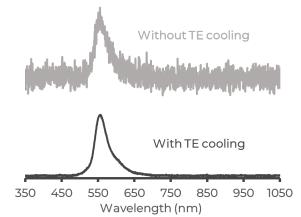
The SMA fiber optic connector allows for a simple attachment of SENSE to a wide range of spectroscopic setups without the need for complex optical alignments. This flexibility is complemented with a number of integration tools that include triggers (trigger in/out and delays) and LabVIEWTM or DLL software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

ows for a 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.

CONTROL THE SENSITIVITY

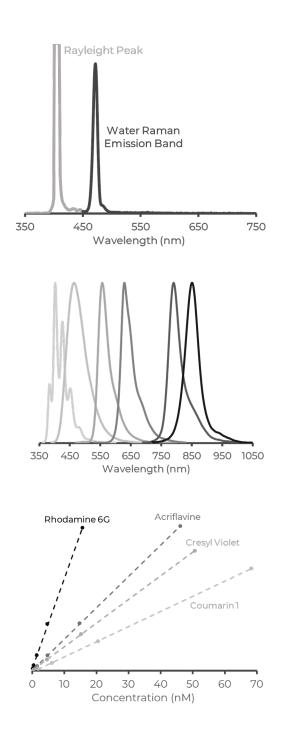
AND RESOLUTION OF YOUT SPECTOMETER



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.

THE BEST SENSITIVITY OVER THE ENTIRE WAVELENGTH RANGE

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.

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 spetral range.

OPTIONAL BATTERY PACK

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





Specifications Table

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	A/D Converter	Integrat	Integration Time	
SMA-905	18 bit	9 milisec	9 miliseconds (min)	
Dimensions				
192 mm (L) x 137 mm (D) x 75 mm (H) (Weight: 1.5 Kg)				
Order Information				
Description		Part Number		
Spectrometer SENSE UV/Vis/NIR		SENSE-UV-Vis-NIR	SENSE-UV-Vis-NIR	
Spectrometer SENSE UV/Vis		SENSE-UV-Vis		
Spectrometer SENSE UV/NIR		SENSE-Vis-NIR	SENSE-Vis-NIR	
Battery Pack for SENSE Spectrometers (optional)		SENSE-BAT		

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