Spark-VIS Spectral Sensor

Ultra-compact, low-cost visible spectral sensor

Spark is a spectral sensor from Ocean Optics that bridges the spectral measurement gap between filter-based devices such as RGB photodiode devices and CCD-array instruments such as miniature spectrometers. Spark is available in three formats – a core spectral sensor product and two embeddable, OEM-friendly versions – with the level of integration up to the customer. The Spark spectral sensor is a new class of device that focuses on size, manufacturability and value, bringing the power of spectroscopy to a wider range of applications than ever before.

Ocean Optics

Emission spectra of an Ocean Optics LED light source shown in OceanView

At a Glance

Optical

Spectral range: 380-700 nm

Resolution: 4.5-9.0 nm (FWHM)

SNR: 1500:1

Product Versions

SPARK-VIS: built with electronics for stand-alone use

SPARK-OEM-VIS: integrated detector with no electronics

Spark detector: sensor only unit, custom integration available

Physical

Thermal range: –10 to 60 °C
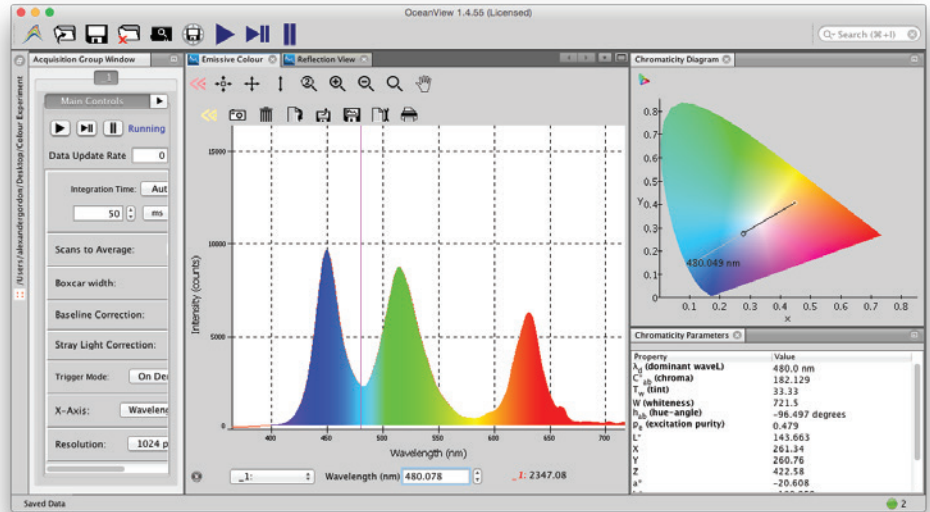
Weight: 15 g including electronics

Accessories

Diffuser

SMA 905 fiber connector

Cuvette holder

Despite being no larger than a simple filter diode device, the Spark-VIS provides full spectral measurements across the entire visible range. Its optical resolution performance makes Spark useful for color sensing and its size makes it perfect for OEM integration.

Key Features and Applications

Feature	Specification	Good for…
Visible wavelength range	380 – 700 nm	Color, PAR, fluorescence and absorbance measurements
Highly compact	- 15 g including electronics - 3.8 g without electronics - <1 g for detector	Integration into handheld and portable devices or onto process lines
Thermally stable	-10 to +60 °C operating range	Analysis in harsh environments
High resolution	4.5 – 9.0 nm (~1.2% across range)	>80 element color measurements
Fantastic value	Our lowest cost spectral sensor	Accessibility for high volume or cost-constrained applications
Ease of use	Spark-VIS plug-and-play with microUSB connectivity	Education, remote control on UAVs and new applications

Learn more online at www.oceanoptics.com

Contact an Ocean Optics Application Scientist for details and pricing

For more information, contact an application sales engineer today.

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