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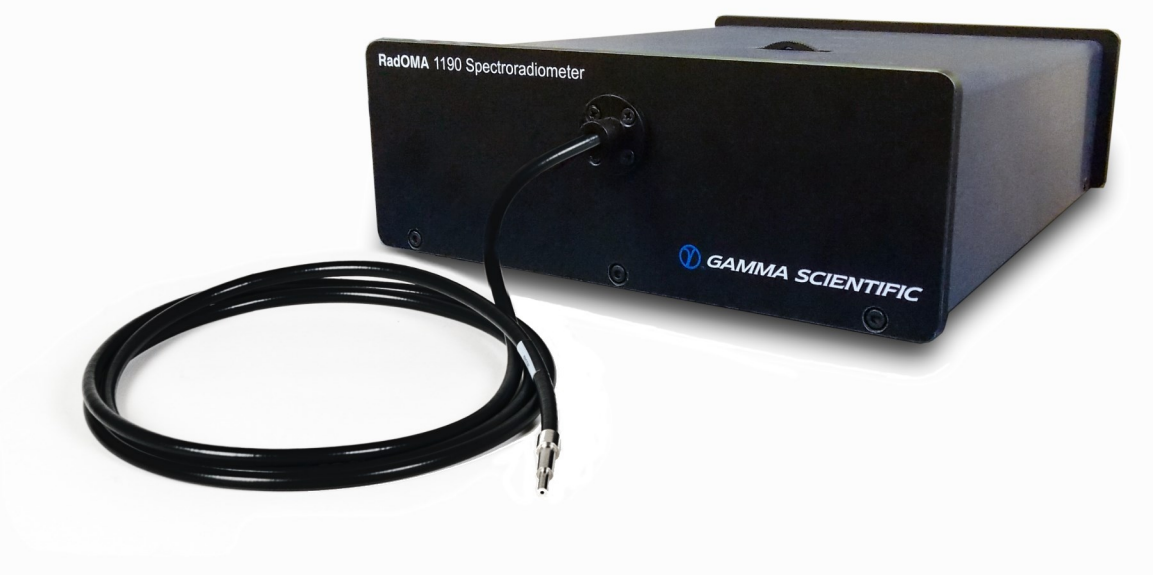

GS-1190 Spectroradiometers

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GS-1190 LED Spectrometer

The Gamma Scientific GS-1190 is a high performance, linear CCD array spectrometer, with an 800 kHz readout speed. The spectrometer utilizes a 2048 element detector with 16-bit resolution. Computer interface is USB 2.0. The GS-1190 is ideal for quick and easy LED measurements for users on a budget. Flexible custom configurations and application support are available for OEM applications.

The spectrometer accepts an SMA905 fiber-optic input that can be connected to a wide variety of optics including integrating spheres for total flux measurements or CIE127 Conditions A and B for intensity measurements.

The system comes with the GS-1190 Windows software package for LEDs with automated report generation.

Features

- Recommended measurement configurations for LED intensity and total flux
- Near-real-time measurement
- High resolution: 0.2 nm/pixel
- Spectral range: 380-780 nm
- USB 2.0 interface
- Windows-based control/analysis software
- NIST-traceable accuracy

About Gamma Scientific

Since 1961 Gamma Scientific has produced LED, display and light measurement test solutions for production and R&D environments. Gamma Scientific instruments are trusted by leading global organizations that require high-speed, precision measurements and custom configurations for the most challenging environments. Gamma Scientific also operates a NVLAP accredited laboratory that performs LM-79/LM-80 LED testing and is ISO 17025 compliant. NVLAP Lab Code 200823-0.

To view the complete line of test and measurement solutions from Gamma Scientific, please visit our website at www.gamma-sci.com.

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GS-1190 LED Spectrometer Specifications

Detector and Wavelength Specifications	
Detector	CCD Linear Array Number of Pixels: 2048 Sensing Pixel size: 14µm x 200µm Sensitivity: 1800 V/(l*s) @660nm
Dimensions (mm)	6.3” L x 4.1” W x 2.1” H (160mm L x 103mm W x 54mm H)
Weight	0.7 lbs (0.3 kg)
Spectral Range	380-780 nm
Spectral Resolution	5-10nm dependent on slit width, and fiber diameter
Gratings	600G/mm
Input	Fiber: SMA 905 ,1000µm core Ø fiber Numerical Aperture = 0.2 Slit: 50 ,100 ,150,350,600µm
Computer Interface	USB 2.0 ,16 bit ,800KHz
Power Input	5VDC, 140 mA (Power Consumption Rate: 0.6 - 0.7W)
Temperature Range	15°C to 40°C
Software	RadOMA-Lite software package

Measurement Specifications	
Peak Wavelength Accuracy	+/- 0.5 nm
Dominant Wavelength Accuracy	+/- 0.5 nm
Luminous Flux	Range Depends on Sphere size Accuracy: +/- 4%
CIE1931 x,y Accuracy	+/- 0.003
Correlated Color Temperature (CCT)	Range: 1000K to 100,000K Accuracy: +/- 5%
Half-Power Bandwidth (FWHM) Accuracy	+/- 0.5nm
Spectral Purity	+/- 5%
Color Rendering Index (CRI)	+/- 5%

*Standard Operating Range for Gamma Scientific Instruments- Temperature: Minimum: 0°C (32°F) - Maximum: 35° C (95°F); Relative Humidity (Non-Condensing): Minimum: 20% - Maximum 70%
**The information contained in this data sheet is based on Gamma Scientific's internal evaluation and is subject to change at any time without notice.
***Revised on April 9, 2015