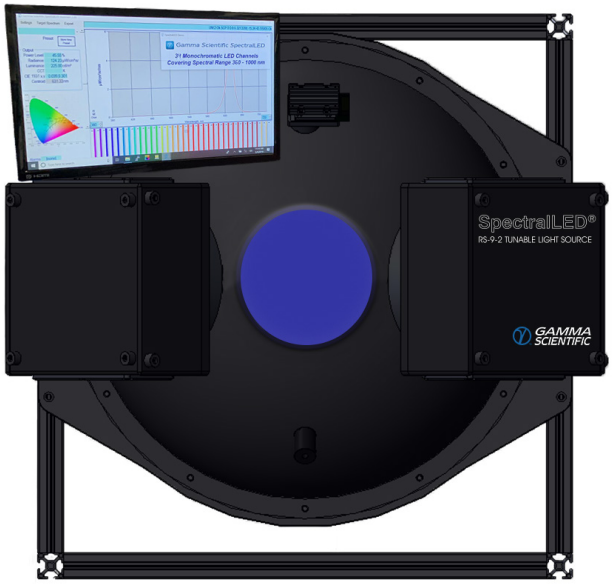
SpectralLED® RS-9-2 VIS SWIR Tunable Light Source



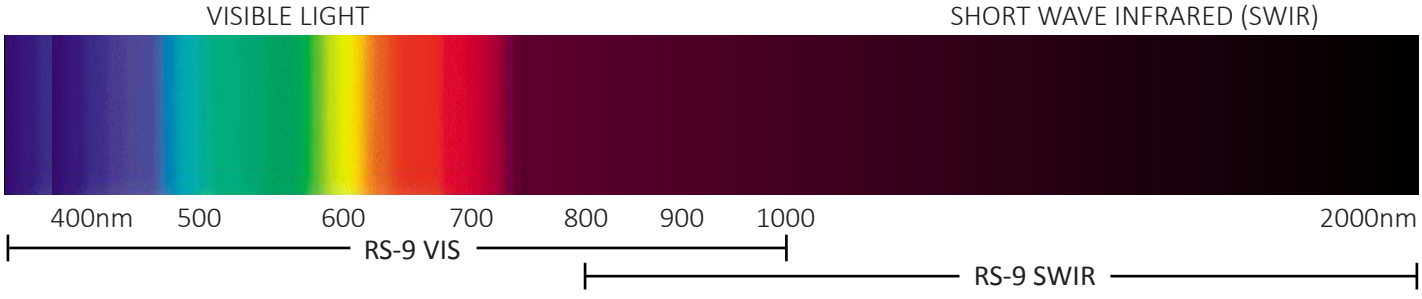
When you require a large area, highly uniform light source for camera and image sensor calibration, the SpectralLED® VIS SWIR Tunable Light Source delivers brightness, radiometric stability and wavelength accuracy that is unmatched in the industry.

For the ultimate resolution and accuracy, the SpectralLED Tunable Light Source incorporates up to 34 discrete wavelengths in UVA to visible spectrum, 2 broadband white channels, and 12 discrete wavelengths in SWIR for synthesis of commercially available light sources or based on spectra that you import. The platform is easily adaptable for automated test systems and production line integration, with integrated optical feedback and temperature control to ensure rock-solid stability and consistent results.

Unprecedented Resolution and Accuracy
for Camera and Image Sensor Calibration

Key Features

- Wavelength options from UVA to SWIR
- Constant current drivers and built-in optical feedback
- Accurate and flicker-free output in real-time
- All solid-state design for rapid start-up and repeatable performance
- ISO/IEC 17025 Accredited by NVLAP (NVLAP lab code 200823-0) for Calibration Accuracy



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SpectralLED® RS-9-2 VIS SWIR

Measurement Applications

- Quantum Efficiency
- Spatial Non-uniformity
- Pixel Defects
- Vignetting Correction
- Sensitivity
- Responsivity
- Signal to noise
- Linearity
- Saturation Exposure
- Dynamic range

Gamma Scientific is ISO/IEC 17025 accredited by NVLAP (NVLAP lab code 200823-0).

RS-9-2 VIS SWIR Optical Specifications	
Spectral Range	360 nm to 1900 nm UVA - SWIR
Spectral output	34 discrete wavelengths in UVA to Visible, 2 broadband white channels, and 12 discrete wavelengths in SWIR
Source Geometry	150 mm diameter uniform output, Lambertian radiant source (Other sizes available on request)
Translational Uniformity (Illuminant E)	Luminous uniformity: ≥ 95% for 130 mm at center and tapers off towards edges
	Chromatic uniformity: Δu'v' Max ≤ 3 points in 130 mm spot in center and tapers off)
Maximum Output (Spectrum dependent)	Dependent upon integrating sphere size and number of light engines attached. Please consult with the factory about configuration parameters and output specifications
Accuracy Specifications	
Illumination Stability	≥ 95% stable after 50ms rise time for single channels, 50ms for broadband spectra
Illumination Accuracy	± 2% Absolute to NIST standard
Spectral Accuracy	± 1 nm peak wavelength for all discrete wavelengths
Color Accuracy	CIE 1931 x, y ± 0.003 (illuminant E)
Temperature Stability	Within ± 1° C via active TEC
General Specifications	
Software	SpectralLED Pro GUI Control Program, or any serial port terminal tool
Interface Connectors	USB 2.0 type B and DB15 RS485 serial
Interface Protocol	Simple ASCII commands
Supported Operating Systems	Windows using FTDI COM port drivers
Input Voltage and Power	100 to 240 VAC at 50-60Hz, 400W maximum
Dimensions (H x W x L)	Dependent on integrating sphere chosen – please contact factory for details
Environmental Conditions	15-35°C, ≤5 %RH
Upgrades	
RS-9 Wavemon™	Multi-channel photodiode system provides amplitude feedback and real-time wavelength measurements

Specifications are subject to change without notice.

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