



## **PRESS RELEASE**

### **Take the Ultra-High Resolution SR-6500 Spectroradiometer to the Field**

**The SR-6500 is designed for applications that require ultra-high spectral resolution.**

*Lawrence, MA – November 2, 2017* – The SPECTRAL EVOLUTION SR-6500 NIR spectroradiometer covers the UV/VIS/NIR range from 350-2500 nm. It features ultra-high resolution and very stable performance with three high sensitivity thermoelectrically cooled photodiode arrays. The SR-6500 is also calibrated to NIST-traceable radiometric calibration standards. Now with two rechargeable lithium-ion batteries, you can take this ultra-high resolution spectroradiometer to the field for *in situ* measurements.

Resolution at FWHM for the SR6500 is:

- 1.5nm @ 700nm
- 3.0nm @ 1500nm
- 3.8nm @ 2100nm

Resolution is achieved using three high density solid state thermoelectrically cooled photodiode arrays:

- 1024 element TE-cooled silicon photodiode array detector (VIS-NIR)
- 512 element TE-cooled InGaAs photodiode array detector (SWIR 1)
- 512 element TE-cooled extended InGaAs photodiode array detector (SWIR 2)

The SR-6500 features the following Noise Equivalence Radiance (NER) performance with a 1.5 meter fiber optic:

- $1.0 \times 10^{-9}$  W/cm<sup>2</sup>/nm/sr @ 400nm
- $2.8 \times 10^{-9}$  W/cm<sup>2</sup>/nm/sr @ 1500nm
- $6.8 \times 10^{-9}$  W/cm<sup>2</sup>/nm/sr @ 2100nm

NER is a measure of instrument sensitivity. Other features of the SR-6500 include:

- All fixed optics – no moving parts for rugged reliability
- Auto-exposure, auto dark current shutter
- DARWin SP Data Acquisition software saves all scans as ASCII files for use with other software programs

The SR-6500 includes wireless Bluetooth and USB communications and has an operating range from 0-40°C. Physical parameters include:

- Dimensions:  
12.4 x 8.7 x 4.4 inches (31.5 x 22.9 x 38.7 cm)
- Weight:  
11 pounds (4.99 kg)

For field work, the SR-6500 can be placed in a backpack. It runs off one lithium-ion battery. Two are provided for up to 6 hours of in-field scanning.

Equipped with our Miniprobe (3mm spot size), the SR-6500 brings high resolution to a range of applications, including:

- Mineral identification and analysis where resolution can help to distinguish between minerals with very similar spectra or to unmix and identify minerals in trace amounts.
- Soil studies for the identification of different soil characteristics, clay types, presence or absence of nutrients and moisture.
- Vegetation studies for plant stress/health, over-fertilization, species identification and more.
- Lab applications such as materials identification, etc.
- Solar radiance and irradiance research.
- Microbial diversity research

For more information on the SR-6500, please visit:

[http://www.spectralevolution.com/spectroradiometer\\_SR\\_6500.html](http://www.spectralevolution.com/spectroradiometer_SR_6500.html)

#### **About SPECTRAL EVOLUTION**

Established in 2004, SPECTRAL EVOLUTION is a leading manufacturer of laboratory and handheld portable spectrometers, spectroradiometers and spectrophotometers. SPECTRAL EVOLUTION spectrometers are used worldwide for many mission-critical lab and field applications in mining, remote sensing, vegetative studies, ground truthing, environmental and climate studies, developing satellite calibrations, and more, due to their reliable, robust, rugged design and user-friendly one-touch features.

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