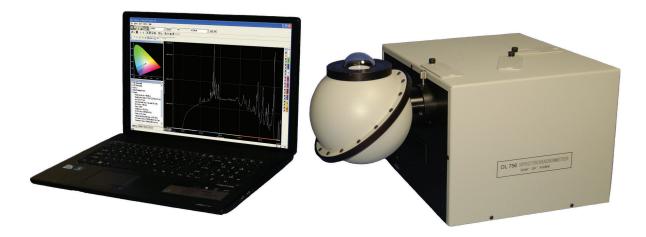
## OPTRONIC<sup>®</sup> LABORATORIES

# **OL SERIES 756**

The OL 756 is **THE** laboratory-grade portable spectroradiometer for the 200 nm – 800 nm spectral range. It is the latest generation from a long line of highly successful predecessors, including the OL 752 and OL 754 spectroradiometers, both of which are frequently cited in published papers and industry standards.



The **OL 756 Spectroradiometer** is engineered for ultra high performance. It provides accurate spectral measurements over the 200 to 800 nm wavelength range. A USB interface, ultra high precision control system and digital signal processing enable this scanning double monochromator to approach speeds seen only with array- based, multi-channel instruments but with 10-20 times the resolution and four orders of magnitude greater stray light suppression! With the monochromator, cooled PMT detector, and control electronics packaged in a single portable enclosure, it's quick to set up as well as simple to operate thanks to a powerful set of software tools.

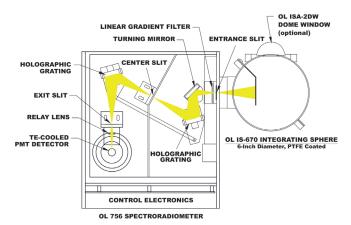
The OL 756 employs a double monochromator, offering exceptional stray light rejection. This is essential when measuring to determine suppression of UV to safe levels in the presence of substantial broadband visible light. Interchangeable fixed slits allow the user to set bandwidth from 0.4 - 10 nm (FWHM). This allows the user to configure the system for superior resolution when needed. Or when set for a wider band-pass, the OL 756 can achieve greater signal / noise to facilitate low-level measurements.

High efficiency blazed holographic gratings boost performance in the UV where most needed and automated linear variable blocking filter eliminates second order diffraction without abrupt transitions or pausing to advance a filter wheel. The OL 756 also has a manual setting for single point monitoring and logging of intensity over time. Digital signal processing (DSP) provides faster scanning, lower noise, capturing spectra with superb fidelity with 6-decade gain auto-ranging. Built-in flash memory allows storage of system parameters.

A wide range of collection optics and measurement accessories are available.

Typical measurement applications include:

- Photobiological studies
- · Solar irradiance at the surface and underwater
- Solar simulator characterization
- Tanning bed/booth irradiance measurements
- $\boldsymbol{\cdot}$  Transmittance of UV skin protection products, lenses and shade fabrics
- Verification of UV curing lamp systems
- Verification of germicidal UV lamp systems
- Eye hazard assessment actinic response, luminaires, ophthalmic procedures and products
- Development and certification of endoscopic and operating room surgical lighting
- Dose determination and safety for phototherapeutic products and procedures
- · Verification of ophthalmic procedure and product safety



<sup>1</sup>Quick Scan mode not available on any other scanning spectroradiometer.

MONOCHROMATOR SPECIFICATIONS	
Spectral Range	200 – 800 nm
Dynamic Range	107
Bandwidth	0.4 – 10 nm (FWHM) With Interchangeable Slits
Scan Rate	200 nm / sec (Quick Scan Mode) – Full Spectrum in 3s.
Acquisition Mode	Fixed or Adaptive Integration
Detection System	Thermoelectrically-cooled S-20 Response Photomultiplier (PMT) Detector
Interface	USB
Power Supply	12VDC power

## **Software Features**

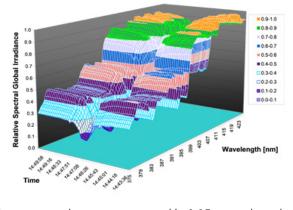


The OL 756 Applications software features highly flexible plot manipulation shows up to 10 scans on a single graph - select and/or protect one or many with "hide scan" or "lock scan" features as well as the capability to save and load user-defined scan settings, "One-click" measurement routines and automatic file saving, spectral plot zooming and dragging allows precise viewing of spectral data and a calibration file list saves searching and selection time by showing recently used files. Color CIE diagrams with zoom capability for precise color studies, sequential measurement result accumulation on the diagram; data reduction includes custom illuminants and the Calculations Tree organizes your calculations, showing only what you need to see. The applications suite includes calibration and measurement routines for performing measurements of:

- Source spectral analysis
- Spectral transmittance
- · Solar simulator characterization

SOFTWARE FEATURES	
Plot Tools/Cursors	Allows Precise Spectral Analysis
Supervisor and Operator Level Passwords	Protects Data and Stored Measurement Setups
Direct Reporting to Microsoft Office	Customized Report Analysis and Data Manipulation Through Excel and Word Templates
Calculated Results	Chromaticity, Lab Luv, CRI, Common Spectral Values, Sunlamp Exposure & Ratios, PAR Irradiance and More
Plot Smoothing	Savitzky-Golay; Reduces Noise While Preserving Features
Optional Software Development Kit (SDK)	Custom Programming
O/S Compatibility	Windows XP, Vista, Windows 7 (32 and 64 bit)

### SUN MEASUREMENTS ON A CLOUDY DAY



Each spectrum shown was scanned in 0.25 seconds and exported to Microsoft Excel in real time!

<sup>2</sup>Data acquisition only - exclusive of data reporting duty cycle.



#### Data Sheet: B230 Dec 2020 | Rev A

As part of our policy of continuous product improvement, we reserve the right to change specifications at any time.

For more information visit OptronicLabs.com or contact Info@OptronicLabs.com