PHYSTEC

# UVS-2500

## Miniature Spectrometer

3 Year Guaranty

3 Year guaranty and
10 year services

- Emission, Absorbance, Transmittance and Reflectance Spectrometer
- UV-Vis-NIR Detection Wavelength Range from 850-190 nm
- From 1 ms to 4 seconds CCD Integration time
- UV-Enhanced Coated Detector
- Aberration- Corrected Concave Holographic Grating
- High speed USB2- interface
- Miniature size and Weight
- Ruggedized Aluminum Enclosure
- No Need to External Power Supply
- Detachable optics assembly suitable for portable process, and lab applications
- Fiber Optics cables with SMA 905 input fiber connectors for interfacing with other equipment such as light sources and sample holders.
- Simultaneous emission meter, Colorimeter and Spectrometer
- UVS2500- can be used as an emission meter for characterize all kinds of light, as a UV-Vis-NIR spectrometer to measure absorbance and a colorimeter to determine the CIE (L*, a*, b*) parameters of visible light.
- It's a modular spectrometer that can acquire a full spectrum in less than 1 millisecond with 0.2 nm resolution.

## Applications:

Material science
Life Science
Food Science
Earth Science
Painting
And more…

| UVS- 2500 Specifications | |
|---|---|
| Wavelength range | 190 - 850 nm |
| Spectral Range | 660 nm |
| Wavelength accuracy | ± 0.1 nm |
| Resolution | 0.2 nm |
| Stray-light | %0.1-0.04 in Absorbance |
| Detector | CCD linear array, 3648 pixels |
| Signal/Noise | 700:1 |
| Integration time | 1 ms -4s |
| Interface | USB 2.0 high-speed, 480 Mbps |
| Number of scan to Average | 0-99 Scan |
| Data transfer speed | 3.7 ms /scan (USB2) |
| Power supply | Default USB power, 350 mA |
| Dimensions | 15x13x6 cm |
| Weight | 700 g |
| Data Display and Saving | As printable graph, double column ASCI code, EXCEL |

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# UVS-spec® software

- Free real-time operating software
- Compatible with Windows XP, 8 ,7 or 10
- Dark-level correction
- Calculating ratio of two wavelengths intensities

## Standard features:

- Thermal Smoothing
- Line thickness
- Grid lines
- Plot mode
- Zoom mode
- Overlay mode
- Cursor mode

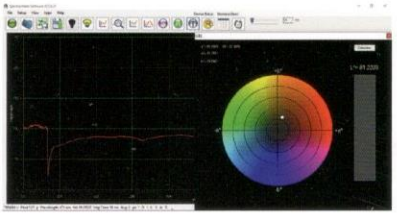
## Additional feature:

- Trigger mode

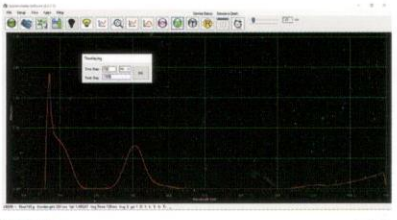
## Standard Apps:

- Wavelength monitoring
- Peak finder
- UV monitoring
- CIE measurements
- Time variation
- Ratio

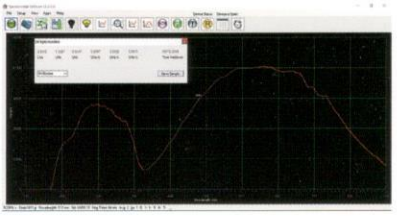
**Color measurement**
**UVS-spec®** software e nables you to determine CIE parameters of light sources or transparent samples.



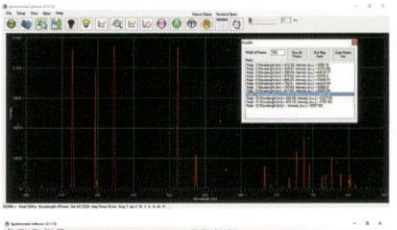
**Time variation and Kinetics**
With **UVS-spec®** software, you could save changes in spectra with time. The total time and time step of saving spectra is tunable.



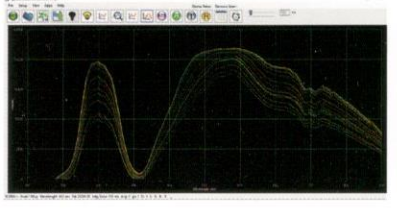
**UV monitoring**
In **UVS-spec®** software UVa, UVb, UVc, their ratio and the total irradiance of UV light could be measured according to UV-USA UV-Europe or Solar standards.



**Peak find**
With **UVS-spec®** software y ou could find all peaks with a desire width.



**Overlay**
With **UVS-spec®** software y ou could monitor the real time changes of spectra.



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# Accessories

## For miniature spectrometer

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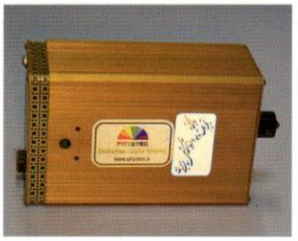
Tungsten Halogen Light Source

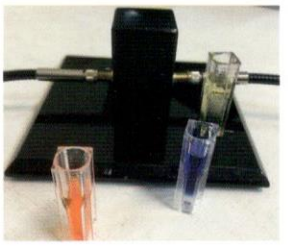


Deuterium light Source

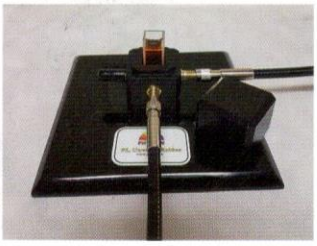
UV-Vis Optical Fiber

Y-Type Optical Fiber

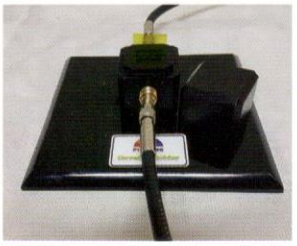
Reflectance Optical Fiber probe



Transmittance Cuvette holder



Photoluminescence Cuvette holder



Thin Film Sample Holder

White Reflectance Standard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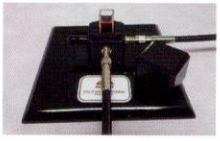
# Modular SpectroChemistry System

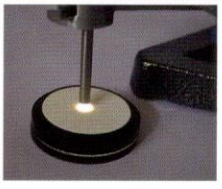
## Fluorescence and Absorbance

Using -4 side photoluminescence cuvette holder you could measure absorbance straight through the sample and fluorescence at right angles to the excitation light.



## Reflectance and Absorbance

Using reflectance Probe, you could measure normal reflectance and absorbance of the opaque samples.



## Thin film transparent measurement

Using slit thin film sample holder, you could measure transmittance and absorbance of thin film supported on transparent substrates

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