



## Fiber Optics UV-vis-NIR Spectrophotometer for Reflection measurements

Model: UVS-R



### UVS-R system include:

Item	Description	Number
1	UV-vis-NIR spectrometer (190-1100 nm)	1
2	Halogen-Tungsten Light Source (300-2500 nm)	1
3	Deuterium Light source (190-400 nm)	1
4	Reflectance Probe for UV & Visible; 7 400µm around 1 600µm	1
5	Armored Y cable, 600um core, 1 SMA to 2 SMA, SR+NIR (Optional)	1
6	White Reflectance Standard (Optional)	1
7	SMA to SMA connector (Optional)	1

### Features:

- Absorbance and Reflectance Spectrometer
- UV-Vis-NIR Detection Wavelength Range from 190-1100 nm (Custom design with 660 nm spectral range)
- Detachable optics assembly suitable for portable process, and lab applications
- From 1 µs to 4 seconds CCD Integration time
- UV-Enhanced Coated Detector
- Aberration- Corrected Concave Holographic Grating

- High speed USB-2 interface
- Ruggedized Aluminum Enclosure
- Fiber Optics cables with SMA 905 input fiber connectors for interfacing with other equipment such as light sources and sample holders.

## **Simultaneous Spectrophotometer and Colorimeter**

**UVS-R** can be used as a UV-Vis-NIR spectrophotometer to measure Reflectance and absorbance at 0-degree geometry of opaque materials. In addition, **UVS-R** can be used as a colorimeter to determine the CIE ( $L^*$ ,  $a^*$ ,  $b^*$ ) and XYZ parameters of colors in the visible range.

It's a modular spectrometer that can acquire a full spectrum in less than 1 millisecond with 0.25 nm step.

### **Applications:**

- **Material science**
- **Life Science**
- **Food Science**
- **Earth Science**
- **Painting**
- **and more...**

## **UVS-spec<sup>®</sup> software**

- Free real-time operating software
- Compatible with Windows 10
- Dark-level correction
- Thermal Smoothing
- Finding Peaks
- UV monitoring
- CIE measurements
- Real-time variation measurements

- Calculating ratio of two wavelengths intensities

<b>Specifications</b>	
<b>Operating Mode</b>	<b>Reflection and Absorbance</b>
<b>Wavelength Range</b>	<b>190-1100 nm custom products (spectral range: 660nm)</b>
<b>Wavelength steps</b>	<b>0.25 nm</b>
<b>Resolution</b>	<b>0.7 nm</b>
<b>Wavelength Reproducibility</b>	<b>± 0.1 nm</b>
<b>Detector</b>	<b>UV-enhanced CCD 3648 Pixels</b>
<b>Light Source</b>	<b>Halogen-Tungsten and deuterium</b>
<b>Stray Light</b>	<b>&lt; 0.2 %T</b>
<b>Photometric Measuring Range</b>	<b>0-3 Abs</b>
<b>User Interface Language</b>	<b>English</b>
<b>Interface</b>	<b>USB2</b>
<b>Power</b>	<b>220 V AC</b>
<b>Dimensions (H x W x D)</b>	<b>155mm×140mm×65mm</b>
<b>Weight</b>	<b>&lt; 2 kg</b>
<b>Data saving</b>	<b>EXCEL, PTS</b>

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