



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

Model: UVS-TR



## UVS-TR 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	2-side Cuvette Holder with quartz lenses	1
5	Armored, 600um core, Solarization Resistant fiber optic cable	1
6	Armored Y cable, 600um core, 1 SMA to 2 SMA, SR+NIR	1
7	Reflectance Probe for UV & Visible; 7 400µm around 1 600µm	1
8	White Reflectance Standard	1
9	SMA to SMA connector	1

### Features:

- Absorbance, Transmittance 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-TR** can be used as a UV-Vis-NIR spectrophotometer to measure transmission and absorbance of liquids and transparent materials as well as a UV-Vis-NIR spectrophotometer to measure reflectance at 0-degree geometry of opaque materials. In addition, **UVS-TR** 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 steps.

#### 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

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

#### **Contact us:**

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