



# Fiber Optics vis-NIR Spectrophotometer for Reflection measurements

Model: VS-R



### VS-R system include:

Item	Description	Number	Price (Rial)
1	vis-NIR spectrometer (300-1100 nm)	1	337,500,000
2	Halogen-Tungsten Light Source (300-2500 nm)	1	23,000,000
3	Reflectance Probe for UV & Visible; 7 400µm around 1 600µm	1	125,000,000
4	White Reflectance Standard (Optional)	1	50,530,000

#### Features:

- Absorbance and Reflectance Spectrometer
- Vis-NIR Detection Wavelength Range from 300-1100 nm (Custom design with 660 nm spectral range)
- Detachable optics assembly suitable for portable process, and lab applications
- From 1  $\mu$ s to 4 seconds CCD Integration time
- 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

**VS-R** can be used as a Vis-NIR spectrophotometer to measure Reflectance and absorbance at 0-degree geometry of opaque materials. In addition, **VS-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
- CIE measurements
- Real-time variation measurements
- Calculating ratio of two wavelengths intensities

Specifications			
Operating Mode	Reflection and Absorbance		
Wavelength Range	<b>300-1100 nm custom products (spectral range: 660nm)</b>		
Wavelength steps	0.25 nm		
Resolution	0.7 nm		
Wavelength Reproducibility	± 0.1 nm		
Detector	CCD 3648 Pixels		
Light Source	Halogen-Tungsten		
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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