

ARCOPTIX VIS-NIR-DR SPECTROMETER



The ARCOptix VIS-NIR-DR spectrometer is a broadband instrument designed for diffuse reflectance measurements in the visible and near-infrared. The entrance port of the instrument leads to an integrating sphere with internal illumination, which ensures optimized illumination of your sample. The VIS-NIR-DR integrates a multichannel grating spectrometer for measuring in the visible as well as an FT-IR that covers the NIR region of the electromagnetic spectrum.

Designed for ease of use, our dedicated software merges the information delivered by the two instruments and outputs a single spectrum covering the 350-2500nm interval. This software also features a direct calculation of the total solar reflectance (TSR) value for reference measurements.

Applications

- *Diffuse reflectance measurement of paints, textiles, ink, cosmetics, plastics etc.*
- *Measurement of total solar reflectance (TSR) in accordance to ASTM norms G173 and E903*

Features

- **Grating spectrometer & FT-NIR combined**
- **Sample holder**
- **Internally illuminated integrating sphere**
- **High resolution < 5nm over the 350-2500nm range**
- **Fast acquisition time (5 s)**
- **USB 2.0 connection**
- **Direct calculation of TSR value**

Specifications

Product code	VIS-NIR-DR
Spectral range [nm]	350-2500
Resolution [nm]	< 5
Measurement geometry	Diffuse illumination, 8° viewing angle
Integrating sphere diameter [mm]	50
Integrating sphere port diameter [mm]	10
Illumination source	Halogen, 5W
Single acquisition scanning time [s]	< 5
SNR (single acquisition)	> 1000:1
Inter-instrument repeatability	±1% at 50% R
Repeatability on white reference	<0.2% variation at 50% R
Software interface	Windows 7/10/11
Operating power	20 W @ 12 VDC
Communication interface	USB 2.0
Dimensions [mm]	380x250x320
Weight [kg]	8
Operating temperature [°C]	10-40

SPECIFICATIONS ARE SUBJECT TO CHANGES WITHOUT NOTICE. Please contact info@arcoptix.com for more information.