

ARCspectro VIS-NIR DR

ARCOptix
Switzerland

DATA SHEET



Spectrophotometer for Diffuse reflectance measurement in VIS & NIR (360-2500nm)

The ARCSpectro VIS-NIR is a laboratory spectrometer designed for the measurement of the diffuse reflectance of samples over the complete VIS & NIR spectral range. The system includes an integration sphere for diffuse reflectance measurement on samples. Accurate results in only 5 seconds. Ideal for paints, textile, plastic sample characterization.

Typical characteristics of the ARCSpectro VIS-NIR DR are:

- **Large spectral range: 360nm-2500nm**
- **Easy to use (no use parameters)**
- **High resolution (5 nm)**
- **Fast measurements (about 5-10 seconds)**
- **Customization of hardware and software on demand**

Applications:

- **Measurement of Total Solar Reflectance (TSR value)**
- **Diffuse reflectance measurement of textile, paints, dyes, ink, cosmetics, plastics,...**

For additional information please contact:

ARCOPTIX S.A.
2000 Neuchâtel, Switzerland
Tel. +41 32 731 04 66
info@arcoptix.com



FEATURES & BENEFITS

Two spectrometers in one: The system incorporates: one ArcOptix FT-NIR Fourier Transform scanning spectrometer for NIR region and one multichannel grating spectrometer for the VIS region.

5 seconds measurement time: Unlike most high end scanning spectrometers used for such applications, where a measurement takes several minutes. the ARCSpectro VIS-NIR gives a result within 5-10 seconds

The 360-2500nm region corresponds to the maximal intensity of the solar emission. **Accurate total solar reflectance (TSR) can be measured** with the ARCSpectro VIS-NIR

The 5cm **Integration sphere with baffles provides** an ideal diffusing source. Light is collected under a standard 8° viewing angle

ARCSpectro VIS-NIR DR

ARCOptix
Switzerland

DATA SHEET

ARCSpectro VIS-NIR DR specification overview:

Spectral range	400 – 1100 nm
Illumination geometry	Diffuse illumination and 8° viewing
Sphere Diameter	5 cm
Entrance port diam.	10 mm or 15 mm
Illumination source	Halogen
Spectral resolution in wavelength:	5 nm
Reporting interval	1 nm
Measurement time	~5s
SNR (Full dynamic range- single measurement, broadband diode)	>1'000:1
Inter-instrument Agreement	±1% at 50% R
Read Repeatability On White Ref	Less than 0.2% variation at 50% R
Inter-instrument Agreement for Reflectance (CIELAB)	Better than 0.2
Software Interface	Windows XP / 7 / 8
Operating Voltage	7.5 V
Communication Interface	USB
Product Dimensions (including electronics)	38mm x 25cm x 32cm
Product Weight	8 Kg
Operating Temperature	15°C – 30°C



10 mm measurement port of the integration sphere



Software interface for Windows XP,7 and 8 included



Power supply and USB port.

ARCOptix is a company located in Neuchâtel (Switzerland) in the heart of the watch valley. For more information about ARCOptix, visit www.ftir-spectrometer.com