

## ARCOptix VIS-NIR DR Spectrophotometer

Measuring diffuse reflectance of solid samples from 360 to 2500nm



The ARCSpectro VIS-NIR-DR combines two spectrometers : a standard multichannel grating spectrometer that covers the visible spectral range (360nm-950nm) and the Arcoptix NIR scanning Fourier-transform spectrometer with an extended range InGaAs detector which is sensitive in the NIR range from 900 to 2500nm. Both spectrometers are connected to the integrating sphere including a high power halogen lamp.

The ARCSpectro VIS-NIR DR allows you to measure the reflectivity of materials and paints over the complete solar energy industries, because it provides crucial information about the solar energy absorbed and transformed into heat by those materials or paints.

### ■ Benefits

- Large wavelength range (360nm to 2500nm)
- Fast measurements (about 5 seconds)
- High resolution (5nm)
- Easy maintenance
- Customization of hardware and software on demand

## ■ Specifications

**General Specs table:**

Features	VIS-NIR DR
Spectrometer type	Multi-channel grating spectrometer (360-950nm) & scanning FT-NIR spectrometer (900-2500nm)
Spectral range	360nm-2500nm
Spectral resolution	5nm (optical, reporting interval: 1nm)
Measurement geometry	Diffuse illumination and 8° viewing
Integrating sphere internal diameter	50mm
Measurement port diameter	10mm
Light source	Halogen, 5W
Measurement time	~5s
SNR (Full dynamic range-single measurement)	>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
Operating temperature	10°C-40°C
Operating power	12V / 15W (line power adaptor is included)
Communication Interface	USB
Software interface	Windows XP/ Windows 7/ Windows 8
Product dimensions	38mm x 25cm x 32cm
Product weight	8 kg