

## Contactless probe for solids

## IR1000-D

### Features

- Spectral Range: 11500 - 4000  $\text{cm}^{-1}$  (800 - 2500nm)
- Spectral Resolution  $\leq 2 \text{ cm}^{-1}$
- Detector: High sensitivity InGaAs 2-stage TE-cooled
- Communication interface: Ethernet or adaptor to USB2.0
- Optical fiber terfac: SMA 905 connector
- works with a noncontact reflection probe (Dual-Eye) to collect the reflection spectrum of the solid sample.
- Probe size (Dual-Eye) : 154mm (height) \* 144mm (diameter)
- Focus distance (Dual-Eye) : 90mm

### Application

- Tobacco industry
- Raw coal production
- Feed industry

### Description

IR1000-D is a Non-contact Diffuse Reflection measurement of powder samples For laboratory and online process. The reflected spectral signal is converged into the detector through the optical system inside Dual-Eye, which greatly improves the spectral collection efficiency and signal to noise ratio.

IR1000-D is very suitable for non-contact analysis of solid samples, such as the detection of tobacco leaves on conveyor belts in the tobacco industry, the detection of raw coal on coal preparation production lines, the detection of raw material content in the feed industry, etc.; it is also suitable for large, irregular and uneven samples, large areas Illumination sampling can improve the representativeness of the sample



## Parameter

Items	Parameters
Spectral Resolution	$\leq 2 \text{ cm}^{-1}$
Spectral Range	11500 - 4000 $\text{cm}^{-1}$ (800 - 2500nm)
Light Source	High Performance NIR light source
Detector	High sensitivity InGaAs 2-stage TE-cooled
Laser	Solid laser 10 year warranty
Beamsplitter	CaF <sub>2</sub>
Wavenumber Precision	$\leq 0.02 \text{ cm}^{-1}$
Interferometer	High stability Cube corner interferometer
Software interface	Window 7/10
Operating temperature / humidity	5 to 35°C / non condensing
Storage temperature	-10 to 60°C
Communication interface	Ethernet or adaptor to USB2.0
Optical fiber terfac	SMA 905 connector
Probe size (Dual-Eye)	154mm (height) * 144mm (diameter)
Focus distance (Dual-Eye)	90mm