

Luminar 5030

“Hand-held” Mini - Spectrometer

ISITEC-LAB is the representative in Europe of **BRIMROSE** Corporation, which has developed a new, portable platform for conducting non-destructive and contact/non-contact analytical testing and inspection that extends versatility from the laboratory to the production floor and to the field.

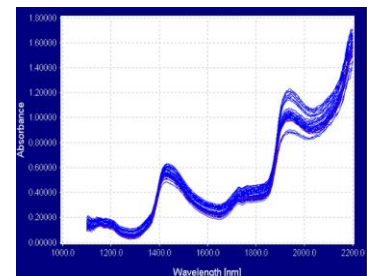
The **Luminar 5030 “Hand-held” Mini-Spectrometer** is a rugged hand-held analytical instrument that utilizes **BRIMROSE’s** high performance **AOTF-NIR (Acousto-Optic Tunable Filter-Near Infrared)** technology. By delivering rapid, multi-component analysis for a wide variety of applications that include diffuse reflectance measurements of powders, pellets, liquids, web-based and solid products, use of the **Luminar 5030** offers a new powerful tool for quality control and process troubleshooting.



Stand
with rotating cup



Luminar 5030 Handheld Free Space™ Spectrometer with Battery Pack.



Typical Applications

- Blender Control
- Fluid Bed Dryer
- Powders
- Polymer Pellets/Resins
- Paper/Textile Goods
- Fruit/Grain
- Liquids
- Raw Material ID
- Vines
- Tobacco and Tobacco Leaves

Measurements

- Moisture
- Fat/Sugar/Protein
- Active Ingredients
- Coating Weight
- Blend Assay
- Recycled Plastic ID



Specifications	
Luminar 5030 - 731	“Hand-held” Mini-Spectrometer
Spectral Range Options	600-1100 nm, 850-1700 nm, 900-1800 nm, 1100-2300 nm
Measurement Modes	Diffuse Reflection, liquid transmission with probe attachment
Spectral Resolution	2-10 nm
Wavelength Accuracy	± 0.5 nm
Wavelength Repeatability	± 0.01 nm
Wavelength Increment	Software Selectable 1-10 nm
Ambient Light Rejection	> 10 ⁶
Vibration immunity	Blenders, Agro field operations, e.g. vineyards
S/N at 70% range	< 30µabs in reflectance and transmission, for <5 seconds integration time
Wavelength access time	< 66 µsec
Photometric Range	3.5 AU
Linearity	Better than 0.15%
Signal Digitalization	16-bit A/D (1 part in 65,536)
Sampling Speed	16,000 wavelength/sec
Sampling Area	Ø6mm
Sampling Distance	40mm
Diagnostic	10 Built-in monitoring sensors
Power Requirements	12VDC, (24VDC special order), 90Watts, 110VAC 60Hz, 220VAC 50Hz
Outputs	PC Interface via Ethernet connection
Software	Windows-based analytical software for data acquisition
Options:	Accessories:
<ul style="list-style-type: none"> • Battery Operation • Display • Liquid Probe Attachment • Powder Probe Attachment • Wireless Communication • Gravity switch 	5030O: L-shape mounting plate with 1.5” Sapphire Window Assembly for Quick dismounting of Optical module 5030E: Mounting Plate for Electronics module for Quick dismounting of Electronics module 731-09: Liquid Transflectance measurements with selectable pathlengths 731-10: Diffuse Reflectance measurement with Sapphire ball 731-S: Stand with Rotating cup
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