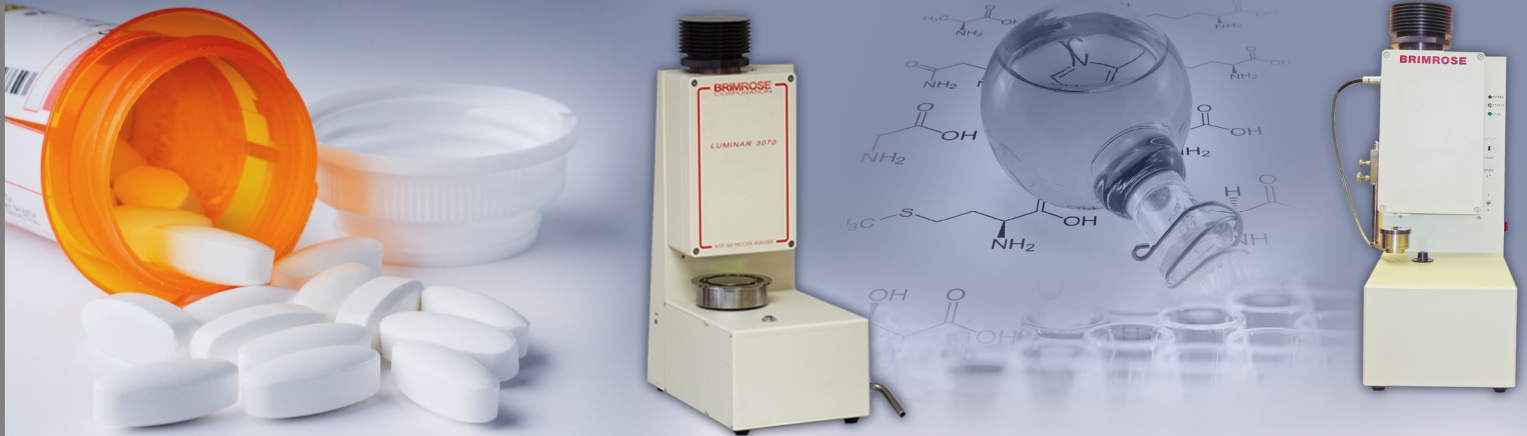


**Robust . Reliable . Accurate**

# AOTF-NIR BenchTop Laboratory Analyzer



- Non-contact and Non-destructive Measurements of Powders, Solids, Liquids, Gels, Seeds
- Brimrose Analytical Software - Snap32!
- Transmission and Diffuse Reflectance Measurement Modes



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Luminar 3070

## ■ Bench Top AOTF-NIR Analyzers for non-contact Measurements in Laboratory

Brimrose solid-state Luminar 3070 AOTF-NIR BenchTop Analyzers are designed for any types of noncontact, non-destructive measurements of chemical and physical properties of powders, solids, liquids, gels, etc. in Laboratory environment. The following types of measurements can be done:

### Model 920A

- Diffuse reflectance for powders, liquids, and solids in rotation mode.
- Transmission for liquids with integrated flow cell in dynamic mode.

### Model 920B

- Diffuse reflectance for Powders and Solids in rotation mode.
- Transmission for single seeds.

### Model 920D

- Diffuse reflectance for powders and solids in rotation mode.
- Transmission for liquids with separate heated flow cell in dynamic mode.

### Model 920E

- Diffuse reflectance for powders and solids in rotation mode.



**Model 920E**

**Model 920B**



Powders and solids measurement and liquid measurement

**Model 920D**

## ■ Key Features

- Dual Beam, Pre-aligned Lamp Assembly, InGaAs Detectors
- Fast Scanning Speed - 16,000 wavelengths/sec
- SNAP32! Brimrose Analytical Software with Brimrose MACRO Language

## ■ Real-time Applications

- Measurements of Powders, Liquids, Solids, Gels, Seeds, etc.



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■ Technical Data Specifications

| Spectrometer Name        | Luminar 3070 BenchTop Laboratory AOTF-NIR Analyzer                        |
|--------------------------|---|
| Spectral Range Options   | 850-1700 nm, 900-1800 nm, 1100-2300 nm                                    |
| Measurement Modes        | Transmission and Diffuse Reflectance                                      |
| Spectral Resolution      | 2-10 nm   |
| Wavelength Accuracy      | ± 0.5 nm  |
| Wavelength Repeatability | ± 0.01 nm over more than 5 years service                                  |
| Wavelength Increment     | Software Selectable 1-10 nm   |
| Ambient Light Rejection  | > 10 <sup>6</sup>   |
| 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            | 5 x 3 mm  |
| Diagnostic               | 10 Built-in monitoring sensors  |
| Power Requirements       | 12VDC, (24 VDC special order), 90Watts, 110VAC 60Hz, 220VAC 50 Hz         |
| Dimensions               | W x H x D (225 x 600 x 365 mm)  |
| Outputs                  | PC Interface via Ethernet connection                                      |
| Software Package         | Windows-based analytical software for data acquisition                    |



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