Robust . Reliable . Accurate

Non-Contact Multi-Component Analysis for Food Applications

- Non-contact, Non-destructive Analytical Technology for the Multi-component Analysis of Food Products
- Brimrose Analytical Software - Snap32!
- Use of the Luminar’s Direct Diffuse Reflectance or Transmission Measurement Technology

Brimrose Corporation of America
Email: office@brimrose.com
www.brimrose.com
Analytical Technology for Multi-component Analysis of Food Products

Brimrose Corporation has developed a non-destructive and non-contact analytical technology for multi-component analysis of food products.

The Luminar Series Analyzer Systems utilize rugged and high performance AOTF-NIR spectroscopy to deliver rapid, multi-component analysis for both laboratory and continuous on-line applications. Use of the Luminar’s direct diffuse reflectance or transmission measurement technology allows for accurate detection of moisture, fat content, sugar, protein, food additives, packaging identification, particle size and chemical composition without contacting the product.

The Luminar Series AOTF-NIR Spectrometers consists of an optical sensor module with light source and detector, electronics enclosure, sample probe/accessories and operating/analytical software with PC or Distributed Control System (DCS) interface.

Measurements

- Moisture
- Fat/Sugar/Protein/Acid
- Food Additives
- Coatings & Packaging ID
- Particle Size

Benefits of the Luminar Series Analyzers

- Direct non-destructive, non-contact measurement
- Rapid measurement speed
- Multi-point, multi-component ability
- Rugged design for plant environments
- Insensitive to vibration - no moving parts
- No interference from ambient light
- Ability to measure tobacco leaves, tobacco blends, cloves blends, and ground tobacco

Real-time Applications

- Dairy & Meat Products
- Baked Goods
- Process Foods
- Liquid Products
- Fruit/Seed Inspection

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Luminar 3030 for Fruit Inspection

The rugged Luminar Series provides fast, reliable analysis in any production or lab environment.
## Technical Data Specifications

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<th>Luminar Series</th>
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<td><strong>Operating Range</strong></td>
<td>PPM or % based on five spectral range options from 600-2300 nm</td>
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| **Spectral Data** | Accuracy: +/- 0.5 nm  
Repeatability: +/- 0.01 nm  
Resolution: 2-10 nm  
Scan Speed: 16K wavelengths/sec (30 scans/sec) |
| **Sampling** | Distance: 40 mm and up  
Viewing Area: 5x5 mm, 16x26 mm, 9x5 mm |
| **Outputs** | Analog, digital (16-bit A/D) and ModBus |
| **Enclosure** | NEMA 4X, 12X; Explosive Proof |
| **Operating Temp** | 32-140°F (0-60°C) |
| **Power Requirements** | 90-250 VAC, 47-63 Hz |
| **Software Package** | Windows-based analytical software for data acquisition |

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