Robust . Reliable . Accurate

SeedMeister
AOTF-NIR Analyzer

Creating Solutions through Technology . Real - Time Results

- High Performance 100% Seed Inspection and Sorting

- Easy Calibration Transfer – SEEDM Software

- Spectrometer with 6 channel slots sorting system

Brimrose Corporation of America
Email: office@brimrose.com
www.brimrose.com

Luminar 3076

High-Speed Discrimination, Quantification, and Sorting of Hybrid Seeds

The Brimrose Solid-state Luminar 3076 SeedMeister AOTF-NIR Analyzer is a system specifically developed for high-speed non-contact and non-destructive 100% seed discrimination, prediction, quantification, and sorting based on seed properties such as oil, protein, moisture, starch, oleic, linoleic, sugar, etc. of major hybrid seeds such as **corn, soybeans, coffee, watermelon, peanuts, sunflower** and much more.

The reliable SeedMeister spectrometer collects spectral data up to 16,000 wavelengths per second with AOTF-NIR technology and advanced chemometrics. This system data acquisition provides the capability of sorting up to 40 individual seeds per minute. Important constituent information such as oil, protein, starch, moisture, low and high oleic contents are measured simultaneously.

With this nondestructive selection process only those seeds matching desired genetic traits are chosen for future growing trials.

Early discriminations and reliable sorting will ensure the fast development of new genetic products while cutting developmental costs. The unmatched analytical accuracy and unbeaten speed of Brimrose SeedMeister allows you to place your new hybrid on the market at a fraction of the time and cost of previous methods.

6 Channel Slots Sorting System

Key Features

- 100% Accuracy Seed Inspection and Sorting
- Belt Driven Orientation
- Easy Calibration Transfer
- Sorting Up to 40 Seeds/min
- Fast Scanning Speed - 16,000 wavelengths/sec
- SEEDM & Snap32! V2.03.04 Software package

Real-time Applications

- Predicting Hybrid and Inbred Watermelon Seeds
- Determination of Percentage of Oleic and
- Linoleic Acid in Sunflower Seeds
- Discriminating Between High Oleic Acid and
- Linoleic Sunflower Seeds
- Classifying Corn Seeds Based on Oil Content
- Quantitative Analysis for Protein in Soybeans Seeds

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■ Technical Data Specifications

Spectrometer Name	Luminar 3076 SeedMeister AOTF-NIR Analyzer
Spectral Range Options	850-1600 nm or 1100-2300 nm
Measurement Modes	Model 908: Transmission Model 908A: Reflection
Wavelength Repeatability	± 0.01 nm over more than 5 years service
Light Source	35 Watts Tungsten Halogen Lamp
Wavelength Access Time	< 250 μsec
Photometric Range	3.5 AU
Sampling Speed	16,000 wavelength/sec (30 scans/sec)
Sample Throughput	Up to 40 seeds per minute
Sorting	2 - 6 discrete channels
Power Requirements	110 VAC 60 Hz, 220 VAC 50 Hz
Dimensions (W x H x D)	W x H x D (546 x 531 x 360 mm)
Weight	23.4 Kg
Outputs	TCP/IP Protocol over Ethernet cable with External PCs
Software Package (SEEDM & Snap32! V2.03.04)	Windows-based analytical software for acquisition

Options:	Accessories:
➢ Model 908 – 704 Free space optical head for transmission sorting system ➢ Model 908A – 707 Free space optical head for reflection sorting system, diffuse reflectance measurement	Automatic Seed Sample Feeder

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