

# Luminar 3076

## Seed Meister Spectrometer

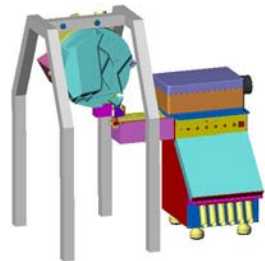
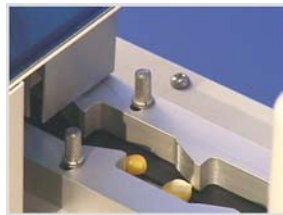
### 100% Seed Inspection and Sorting

**BRIMROSE Seed Meister™** is a system specifically developed for high-speed discrimination, quantification, and sorting of Hybrid seeds e.g. corn, soybeans, coffee, watermelon, peanuts, sunflower, and more.

Utilizing **BRIMROSE's Acousto-Optic Tunable Filter Near Infrared (AOTF-NIR)** technology and advanced chemometrics, the **Seed Meister** collects spectral data up to 16,000 wavelengths per second. 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 / high Oleic contents are measured simultaneously. In many cases, Vigor/Emergence of seeds can be predicted as well.

The availability of this information allows plant breeders to sort early generation seeds for maximum predetermined quality e.g., high oil corn. 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 our **Seed Meister™ 3076** allows you to place your new hybrid on the market at a fraction of the time and cost of previous methods.



**Seed Feeder**



## Features

### Seed Quality Analysis for:

**Oil, Protein, Moisture, Starch, Oleic, Linoleic, Palmitric, Vigor / Emergence, Sugar and more**

### Performance:

**Up to 40 Seeds/min, 98% Accuracy, Easy Calibration Transfer, 6 Channel Slots, Software: Windows 95/98**

Specifications	
<b>Luminar 3076</b>	<b>Seed Meister Spectrometer</b>
Spectral Range Options	850-1600nm or 1100-2300nm
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	110VAC 60Hz, 220VAC 50 Hz
Dimensions	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	Windows-based analytical software for acquisition
<b>Options:</b>	<b>Accessories:</b>
<ul style="list-style-type: none"> <li>Model908 – 704 Free space optical head for transmission sorting system</li> <li>Model908A – 707 Free space optical head for reflection sorting system, diffuse reflectance measurement</li> </ul>	Automatic Seed Feeder

# BRIMROSE

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