



# Soy Processing Analyzer

EQUIPMENT SERIES



- Soybean, Soymeal and By-Products
- Moisture, Protein, Fat, Fiber, Starch, Ash, NDF, and Other Parameters in Under 30 Seconds\*
- Ready to go Pre-Calibrated with Unity or Ingot® Calibrations from Aunir™

\* Deluxe Model



## Process and Quality Control

Fast, accurate analysis is critical for soybean processors to optimize the oil extraction process and insure quality of the finished products. Optimizing the process will save the plant time and money and provide very rapid payback. Near Infrared (NIR) analysis is a proven technique designed to provide fast, accurate, and reliable results for the oil seed processing industry.

## BENEFITS:

- Rapid payback
- At-line ready
- Simple to use
- Flexible sample handling
- Easy data integration
- Low maintenance
- ISO 12099 Compliant
- Guaranteed calibrations

Monitoring incoming soybean quality whole and expeller

Monitoring and controlling extraction process

Residual oil and protein values in soymeal

Feed value of soy hulls and byproducts



## SpectraStar™

The Unity Soy Processing Analyzer is based on the SpectraStar XT, a state of the art hi-performance NIR analyzer optimized for the analysis of ground and unground natural products.

The SpectraStar XT contains TRUE ALIGNMENT® Spectroscopy (TAS), a revolutionary technology which monitors the instrument status and precisely calibrates the instrument to first principles. The SpectraStar XT delivers reliable operation and ultimate performance.

The Unity Scientific SpectraStar™ RTW (Rotating Top Window) system gives the ultimate in sampling flexibility and allows the customer to make measurements of all important soybean processing steps.

## Plug and Go Calibrations

The Basic Soy Analyzer comes ready to use with Unity calibrations for protein, moisture and fat in soybean, flake and soymeal and includes 1 year calibration support.

The Deluxe Soy Analyzer is powered by the Ingot® calibration package from Aunir™, a world leader in NIR calibrations for over 30 years. This package includes a full suite of calibrations for protein, fat, moisture, fibers, starch and ash. With calibrations for soybeans, flake, soymeal and hulls, the Ingot calibration package covers all products and by-products in the plant. All Ingot calibrations are backed by Aunir's 30 years of experience and include 1 year calibration support and guarantee from Aunir.

# Soy Processing Analyzer

## Ready to Use

The Unity Soybean Processing Analyzer is robust enough to be used both at-line or in the lab. The system features a long life lamp and no air filter or fan, providing for very low cost of ownership. The built in computer is fully networkable and LIMS compatible, allowing for plant management to immediately access results. The Soybean Analyzer is a valuable tool to control every step in the soybean processing plant from incoming expeller to soymeal export certificate of analysis.



### Both Soy Processing Analyzer package includes the following:

- SpectraStar 2600 XT (1100 nm - 2600 nm) with built in 17" touch screen prediction software, multi-cup adapter, US-RTIR-0016 adapter ring, Unity TAS Standards
- 2 Sample cup US-LGOP-0001 for analysis of ground soybeans, soymeal and hulls

The **Soy Analyzer Basic** package includes:

- Unity calibrations for soybeans, soymeal and by-products
- 1 year free calibration support

The **Soy Analyzer Deluxe** package includes:

- Full Ingot Calibration package for soybeans, soymeal and by-products
- 1 year calibration support and guarantee from Aunir™

## HOW TO ORDER

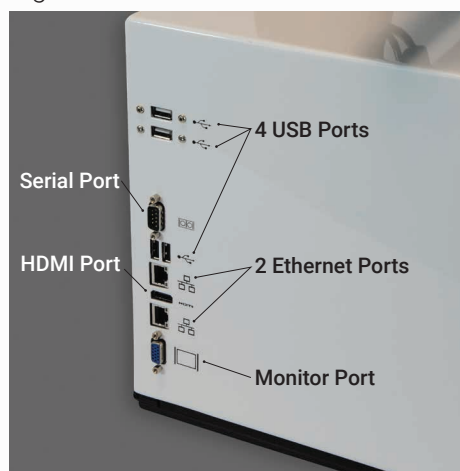
Simply choose the calibration package most suited to your requirements

### SOY ANALYZER BASIC

US-2600-SOY1  
SpectraStar 2600 XT  
(1100 nm – 2600 nm)  
Unity calibrations

### SOY ANALYZER DELUXE

US-2600-SOY2  
SpectraStar 2600 XT  
(1100 nm – 2600 nm)  
Ingot® calibrations



## Specifications Table (Full Specifications in SpectraStar XT Brochure)

Technology	Pre-dispersive scanning monochromator with nominal bandwidth of 10 nm (FWHM)
Wavelength Range	1100 - 2600 nm
Light Source	Tungsten halogen lamp with MTBF rating of 10,000 hours (User changeable)
Detector	Custom dual cooled, extended InGaAs detectors (2)
Analysis Time	10 - 30 seconds
Data Interval	1.0 nm
Photometric Noise	< 0.02 mAu 1100 - 2600 nm

## User Interface

Built-in Computer	Windows® 10 Professional, Solid State HDD, 17" high resolution touch screen monitor
Software	UScan™ routine analysis and data management package
Network Capabilities	OPC Compliant; LIMS Compatible; 4 USB ports, 2 Ethernet (RJ45)

## Dimensions and Power Requirements

Size	330 x 381 x 508 mm (with display) 330 x 381 x 270 mm (without display)
Weight	18 kg, 40 lbs.; 22 kg, 48 lbs. with monitor
Voltage	100-240 V AC *, frequency 50-60 Hz, Class 1, protective earth

### Unity Scientific

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