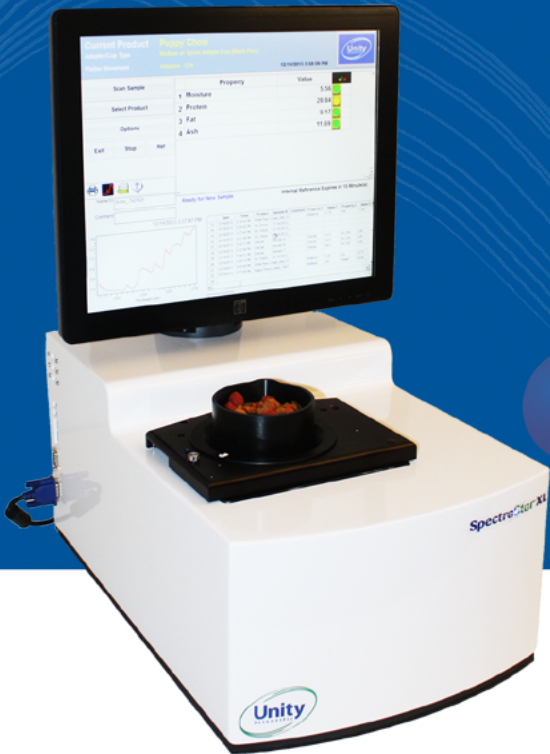


Rendering Analyzer

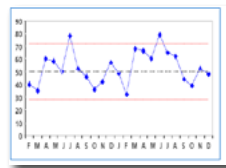


- **Animal Meals and By-Products**
- **Moisture, Protein, Fat, Fiber, Starch, Ash and Other Parameters in Under 30 Seconds**
- **Ready to go Pre-Calibrated with Ingot® Calibrations from AuNIR™**

Monitoring and controlling cookers and dryers to ensure optimal and efficient operation

Verifying production batch values to reduce or eliminate claims

Optimize final product moisture levels for maximum shelf life and profit margin



BENEFITS

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



Process and Quality Control

Fast, accurate analysis is critical for renderers to optimize their process and insure quality. 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 rendering and animal by-products industries.

SpectraStar XL

The Unity Rendering Analyzer is based on the SpectraStar XL, a state of the art stand-alone NIR analyzer optimized for the analysis of ground and unground natural products. The SpectraStar XL is calibrated to NIST traceable reference standard materials and utilizes TRUE NIR™ components for outstanding performance and reliability, providing high uptime, complete confidence and quick payback to the operators.

The Unity Scientific SpectraStar™ RTW (Rotating Top Window) system gives the ultimate in sampling flexibility and allows the customer to make measurements of all finished feed and feed ingredients.

Plug and Go Calibrations

The Unity Rendering Analyzer is powered by the Ingot® calibration package from Aunir™. This package includes a full suite of calibrations for all animal meals including meat and bone meal, poultry meal, feather meal, blood meal, fish meal and others. Constituents include moisture, fat, protein, crude fiber, and ash.

All Ingot calibrations are backed by Aunir's 30 years of experience and are guaranteed to be accurate. Calibration experts are on call to specifically tailor the calibrations to our customer's needs.

SpectraStar™ XL

Rendering Analyzer

How to Order

The Rendering Analyzer package includes everything you need to start analyzing animal by-products and meals right out of the box.

Rendering Analyzer

US-2500-FED1
SpectraStar 2500 XL
(1100 nm - 2500 nm)

Rendering Analyzer XLR

US-2500-FED1
SpectraStar 2500 XL-R
(680 nm - 2500 nm)



Ready to Use

The Unity Rendering 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 Rendering Analyzer is a valuable tool to control every step in the animal meal manufacturing process, from in-process optimization to final product verification.



The Rendering Analyzer package includes the following:

- SpectraStar 2500 XL (1100 nm - 2500 nm) with built in 17" touch screen, prediction software, multi-cup adapter, US-RTIR-0016 adapter ring, Unity check cell, Unity R99 standard.
- 2 Large cup US-LGOP-0001 for analysis of animal by-products
- Full Ingot Calibration package for animal meals and by-products
- One year calibration support and guarantee from AuNIR™



Specifications (Full Specifications in SpectraStar XL Brochure)

Technology	Pre-dispersive scanning monochromator with nominal bandwidth of 10 nm (FWHM)
Wavelength Range	1100 - 2500 nm; 680 - 2500 nm XLR optional
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 - 2500 nm

User Interface

Built-in Computer	Windows® 7 Professional, Solid State HDD, 17" high resolution touch screen monitor
Software	InfoStar™ prediction and data management package
Network Capabilities	OPC Compliant; LIMS Compatible; 5 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

117 Old State Road
Brookfield, CT 06804
USA

Phone: 203-740-2999
Fax: 203-740-2955
www.unityscientific.com
Email: info@unityscientific.com

Local Contact Information: