



# Forage Analyzer Package

EQUIPMENT SERIES



- Grasses, Hays, Legumes and Grain
- Fermented and Non-Fermented
- Dry Matter, Protein, Crude Fiber, Ash, Sugar, NDF, ADF, ADL, Dry Matter Digestability, and Other Parameters in Under 30 Seconds
- Ready to go Pre-Calibrated with Ingot® Calibrations from Aunir™



## Process and Quality Control

Fast, accurate analysis of forages is critical to producing consistent and optimal feed rations to livestock producers. Optimizing the ration will save ingredient costs and produce maximum weight gain or milk production. Near Infrared (NIR) analysis is a proven technique designed to provide fast, accurate, and reliable results for the dairy and livestock industry.

## BENEFITS:

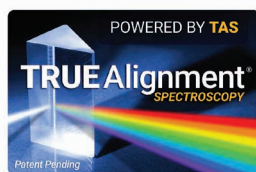
- Rapid payback
- At-line ready
- Simple to use
- Flexible sample handling
- Easy data integration
- Low maintenance
- ISO 12099 Compliant
- Guaranteed calibrations

Testing forage quality prior to mixing Total Mixed Rations

Optimizing feed quality and parameters to nutritional needs

Maximizing weight gain, milk production and animal health

Lowering raw ingredient costs for livestock rations



## SpectraStar™

The Unity Forage 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 forage and feed ingredients.

## Plug and Go Calibrations

The Unity Forage Analyzer is powered by the Ingot® calibration package from Aunir™. This package includes a full suite of calibrations for dried grass, hay, legume and grain forages, both ensiled and fresh. A comprehensive list of constituents are predicted including dry matter, protein, crude fiber, ash, total sugars, NDF, ADF, ADL and dry matter digestability. The Unity Forage analyzer provides instant access to a complete nutritional profile for all your forages.

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.



# Forage Analyzer

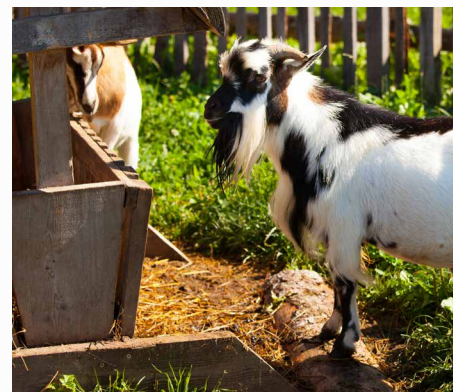
## Ready to Use

The Unity Forage Analyzer is robust enough to be used both in the control room 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 maximum flexibility in reporting results. The Forage Analyzer is a valuable tool to control every step in the feed manufacturing process, from raw ingredients to final rations.

### The Forage 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 cups US-LGOP-0001 for analysis of dried forages
- Full Ingot® Calibration package for dried forages
- One year calibration support and guarantee from Aunir™

An Ingot fresh forage calibration package is also available. Please ask your Unity sales professional for more information



## HOW TO ORDER

The Forage Analyzer package includes everything you need to start analyzing all forages right out of the box.

### FORAGE ANALYZER

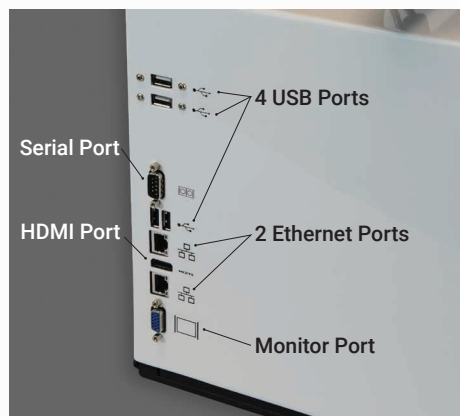
US-2600-FOR1

SpectraStar 2600 XT  
(1100 nm – 2600 nm)

### FORAGE ANALYZER XTR

US-2600-FOR2

SpectraStar 2600 XT-R  
(680 nm – 2600 nm)



## 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; 680 - 2600 nm XTR 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 - 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

113 Cedar Street | Milford, MA 01757 USA  
Phone: 203-740-2999 | Fax: 203-740-2955  
www.unityscientific.com | email: info@unityscientific.com

Unity, True Alignment, UScan, UCal, SpectraStar, Infostar and Smartchem are trademarks of Westco Scientific Instruments, Inc., d/b/a Unity Scientific.

All other trademarks are the property of their respective companies.

©Copyright 2019 All rights reserved. Form #ES\_009\_07.10.19