



# Dairy Analyzer

EQUIPMENT SERIES



- Milk and Whey Powders, Butter, Cheese, Ice Cream Mixes, Cultured Products
- Fat, Moisture, Protein, Total Solids and other Parameters in Under 30 Seconds•
- Ready to go Pre-Calibrated with Unity Calibrations

\* Deluxe Model



## Process and Quality Control

Fast, accurate analysis is critical for dairy plant managers to optimize the production and ensure 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 dairy 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 and controlling drying process for milk powders

Monitoring fat and moisture content for butter and spreads

Test quality of ice cream mixes and cultured products

Analyzing whey and whey powders to optimize production



## SpectraStar™

The Unity Dairy 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 for complex samples and allows the customer to make measurements for many products throughout the dairy plant.

## Plug and Go Calibrations

The Dairy Powders Analyzer comes ready to use with Unity calibrations for non-fat dry and whole milk powders along with WPC, MPC 56 and MPC70 powders and includes 1 year calibration support.

The Dairy Analyzer package adds calibrations for ice cream mix, salted and unsalted butter and cheese.

The Whey Processing Analyzer comes complete with calibrations for liquid whey along with various protein powders.



# Dairy Analyzer

## Ready to Use

The Unity Dairy 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 Dairy Analyzer packages includes the following:

- SpectraStar XT with built in 17" touch screen, prediction software, multi-cup adapter, powder cup adapter, Unity TAS Standards

The **Dairy Analyzer Basic** package includes:

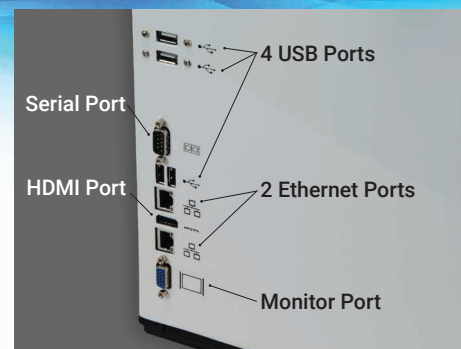
- SpectraStar 1400XT (Static) and powder cups US-MPCP-0001
- Unity calibrations for milk powders, WPC and MPC.
- 1 year free calibration support

The **Dairy Analyzer** package includes:

- SpectraStar 2600XT (Rotating) and large sample cups US-LGOP-0001
- 25 mm cup US-SRCP-00025
- Gold reflector stand US-TSTD-0003
- Adapter ring for petri dish
- Unity calibrations for milk powders, WPC and MPC, ice cream mix, cheese and butter
- 1 year free calibration support

The **Whey Processing** package includes:

- SpectraStar 2600 XT-R (Rotating) and large sample cups US-LGOP-0001
- 25 mm cup US-SRCP-00025
- Gold reflector stand US-TSTD-0003
- Adapter ring for petri dish
- Unity Calibrations for liquid whey protein concentrate and various whey protein powders
- 1 year calibration support



## HOW TO ORDER

Simply choose the analyzer package below for ready to go analysis of all your flour and wheat samples

### DAIRY POWDER ANALYZER PACKAGE

US-14XT-FLR1

SpectraStar 1400 XT (Static)  
(1400 nm – 2600 nm)

### DAIRY ANALYZER PACKAGE

US-2600-DRY1

SpectraStar 2600 XT (Rotating)  
(1100 nm – 2600 nm)

### WHEY PROCESSING ANALYZER

US-2600-DRY2

SpectraStar 2600 XT-R (Rotating)  
(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	1400 - 2600 nm (1400XT); 1100 - 2600 nm (2600XT); 680 - 2600 nm (2600XL-R)
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 (2600 XT and XT-R)

## 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	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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