

Pet Food Analyzer Near Infrared Analysis (NIRA™)

POWERED by **INGOT**
Driven by **UCal**



Unity designs at-line analyzers that are easy to operate and provide fast results so you can run your process more efficiently.

Fast, accurate analysis is critical for pet food manufacturers 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 pet food industry.

BENEFITS

- Complete analysis package
- Calibrations included
- Network ready
- Easy to use and customize
- Low maintenance
- Designed for at-line analysis
- Superior accuracy, precision, and stability
- Easy NIR database transfer from older equipment

Unity delivers proven solutions for the feed, ingredients, pet food and forage markets. NIR provides excellent payback for pet food manufacturers. The use of NIR ensures consistent quality in manufacturing and reduced re-work costs. Raw material suppliers can be verified to ensure they are providing quality materials. The speed of analysis reduces the cycle time and helps to increase the efficiency of the plant. In less than a minute, our NIR systems provide simultaneous results for moisture, protein, fat, fiber, ash, and other parameters. Our Pet Food Analyzer is ideal for every step in the pet food manufacturing process, including

- Raw material testing to verify supplier integrity
- Raw material testing to guide proper ration supplementation
- Raw material testing to control meal formulation
- Monitoring and controlling mixers and optimizing the addition of liquid fat
- Monitoring and controlling moisture levels in extruders and driers
- Verifying production batch values and optimizing fat spraying on pellets
- Verifying and documenting finished pet food label claims

The Unity Pet Food Analyzer is fast, allowing for 100% measurement of incoming ingredients and finished pet food. This speed, combined with guaranteed accuracy, allows for complete control of the plant, maximizing profits and providing fast payback.

The Unity Pet Food Analyzer is powered by the Ingot calibration package from Aunir. This package includes a full suite of calibrations for finished pet food and ingredients. Finished dry pet food calibrations are available for dogs, cats, birds, rabbits, and other small mammals. With calibrations for over 70 different ingredients, the Ingot calibration package covers virtually all ingredients used in the pet food plant.

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™

Pet Food Analyzer

Near Infrared Analysis (NIRA™)

How to Order

Pet Food Analyzer US-APET-001

The Unity Scientific Pet Food Analyzer, powered by Ingot calibrations takes all of the guess work out of NIR analysis. With calibration performance that is guaranteed to be accurate, customers can be confident enough to completely control their process, providing great financial benefit to the plant.

The Unity Pet Food 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 Pet Food Analyzer is a valuable tool to control every step in the pet food manufacturing process, from raw ingredients to finished feed.

The Unity Scientific SpectraStar RTW (Top Window system) gives the ultimate in sampling flexibility and allows the customer to make measurements of all finished pet food and ingredients. The SpectraStar's quick analysis time provides real-time feedback that allows the process to be controlled, optimizing the process and providing rapid payback.

The Pet Food Analyzer Package includes the following:

- SpectraStar 2400 RTW (built in touch screen, prediction software, multi cup adapter, powder cup adapter, Unity check cell)
- Large open cup for analysis of finished pet food and ingredients
- Full Ingot Calibration package for finished pet food and ingredients

SPECIFICATIONS

Technology

Pre-dispersive Scanning Monochromator with nominal bandwidth of 10 nm (FWHH)

Wavelength Range	1200 - 2400 nm (Feed Analyzer)
Light Source	Tungsten halogen lamp with MTBF rating of 10,000 hours (User changeable)
Grating	Holographic NIR for use from 1200-2400nm
Detector	InGaAs (temperature stabilized)
Scan Time	Less than 0.8 seconds/scan
Analysis Time	10-30 seconds
Data Interval	1 nm
Photometric Noise	<20 micro AU at 1640 nm
Temperature Range	0-40°C

User Interface

Operating System	Windows 2000
Display	14.5 inch VGA with touch screen
Software	InfoStar prediction and data management package
Optional	Keyboard and mouse

Dimensions and Power Requirements

Size	W 330 mm x H 368 mm x D 381 mm (W 13" x H 14.5" x D 15")
Weight	13.6 kg, 30 lbs.
Power Voltage	100-240 V ac, 50/60 Hz

Network Capabilities

OPC compliant
LIMS compatible
3 USB ports
1 Ethernet (RJ45) connector interfaces



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

Unity Scientific, SpectraStar, InfraStar, CalStar, UniStar, UCal, UScan, TransStar, QStar, SmartSampler, and InfoStar are all trademarks of Westco Scientific Instruments, Inc., d/b/a Unity Scientific.

All other trademarks are the property of their respective companies.

©Copyright 2012 All rights reserved