



Analyze animal meals and by-products



Results in 30 seconds for moisture, protein, fat, fiber, starch, ash and more



Designed for ease of use

- Results in 30 seconds or less
- Monitor quality of ingredients
- Monitor moisture to control cookers and dryers and reduce costs
- Confirm quality of finished product to reduce claims
- Build COAs for finished product
- Transfer existing databases from other NIR instruments
- Flexible data management

## Next Generation NIR Analyzer

The Phoenix 5000 NIR Rendering Analyzer is an ideal solution for renderers that need highly accurate rapid results for a variety of products.

The Phoenix 5000 offers 30 second analysis of:

**Poultry meal, feather meal, blood meal,  
meat and bone meal, fats, oils, tallow**

It can test simultaneously for protein, fat, moisture, ash, FFA, IV, PV, insolubles and other parameters.

If you have already developed databases on other NIR platforms (FOSS™, Unity Scientific™), you can transfer them onto the Phoenix 5000 and begin generating reliable results immediately.

# EXPLORE THE PHOENIX

## Easy to Use Interface

- 12.3" Microsoft Surface Touchscreen
- Simple tab design
- Fast access to results
- Flexible data handling

All Phoenix instruments are manufactured at Blue Sun Scientific's headquarters in Jessup, Maryland.



## NIR Monochromator

The most trusted NIR technology used by the food and agriculture industries

## Innovative Sample Car

- Scans large and small cups
- Scans entire sample cup
- Integrated standards



## Fully Sealed

- Rugged and robust
- Ideal for in-lab or at-line analysis

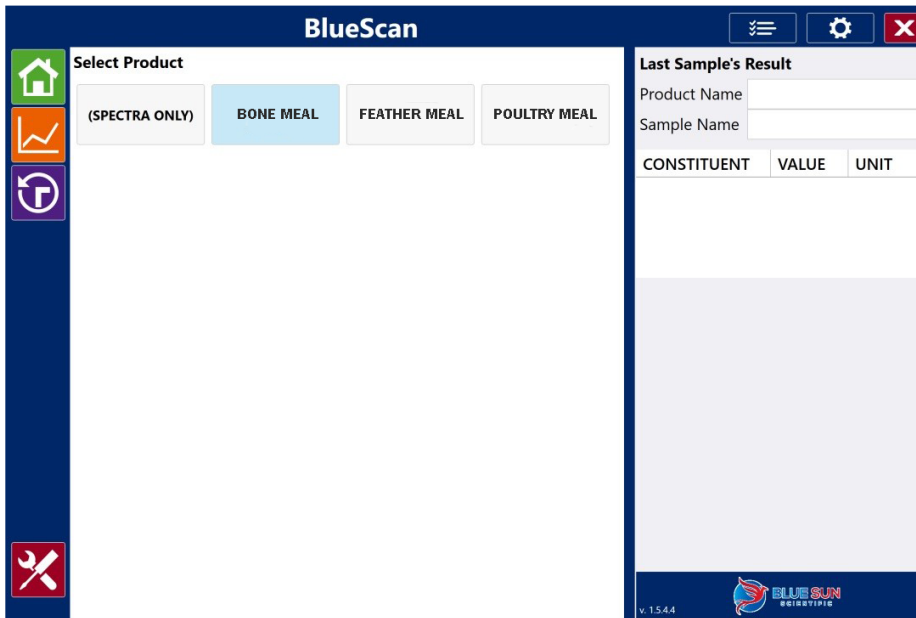
## Easy to Access Lamp

The 5k-10k hour lamp can be replaced in under 5 minutes with no special tools needed.

HIGHLY ACCURATE, RUGGED AND EASY TO MAINTAIN

# Introducing BlueScan

*Software Designed for Ease of Use*



The Phoenix 5000 is powered by BlueScan software. BlueScan is designed to simplify routine analysis and is packed with features that make it ideal for monitoring quality and optimizing production.

BlueScan's tab design ensures your information is always a click away. You can easily view results, historical data, spectra, generate reports and run diagnostics with the press of a button.

## Keep Your Database

The Phoenix 5000 Rendering Analyzer comes ready to analyze common rendering products, including blood meal, crab meal, feather meal, fish meal, lamb meal, meat meal, pork meal and poultry meal.

Additionally, you can continue to use calibrations you have previously developed on other NIR instruments.

The Phoenix 5000 is backwards compatible with databases from many major NIR manufacturers, including FOSS™, and Unity Scientific™.



Monitor moisture to control cookers and dryers



Monitor quality of incoming ingredients



Confirm quality of finished product to reduce claims

# Specifications

## Hardware

Dimensions	14.0 in x 15.0 in x 20.75 in ; 356 mm x 381 mm x 527 mm (LxWxH)
Weight	34 lbs ; 15.4 kg
IP Rating	62
Power Connection	Via external power supply; Input:100-240VAC, 50/60Hz, 65watt Output: 24VDC, 2.7A.
Light Source	Tungsten Quartz Halogen Lamp, MTBF > 5k-10k hours
Measurement Mode	Reflectance or Transflectance
Detector	High Performance InGaAs extended ranged detector
Wavelength Selection	Scanning diffraction grating monochromator with nominal bandwidth of 10nm (FWHH). Configurable Data presented in 0.5nm, 1nm or 2nm increments

## Performance

Wavelength Range	1100-2500 nm
Number of Data Points	Up to 2800
Analysis Time	10-60 seconds (24 scans / sample = 32 seconds)
Wavelength Reproducibility	< 0.02 nm (based on Blue Sun Scientific specific diagnostic test)
Wavelength Accuracy	< 0.3 nm for Blue Sun selected published peak positions of NIST SRM 1920a standard
Photometric Noise	< 15 $\mu$ Au in standard range

## User Interface






Display	12.3" Microsoft Surface Pro Touch Screen running Windows 10
Data Export Options	LIMS, Modbus, Excel

## Installation Requirements

Ambient Temperature	10-40°C
Storage Temperature	-20-40°C
Ambient Humidity	< 85% RH
Mechanical Environment	Stationary during use
EMC environment	Laboratory use, Industry requirements

## Blue Sun Guarantee

Every Phoenix 5000 is backed by our industry leading warranty program which guarantees you receive fast, reliable support from industry experts you can trust at a fair market price. It includes free:

-  Phone Support
-  Remote Support
-  Software Upgrades
-  Calibration Development (1 Year)
-  Warranty on Parts (1 Year)