

# Phoenix 5000

NIR Analyzer



### Results in 30 seconds for:

- **✓** Moisture
- ✓ Ash

✓ Fat

- ✓ Fiber
- **✓** Protein
- ✓ and more

- Monitor incoming ingredients
- Optimize your production
- Test the quality of final product
- Transfer your existing databases
- Ideal for at-line and in the lab
- Rapid ROI
- Flexible data handling
- User friendly software design
- ▶ IP62 rated
- Minimal sample preparation

### **Next Generation NIR Analyzer**

The new Phoenix 5000 NIR Analyzer is an ideal solution for manufacturers and laboratories that need rapid, accurate and reliable analysis.

The Phoenix 5000 employs a scanning monochromator, which is the NIR technology most trusted by agriculture and food companies and labs around the world.

It can simultaneously test for moisture protein, fat, fiber, starch, sugar, ash and more.

For customers who have already developed databases on other NIR platforms (FOSS<sup>TM</sup>, Unity Scientific<sup>TM</sup>, etc.), databases can be transferred onto the Phoenix 5000 and reliable results can be generated 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.



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



### **Fully Sealed**

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

#### **Innovative Sample Car**

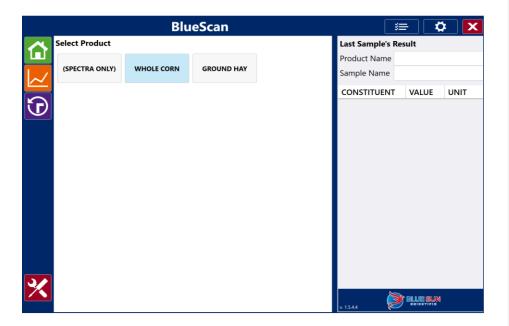
- Scans large and small cups
- Scans entire sample cup
- Integrated standards



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

## 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 making it ideal for monitoring quality and optimizing production.

BlueScan's tab design ensures your information is just 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 NIR Analyzer comes standard with calibrations for many industries.

If you have existing calibrations that you have built and would like to keep, you can with the Phoenix 5000.

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

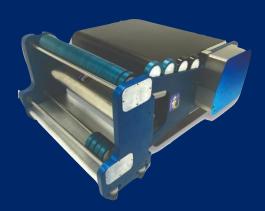


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# Integrated Diagnostics

To ensure reliability and minimize downtime, the Phoenix 5000 comes with check standards integrated into the instrument.

### **Auto-Sampler**



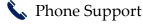
The Phoenix 5000 is also available in a side loading configuration. The side loading Phoenix 5000 can be configured with a 5, 30 or 50 position auto-sampler.

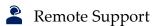
# **Specifications**

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 µAu 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**:





Software Upgrades

■ Warranty on Parts (1 Year)