# Phoenix 5000

## NIR Feed Analyzer

**BLUE SUN** SCIENTIFIC

- ✓ **Analyze feed ingredients, finished feed and by-products**

- ✓ **Results in 30 seconds for moisture, fat, protein, fiber, starch and more**

## Next Generation NIR Analyzer

- ❯ Results in 30 seconds or less
- ❯ Monitor incoming ingredients
- ❯ Determine least cost formulations
- ❯ Control moisture in driers and extruders
- ❯ Verify finished product
- ❯ Transfer your existing databases from any NIR instrument
- ❯ User friendly software design
- ❯ Flexible data management

The Phoenix 5000 NIR Feed Analyzer is the ideal solution for feed producers that need highly accurate rapid results before, during and after production.

The Phoenix 5000 offers 30 second analysis of

**Feed, feed ingredients, and by-products**

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

If you have already developed databases on any other NIR platforms (FOSS™ Unity Scientific™), you can easily 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.
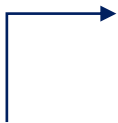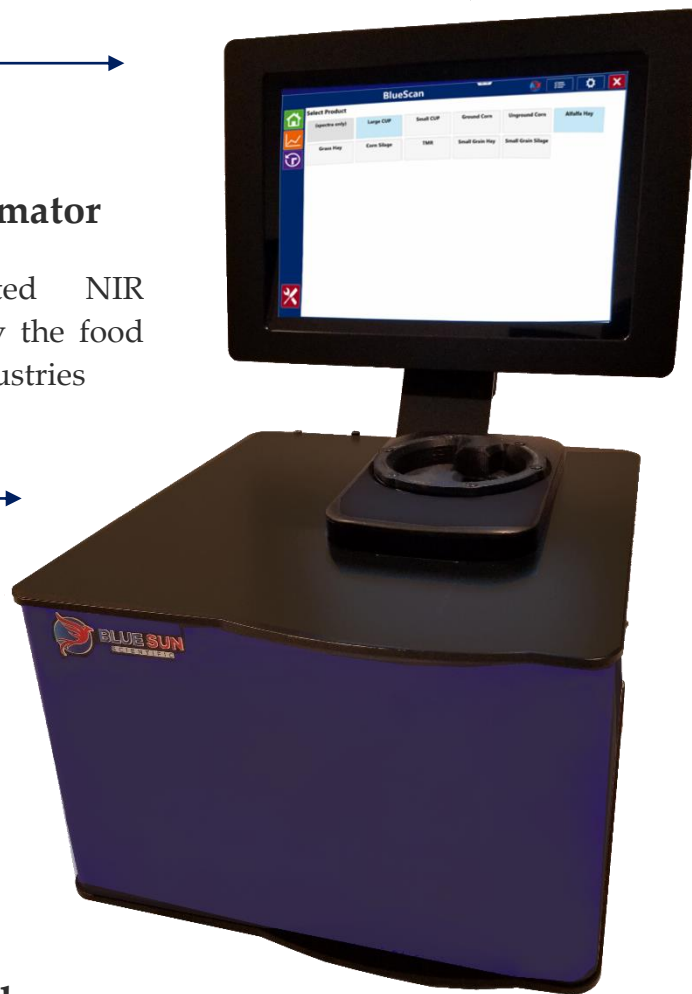
### NIR Monochromator

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

### Easy to Access Lamp

The 10,000-hour lamp can be replaced in under 5 minutes with no special tools needed.

### Fully Sealed

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

## HIGHLY ACCURATE, RUGGED AND EASY TO MAINTAIN

# Introducing BlueScan

*Software so simple, anyone can use it*
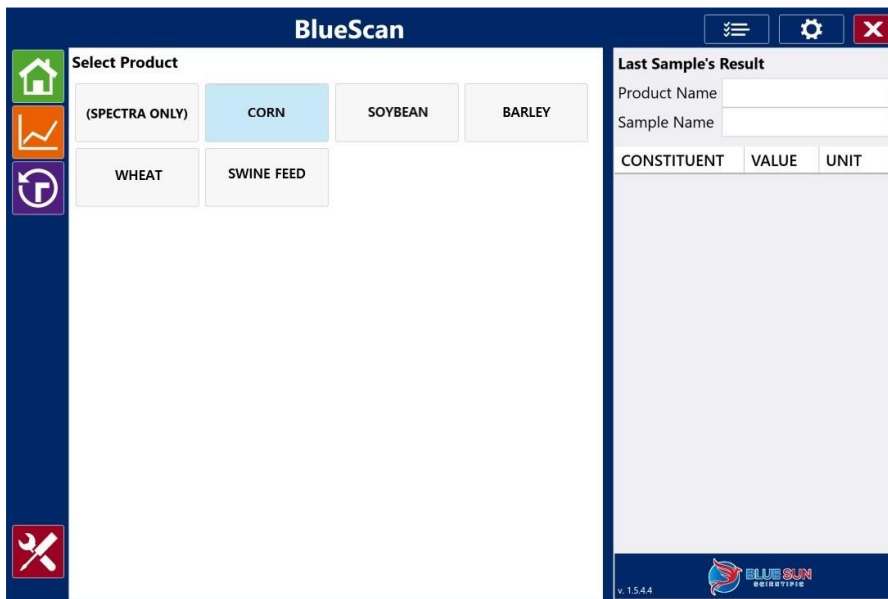


The Phoenix 5000 is powered by BlueScan. BlueScan is designed to simplify routine analysis and is packed with features making it ideal for monitoring quality and optimizing production.

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 Feed Analyzer comes ready to analyze feed ingredients, finished feed and by-products.

If you have existing calibrations that you have built and would like to keep, you can with the Phoenix 5000.
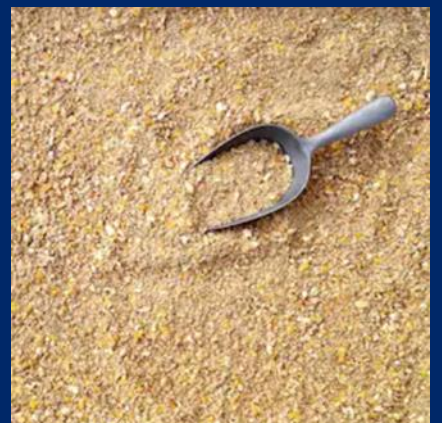
The Phoenix 5000 is backwards compatible with databases from many major NIR manufacturers, including FOSS™, and Unity Scientific™.



Monitor and verify incoming ingredients
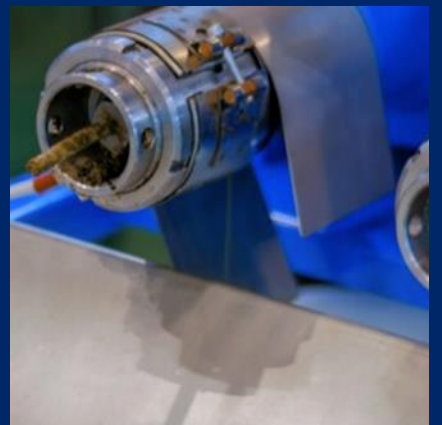


Control moisture in driers and extruders



Verify finished feed is within specifications

# 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 > 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**:

📞 Phone Support

👨‍💼 Remote Support

🖥️ Software Upgrades

🔄 Calibration Development (1 Year)

🖩 Warranty on Parts (1 Year)