Phoenix 5000

NIR Spice Analyzer

BLUE SUN SCIENTIFIC

- **Analyze ground and unground spices and spice mixes**

- **Results in 30 seconds for moisture, ash, volatile oil and more**

- Results in 30 seconds or less
- Monitor quality of incoming ingredients
- Control moisture and volatile oil during milling
- Ensure consistency for spice mixes
- Build COAs for finished product
- Transfer existing databases from other NIR instruments
- Flexible data management

Next Generation NIR Analyzer

The Phoenix 5000 NIR Spice Analyzer is an ideal solution for spice millers and producers that need highly accurate rapid results for a variety of products.

The Phoenix 5000 offers 30 second analysis of:

A variety of spices including black pepper, cinnamon, cumin, oregano and many more.

It can test simultaneously for moisture, volatile oil 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
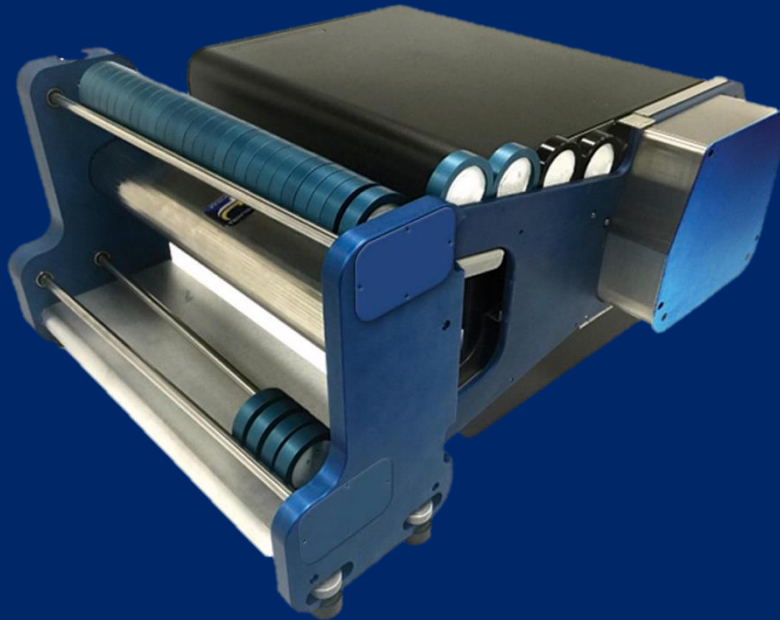- Scans entire sample cup
- Integrated standards

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

30 Position Auto-Sampler

Some labs receive hundreds to thousands of samples each season. This volume of testing can quickly consume an operator's entire day.

To meet this demand, the Phoenix 5000 is also available in a side-loading configuration with an optional autosampler.

Our state-of-the-art auto sampler can be quickly programmed to run up to 30 samples in standard ISI ring cups.
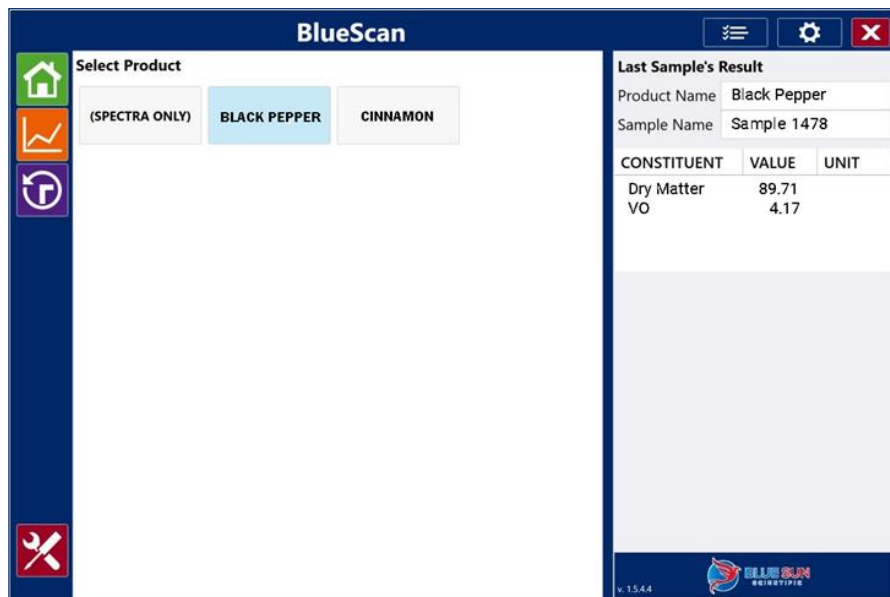
Each cup can be scanned via RFID reader. An integrated sensor on the Phoenix 5000 matches the cup's RFID to the scan results.

The operator can leave the instrument to perform the tests unattended while they concentrate on other testing and responsibilities around the lab.

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 Spice Analyzer comes ready to analyze many spices and seasoning.

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™.

Control volatile oil in black pepper

Monitor moisture in cinnamon

Ensure consistency in spice blends

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**:

📞 Phone Support

👤 Remote Support

🖥 Software Upgrades

🔄 Calibration Development (1 Year)

🔢 Warranty on Parts (1 Year)