BLUE SUN
SCIENTIFIC

Phoenix 5000
NIR Chocolate Analyzer

✓ **Analyze cocoa beans, nibs, cocoa butter and finished chocolate**

✓ **Results in 30 seconds for moisture, fat, sugar and FFA**

Next Generation NIR Analyzer

- Results in 30 seconds or less

- Monitor moisture in incoming cocoa beans

- Control moisture during tempering

- Analyze in-process product for quality and consistency

- Verify fat, cocoa, and sugar in final product

- Transfer your existing databases from any NIR instrument

- User friendly software design

The Phoenix 5000 NIR Chocolate Analyzer is the ideal solution for chocolate makers that need highly accurate, rapid results before, during and after production. The Phoenix 5000 offers 30 second analysis of:

Cocoa beans, nibs, cocoa liquor, cocoa butter, pressed cake, cocoa powder and finished chocolate

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

Fully Sealed

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

Easy to Access Lamp

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

Introducing BlueScan

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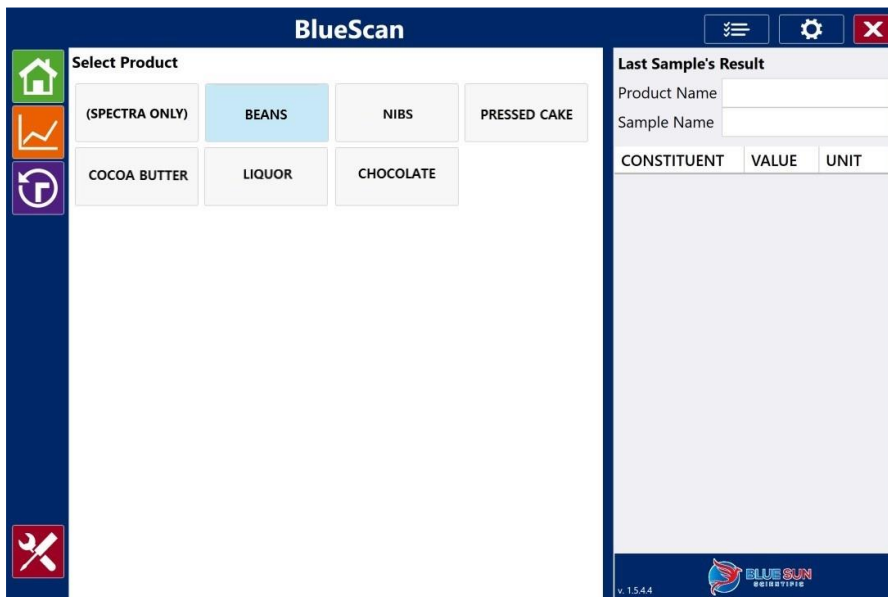
The Phoenix 5000 is powered by BlueScan. BlueScan is designed to simplify routine analysis and is packed with features making it ideal for monitoring quality and optimizing production.

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 Chocolate Analyzer comes ready to analyze the many stages of chocolate production.

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 moisture and quality in cocoa beans

Analyze nibs, cocoa liquor and cocoa powder

Verify fat, cocoa, and sugar in finished product

Specifications

Hardware	
Dimensions	14.0 in x 15.0 in x 20.75 in ; 356 mm x 381 mm x 527 mm (LxWxH)
Weight	24 lbs ; 11 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)