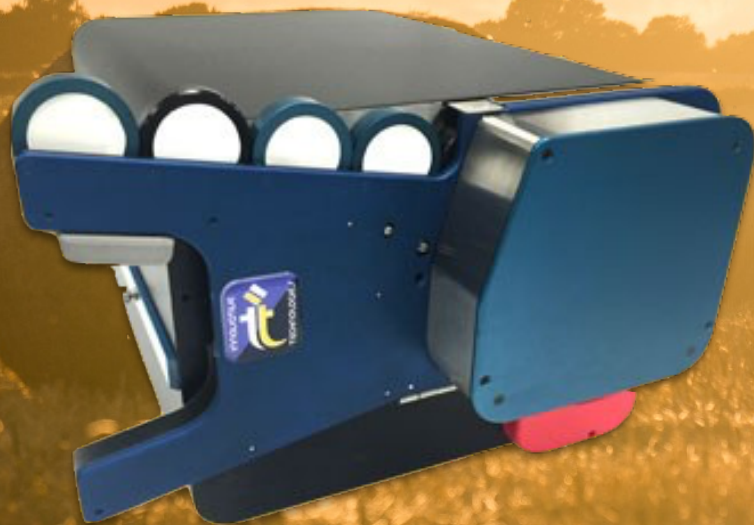


# Phoenix 5000

## NIR Forage Analyzer



- **Transfer existing calibrations**
- **Expert Calibration Handling**
- **State-of-the-art Auto-Sampler**
- **Flexible Data Handling**

### Next Generation NIR Analyzer

- Optimize least cost formulations
- 30 second analysis of all forages
- Transfer your existing calibrations from any NIR instrument
- Easy to use
- Multiple calibration options
- Integrated check standards
- Modern software features
- State-of-the-art auto sampler

The new Phoenix 5000 NIR Forage Analyzer is the ideal solution for forage labs that need highly accurate rapid results for a variety of forage samples.

If you have already developed calibrations on any other NIR platforms (Foss, Perten, etc.), you can easily transfer them onto the Phoenix 5000 and begin generating reliable results immediately.

The software is intuitively designed and easy to use. The Phoenix comes standard with a 5 position auto sampler (seen above). Higher capacity auto samplers (30 and 50) are available on request.

Each of our instruments comes backed by the Blue Sun Guarantee. (see page 4)

# Calibration Options

The reliability of every NIR instrument depends on both the instrument's hardware and the calibration library used. That's why the Phoenix 5000-SL is designed to utilize the widest range of calibrations possible. Even before installation, we will work with you to determine the calibration library that best fits your samples. Your available options are:

**1) Forage Consortium:** The Forage Consortium releases updated NIR calibrations for Forages every year. We've worked closely with them for years and can install their calibrations on the Phoenix 5000-SL. This is as close to a plug and play solution as you will find.

**2) Transfer from Foss 5000, 6500:** The Foss 5000 and 6500 were widely used by Forage Labs and nutritionists for over three decades. Many of these labs have built custom databases with hundreds to thousands of samples each. With the Phoenix 5000-SL, you can easily transfer your existing Foss 5000 and 6500 databases. You will find that they perform even better on the Phoenix 5000-SL.

**3) Transfer from any other NIR instrument:** Whichever NIR instrument your calibrations were developed on, we can seamlessly transfer them onto the Phoenix 5000-SL.

**4) Design your own:** Many labs and universities prefer to use their own wet chemistry data and design custom calibrations that are unique to their customers. If this is important to you, we offer a software and training bundle on our calibration



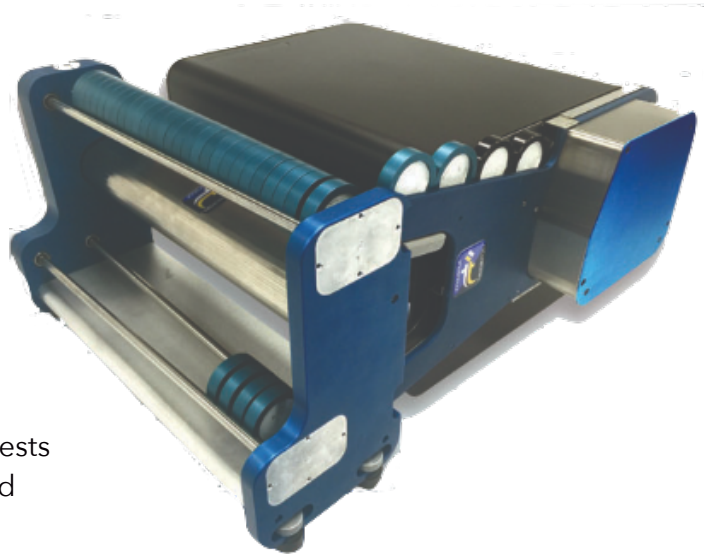
# 30 and 50 Position Auto-Sampler

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

Our state-of-the-art auto sampler can be quickly programmed to run up to 30 or 50 samples in standard ISI cups.

Each cup can be scanned via RFID reader. An integrated sensor on the Phoenix 5000 matches the cup 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.



## Internally Referenced

Like most top of the line NIR instruments, the Phoenix 5000-SL comes with a set of reference standards for calibrating the instruments. These should be routinely run (once per week)

This guarantees your results and lets you know your instrument is performing well.

But what do you do if your instrument fails the standardization?

Previous generations of NIR instrument lacked a way of resetting the internal hardware without a service technician.

The Phoenix 5000-SL comes stock with standards integrated into its design. It automatically runs internal reference scans with these standards and **auto-aligns itself** as needed.

This reduces the need for biasing and guarantees consistent reliable data every time.

# BLUE SUN GUARANTEE

The Blue Sun Guarantee is the industry's leading service and warranty program. It guarantees you start up quickly and avoid downtime and repairs. Every Blue Sun instrument comes standard with the Blue Sun Guarantee, which includes:



- Free phone support
- Guaranteed Installation
- 1 Year Calibration Support and Development
- A loaner instrument if yours goes down
- 1 Year Warranty on Parts

## SPECIFICATIONS

Phoenix Measurement Modes Supported	Reflectance w/ rotating sample cup; Transmission/Transflectance in Fiber-optic mode
Phoenix 5000 Standard Configuration	Phoenix 5000 Spectrometer w/ 5 cup rotating sampling unit
Other Configurations	Phoenix 5000 Top Window
Accessories (Supported)	FC-30 Allowing for 30 cup auto feed and unload
Wavelength Selection	Scanning diffraction grating monochromator with nominal bandwidth of 10 nm (FWHH). Configurable data presented in 1nm or 2nm increments.
Instrument Scanning Range	1100-2500 nm
Computer Requirements	Operating System: Windows 7 or better Memory (RAM): 2 GB or better Fixed Disk Drive Memory: 40 GB or better Ports: VGA display port, USB A, Ethernet RJ45 x 1
Peripheral options	ITG RFID reader/writer, ITG specified bar code reader.
Lamp Life	(Continuous Operation): 10,000 Hrs. (MTBF)
Size	12.25 in x 15.0 in x 10.125 in (L x W x H) ; 37 lbs
Power Supply	100-240VAC - 50/60Hz Single phase with ground - Fuses 2.0Amp 230VAC, 4.0Amp 115VAC