

# Feed & Forage Analyzer Spinning Model



*The Spinning Model for ground samples can be used to analyse parameters like protein, fat, moisture, sugar, starch and fibre in feed ingredients and mixed feeds.*

## Features

- Fast and easy operation; results for several constituents available in one minute
- Transferable calibrations; use the same application model on different instruments
- User-friendly interface with the ISI Software
- Scanning monochromator; ensures you get the complete picture
- Analysis of complete feeds; Poultry Feed, Pig Feed, Cattle Feed, Pet Food, Fish Feed, Hay, Silage
- Analysis of feed ingredients; Soy meal, Corn, Wheat, Barley, Rapeseed, Fish meal, Meat and Bone Meal and many more



## Hardware

The Spinning Model is configured for NIR reflectance measurements using a spinning sample module that accepts cups for ground samples. The instrument is available in two versions. The model 5000 with a scanning range of 1100-2500 nm and the model 6500 with a scanning range of 400-2500 nm.

## Software

The instrument comes with ISIScan™, which is a dedicated routine operation software. ISIScan offers a very user-friendly interface and includes all the necessary features for routine analysis like ISI standardisation (Patent no.4,866,644), instrument diagnostics, real time outlier detection, bias/slope adjustment, calibration monitoring and LIMS import/export. Different calibration technologies including PLS, MPLS, LOCAL and ANN can be used.

The optional WinISI™ III calibration development software makes it possible for anybody with just minimum chemometric knowledge to make sophisticated calibration models. WinISI is a comprehensive chemometric software for database optimization and calibration development based on MLR, PLS or MPLS regression methods as well as for managing, optimizing and evaluating LOCAL databases.

*No application models are included in the standard configuration*



**Ring cup**  
This sample cup can be used for all ground samples.



**Micro inserts, set of 3**  
(cups not included)  
Can be used in the ring cup for small samples.



**Gold reflector**  
0.1, 0.2 or 0.5 mm with cam-lock cup. Transflectance cell for liquid application like liquid fat. The design guarantees the same pathlength after a glass replacement.



**Cam-lock cup**  
Reflectance cell for ground sample. This cell is recommended for use as a check cell.

**System description:**

**Feed & Forage Analyzer Spinning Model includes:**

Model 5000 Scanning Monochromator  
Reflectance Detector Module  
Spinning Sample Module  
ISIScan™ Routine Operation Software  
Check Cell Kit  
Installation Manual  
Ring Cup Kit

**Options:**

Spinning Model 6500 with ISIScan™  
WinISI™ III Calibration development software

**Technical data:**

Wavelength Range:	5000	1100 - 2500 nm	Operating Temperature:	60-90°F; 15-32°C, nominal
	6500	400 - 2500 nm	Dimensions:	267 × 426 × 419 mm
Scan Speed:	1.8 scans/second		(w × d × h):	10,5 × 16¾ × 16,5 inches
Detector:	Lead Sulfide,	1100 - 2500 nm	Weight:	17 kg
	Silicon,	400 - 1100 nm		37 lbs
Spectral Bandwidth:	10 nm ± 1 nm in Reflectance			

**Minimum computer requirements**

Pentium processor or equal, 128 MB RAM, min 1 GB free hard drive space, SVGA graphics or better, minimum 1 available USB port, Windows® 2000 (SP2 or higher ) or Windows® XP.  
256 MB RAM, 5 GB free hard drive space and Windows® XP are recommended for optimal performance.

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