

## NIRS™ DS2500

The dedicated analyser providing full confidence in flour and grain analysis



ANALYTICS BEYOND MEASURE

The NIRS™ DS2500 analyser helps millers to boost yield by offering unsurpassed, rapid analysis of ash in addition to reliable flour analysis for protein and moisture. Ideal for routine testing of flour and grains in the laboratory or in the production environment.

### Ready to use calibrations for all key parameters

Robust calibrations coupled with groundbreaking performance in near infrared technology guarantees highly accurate measurement of ash and other key parameters across a broad wavelength range of 400 to 2500 nm by anyone, anywhere, at anytime.

### Optimise your NIR management with networking software

FossManager™ networking software makes it possible to make immediate adjustments on instrument calibration and configuration remotely. Ensure consistent performance of all instruments in your network. Protect your database and calibration models with automatic back up of data.

### Save time and money with innovative usability features

With NIRS DS2500 you can hit targets precisely and fine-tune your production to improve profit and quality. By getting just 0.1% closer to target on ash content, you can expect a return on investment in under a year.

### Sample type

Direct measurements of flour and grain samples

### Parameters

Protein, moisture, ash, wet gluten, water absorption and many more

### Technology

NIR monochromator across the full spectral range from 400 to 2500 nm.

Factory standardisation ensures seamless transfer of calibrations.

Complete dust tight and water protected if exposed to water jets (IP65 certified)

# Specifications

Feature	Specification
Dimensions (w x h x d)	37.5 x 30 x 49 cm
Weight	27 kg
Degree of protection	IP 65
Measurement mode	Reflectance or transmittance (for liquids)
Wavelength range	400 - 2500 nm
Detector	Silicon (400 - 1100 nm), lead sulfide (1100 - 2500 nm)
Optical bandwidth	8.75 ±0.1 nm
Spectral resolution	0.5 nm
Number of data points	4200
Absorbance range	Up to 2 AU
Analysis time	<1 minute*
Wavelength accuracy	<0.05 nm
Wavelength precision (Based on a single analyser)	<0.005 nm
Wavelength precision instrument-to-instrument (Based on a group of analysers)	<0.02 nm
Photometric noise**	400 - 700 nm < 50 micro au 700 - 2500 nm < 20 micro au

\* Adjustable

\*\* Noise = RMS for 10 co-added, 10 second scans

Installation requirements	
Voltage supply	100-240 V AC*, frequency 50-60 Hz, Class 1, protective earth
Ambient temperature	5 - 40°C
Storage temperature	-20 to 70°C
Ambient humidity	< 93% RH
Mechanical environment	Stationary during use
EMC environment	Laboratory use, industry requirements

\*Mains supply voltage fluctuations not exceeding ±10% of the rated voltage.

Instrument management	
Networking software	FossManager™

FOSS

Tel.: +45 7010 3370

info@foss.dk · www.fossanalytics.com

GB, May 2018