

NIRS™ DS3

The dedicated analyser providing full confidence in flour and grain analysis



ANALYTICS BEYOND MEASURE

The NIRS™ DS3 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

IQX™ Device Management 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 DS3 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 types

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.

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

Specifications

Feature	Specification
Dimensions (w x d x h)	375 x 490 x 300 mm
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 Sulphide, PbS (1100 - 2500 nm)
Optical bandwidth	8.75 ± 0.10 nm
Data resolution	0.5 nm
Number of data points	4200
Number of subsamples	Default: 7 for small cup; 8 for large cup
Self test	12 minutes (variable)
Analysis time	<1 minute for 32 scans (8 subsamples, 4 scans per subsample)

Installation requirements

NIR TM DS3	
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.

Optimize your instrument performance	
Digital services	Streamline your operations and improve your profitability with our FOSS IQX TM digital solutions.
Service agreement	With a FOSS service agreement you will secure operational uptime, regulatory compliance, and analytical accuracy.