NIRS™ DS3

The dedicated analyser providing full confidence in meat by-product analysis

The NIRS™ DS3 provides NIR analysis of meat and meat by-products with exceptional accuracy. Designed for use in the laboratory, the NIRS DS3 is ideal for routine control.

Control the quality of meat by-products
Analyse samples from rendering production or other meat by-products with one simple analysis in less than a minute and increase your sampling frequency without extra cost. Get immediate results that enable you to adjust the production process or stop poor quality products at the gate.

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
Easy sample preparation and intuitive user interface means that anyone can perform analysis with a minimum of training. Remote instrument monitoring allows FOSS NIR experts to troubleshoot and diagnose performance issues without interrupting operations.

Sample types
Dry samples such as meat and bone meal. Liquid samples such as fats for petfood or energy production.

Parameters
Animal by-products: Fat, moisture, protein and ash.
Fats and oils: Free fatty acids, iodine value, peroxide value, moisture and colour.

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

Factory standardisation ensures seamless transfer of calibrations.

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 transflectance (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)
Network connections	FossManager™

Installation requirements

NIRS™ 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.

Optional services

Digital Services	FossAssure™
Care Solutions	FossCare™, SmartCare™