NIRS™ DS3

The dedicated analyser providing full confidence in the laboratory

The NIRS™ DS3 analyser is always ready, delivers results you can trust and offers many smart data sharing and calibration management options. NIR provides fast and accurate analysis of samples, making it ideal for sample preparation, quality control and adding more revenue.

Screen samples to improve turnaround time
Dealing with unknown samples makes it hard to determine your next steps in terms of reference analysis. Knowing the expected values of incoming samples, gives you full control of your sample analysis. Avoid re-runs, delayed release of samples and unnecessary use of chemicals to improve turnaround time.

Improve quality control with sample matching
Sample Matching Service makes it easy to match and compare results from your NIRS DS3 with reference analysis results. Automatic registration via integration and connectivity services eliminates the hassle and risk of error associated with manual matching of results.

Always ready with full confidence in results
Maintaining the high analytical performance of your NIR analyser can be time consuming and limit access to the instrument. With scheduled diagnostics, you can ensure that your instrument is always ready during working hours, with full confidence in your results.

Sample types
Direct measurements of a wide range of food and feed matrices such as bread, pasta, ready to go meals, sausage and more.

Parameters
FOSS global calibrations include: Fat, protein, moisture, ash and starch. Option to develop specialised calibrations such as amino acids, NDF, ADF, dietary fibre, sugar and more for selected matrixes.

Technology
NIR monochromator across the full spectral range from 400 to 2500 nm. Measuring mode: Reflectance or transflectance (for liquids).

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™