NIRS™ DS3 F

Advanced feed analysis for everyone

The innovative NIRS™ DS3 F combines unique analytical performance with the latest software and networking services, making reliable test data more easily available than ever. It's a complete solution that covers your analytical needs from raw material intake to final product control.

Effective analytical operations
Optimise analytical workflow for maximum efficiency at minimal cost. Ensure instrument availability with Smart Start, reduce manual tasks using Automated Sample Transfer of data and manage instruments from any location using FossManager™ software.

Complete solution builds confidence
A wide spectral range makes NIRS DS3 F a versatile instrument that is ideally suited to feed analysis. Statistical reports based on data from multiple-instruments allow you to track the performance of individual units or a whole fleet of instruments.

Unique levels of uptime
Robust and reliable hardware is complemented by advanced diagnostics for troubleshooting and simple instrument maintenance. Avoid the risk of unscheduled downtime with SmartCare™ remote instrument monitoring.

Sample types
Raw materials, compound feed, pet food, aqua feed and forage. Tests are performed on ground, unground or liquid material with no or very limited sample preparation.

Parameters
FOSS Artificial Neural Network calibrations for analysis of protein, moisture, fat, fibre, starch and ash in under a minute.

Technology
NIR monochromator across the full spectral range from 850 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	850 - 2500 nm
Detector	Silicon (850 - 1100 nm), Lead Sulphide, PbS (1100 - 2500 nm)
Optical bandwidth	8.75 ± 0.10 nm
Data resolution	0.5 nm
Number of data points	3300
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 F	
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™