

**DILACO®**

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**FOSS**

# NIRS™ DA1650

Ready to use near infrared analysis for forward-looking feed mills



ANALYTICS BEYOND MEASURE

The NIRS™ DA1650 uses state-of-the-art near infrared technology to bring high accuracy NIR analysis into the feed mill or on-farm. Produce closer to specification and get a consistent final product quality.

## Control feed and forage quality

Analyse all incoming and outgoing deliveries with one simple analysis in less than a minute and increase your sampling frequency without extra cost. Get immediate results that enable you to stop poor quality products at the gate.

## Ready-to-use calibrations for feed and feed ingredients

The NIRS DA1650 can be pre-calibrated for the basic parameters that have the greatest impact on production costs. Based on a range of samples taken from all over the world, FOSS global calibrations are robust, require low maintenance and are ready to use right from day one.

## Easy to operate with intuitive touch screen

Easy sample preparation and intuitive touch screen interface allows anyone to run analysis with a minimum of training. Remote instrument monitoring allows FOSS NIR experts to troubleshoot and diagnose performance issues without interrupting operations.

## Sample type

Direct measurements of feed and forage samples in ground or unground form, for example direct measurement of pellets

## Parameters

FOSS global calibrations include: Fat, protein, moisture, ash, starch and crude fibre, as well as NDF and ADF for forage.

## Technology

Diode array (DDA) based NIR reflectance and transreflectance analyser with a versatile scanning range of 1100 - 1650 nm.

# Specifications

Feature	Specification
Dimensions (w x d x h)	230 x 530 x 280 mm
Weight	16 kg
Degree of protection	IP 65 (dust and water proof)
Measurement mode	Reflectance or transmittance (for liquid samples)
Wavelength range	1100 - 1650 nm
Detector	256 pixel InGaAs diode array
Optical bandwidth	10.44 $\pm$ 0.5 nm
Spectral resolution	0.5 nm/data point
Number of data points	1100
Absorbance range	Up to 2 AU
Analysis time	<1 minute*
Wavelength accuracy	<0.5 nm
Wavelength precision	<0.05 nm (standard deviation)
Wavelength temperature stability	<0.02 nm/ °C

\* Adjustable

## Installation requirements

NIRS™ DA1650	
Voltage supply	100 - 240 V AC*, frequency 50 - 60 Hz, Class 1, protective earth
Ambient temperature	5 - 40°C
Storage temperature	-20°C to 70°C
Ambient humidity	< 93% RH
Mechanical environment	Stationary during use
EMC environment	Laboratory use, industry requirements

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

Instrument management	
Networking software	FossManager™

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