

# NIRS™ DA1650 Oilseed Crush Analyser

Ready-to-use near infrared analysis for direct measurement of solid and liquid oilseed crush samples



The NIRS™ DA1650 Oilseed Crush Analyser allows you to take control of your oilseed crushing process with reliable measurements for whole grains, press cake, flakes, meals and oils. It is available with FOSS global calibrations that are robust, low maintenance and ready-to-use from day one.

#### Just one solution for liquid and solid samples

The NIRS™ DA1650 Oilseed Crush Analyser helps oil crushers to gain vital process data on liquid and solid material with just one cost-effective analytical unit. The intuitive touch screen interface makes it fast and easy for any user to switch between sample types.

#### Purpose built for your oil-crushing operation

The sealed NIRS DA1650 withstands vibration, dust or spills that can occur during regular use, ensuring accurate and robust oilseed analysis in the laboratory as well as in a harsh production environment.

#### Optimise your NIR management with networking software

With IQX™ Device Management the NIRS DA1650 is ideal for use in a group of instruments. Make immediate and remote adjustments on instrument calibration and configuration and ensure full transferability and consistent performance of all instruments in your network.

#### Sample type

Direct measurements of solid and liquid samples such as whole soybean, rapeseed, sunflower seeds, cottonseed, oilseed press cake and meals, crude vegetable oils and more.

#### Parameters

Solids: Protein, moisture, oil, fibre and ash  
Liquids: Moisture, peroxide value, iodine value, FFA, phosphorus.

#### 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 ±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

## Installation requirements

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 ±10% of the rated voltage.

## Optimize your instrument performance

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