

NIRS™ DS2500 L

Take advantage of the latest development in rapid oil testing



NIRS™ DS2500 L offers rapid multi-parameter testing of oil. Standardised units deliver consistent results with all monitoring and adjustments taken care of by connectivity-enabled support services. Ease of use and automatic logging of tests empower all staff to deliver valuable tests for constant optimisation of oil production processes.

Designed for optimal process control

Factory-standardised for consistent performance across units. Unique, convergent light-path for accurate results with both round vials and standard square cuvettes, while a robust design withstands vibration and dust (IP54).

Consistent performance for high quality standards

Automatic reference tests after each measurement, remote monitoring of instrument and calibration status by trained technicians. Monthly reports include troubleshooting for quality assurance and compliance purposes.

An expert tool that anyone can operate

Simply load sample, select type and press start. Automatic adjustment of sample temperature, rapid change of target temperature and traceable measurements that help to track correct usage and ensure compliance with standard operating procedures.

Sample type

Direct measurement of oils and liquid samples

Parameters

Free fatty acids (FFA)/acidity, iodine value, colour and more

Access to relevant reference analysis makes it possible to develop calibrations

Technology

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

Factory standardisation ensures seamless transfer of calibrations

Specifications

Feature	Specification
Analysis time	< 40 seconds
Sample containers	4 and 8 mm disposable vials. 1, 2, 5 and 10 mm cuvettes
Measurement mode	Transmission
Wavelength area	400 - 2500 nm
Detector	Si (400 - 1100 nm), InGaAs (1100 - 2500 nm)
Optical bandwidth	8.75 nm
Spectral resolution	0.5 nm
Wavelength accuracy	0.05 nm
Wavelength compatibility (instrument to instrument)	0.005 nm
Ambient temperature	5 - 40°C
Sample temperature (min.)	Ambient +10°C
Sample temperature (max.)	80°C
Degree of protection	IP54
Dimensions (w x d x h)	375 x 490 x 300 mm
Weight	27 kg
Wavelength precision instrument-to-instrument (Based on a group of analysers)	<0.02 nm
Photometric noise**	850 - 2500 nm < 20 micro au

Installation requirements

NIRS™ DS2500 L	
Voltage supply	100-240 V AC *, frequency 50-60 Hz, Class 1, protective earth
Ambient humidity	< 93% RH
Mechanical environment	Stationary during use
EMC environment	Laboratory use, industry requirements

Instrument management	
Networking software	FossManager™