FOSS

NIRS™ DS2500 L

Take advantage of the latest development in rapid testing of liquid samples



NIRS[™] DS2500 L offers rapid multi-parameter testing of oil and other liquid samples. Standardised units deliver consistent results with all monitoring and adjustments taken care of by connectivity-enabled support services. Automatic logging of tests empower staff to deliver valuable tests for 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 round vials, standard square cuvettes and flow cells. 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 edible oils, liquid sugars and other liquid samples.

Parameters

Free fatty acids (FFA)/Acidity, iodine value, peroxide value, phosphorous, oleic acid, linoleic acid, colour and more

For sugars, e.g. Pol, Brix and Reducing Sugars.

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 and 1 mm flow cell |
| 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 | 0.20 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) | 0.015 nm as std |
| 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™ |