## **FOSS**

## Infratec™ Sofia for grain receival



#### Easy, accurate and affordable

Infratec<sup>TM</sup> Sofia is a low cost analyser that brings the value of precision grain testing to grain receival sites of all sizes. Mobile, easy-to-use and aligned with the renowned Infratec<sup>TM</sup> 1241 analyser, Infratec Sofia gives you the information you need to get the possible return from your grain.

Sample	Parameters
Whole grain, wheat and barley	Protein and moisture

### Affordable accuracy

Knowing the quality of your grain is becoming invaluable when making critical decisions about segregation and marketing of grain. The Infratec Sofia gives you that power in the form of a low-entry cost analyser offering reliable measurements aligned with the Infratec 1241 grain analyser. The Infratec is the official system used for payment by bulk grain handlers around the world and has a number of approvals for trade purposes.

Infratec Sofia measurements are based on the same comprehensive data used to calibrate Infratec 1241 instruments, acquired over 25 years of product development in collaboration with the grain industry. As new calibrations are released, they are simply downloaded via the internet and transferred to the Infratec Sofia unit ensuring that your results are always accurate and reliable.

### Share in the value of routine analysis

Another delivery arrives – but what's it really worth and how should we store it?

With smart, on-the-spot grain analysis, you can pay exactly the right price for deliveries and make critical grain handling decisions to improve the overall value of your grain. Studies indicate that smart blending of grain according to specific market requirements can realise over \$50,000 in a single season.

Results are stored on the removable memory card, so grain quality data gathered from different farms can be used to help individual farmers with their farming strategies.

#### Mobile measurements for smarter receival

Mobile and robust, Infratec Sofia goes wherever you need it, making it an ideal solution for modern low-infrastructure receival sites.

Anyone can make a valid measurement. Pour in the sample, select the grain type and press 'start'. The result is clearly displayed and can be printed out. Previous results can also be recalled for review.

It uses less than half a litre of grain and no grinding or sample preparation is required.

#### Easy to use



1. Pour in the sample



3. Press start



2. Select grain type



4. Results displayed within minutes and printed out

# FOSS is your partner for accurate, reliable grain analysis.

Our experience in automated grain quality analysis is long and proven.

The Infratec™ grain analyser was introduced in 1987 and revolutionised grain analysis by providing accurate, repeatable analysis for whole grain samples.

It quickly became the global standard for grain quality analysis. Now, the Infratec<sup>™</sup> Sofia brings these benefits to receival sites of all sizes.

The Infratec family of instruments is based on near infrared (NIR) spectroscopy, a field in which FOSS has vast experience and knowledge.

Gain the security of knowing that your results come from a member of the whole grain analyser family that is officially approved and accepted around the world.

## **Technology**

Infratec Sofia is a rugged, simple-to-use and accurate grain analyser. It is based on near infrared (NIR) spectroscopy, a field in which FOSS has vast experience and knowledge. Applying this know–how, Infratec Sofia has been specially designed for mobility and operation in harsh conditions.

Measurements are simple to perform and results are delivered in around three minutes. The mobile analyser runs on a 240vAC or 12vDC power supply. No grinding or sample preparation is required.

Results are displayed on an in-built computer. IAn external printer can be connected.

# Network software keeps it accurate and up to date

Infratec Sofia is fully aligned and calibrated against the Infratec 1241 analyser, the official system used for payment by bulk grain handlers around the world.

The instrument can be remotely monitored and updated via Mosaic Updater which can be installed on a standard office PC. Mosaic Updater will automatically check and notify when updates are available for download to the instrument.

No season is exactly the same, but adjustments and improvements to calibrations ensure measurements remain accurate and reliable. With Infratec™ Sofia's unique web-based update system, your instrument is always up to date.

### New calibrations? No problem

Initially programmed for the measurement of protein and moisture in wheat and barley, Infratec Sofia is easily upgraded as new commodity calibrations become available. They are simply downloaded via the internet and transferred to your unit at the click of a button. No need to buy a new instrument.

As well as being accurate and reliable year in year out, your Infratec Sofia is also essentially "future-proof".



#### Infratec Sofia:

- Aligned with the approved-for-trade Infratec™ 1241 Grain Analyser
- Compact, mobile and ready for use wherever you are
- Rapid and easy-to-use providing results in around three minutes
- No grinding or sample preparation required
- Results stored on a removable memory card
- Unique web-based update system ensures that Infratec™ Sofia is always up to date
- Ready-made global calibrations for protein and moisture in wheat and barley
- Download new calibrations for different commodities via the internet



# Specifications

Feature	Specification
Dimensions (W x D x H)	255 x 390 x 295 mm
Weight	9 kg
Degree of protection	IP 65
Measurement mode	Transmittance
Wavelength range	850 - 1050 nm
Detector	Silicon Linear Array
Optical bandwidth	7 nm
Number of data points/scan	100
Absorbance range	1-4 AU
Analysis time	Approximately 3 minutes for 10 sub-samples

# Installation requirements

Infratec™ Sofia		
Voltage supply	100-240 V AC *, frequency 50-60 Hz, Class 1, protective earth	
Ambient temperature	0 - 45°C	
Storage temperature	-20 to 70°C	
Ambient humidity	< 93% RH, cyclic up to 100% RH	
Mechanical environment	Stationary when in use, in vehicles	
EMC environment	Light industry, Industry and Agricultural Machines	
* Mains supply voltage fluctuations not exceeding ±10% of the rated voltage.		

## Legal data

Infratec™ Sofia is CE labeled and complies with the following directives:

- EMC (ElectroMagnetic Compatibility) Directive 2004/108/EC
- LVD (Low Voltage Directive) 2006/95/EC
- Packing and Waste Directive 94/62/EC
- RoHS (Restriction of Hazardous Substances) Directive 2002/95/EC

## PC Requirements

Contact your local FOSS representative for information.



FOSS Slangerupgade 69 DK-3400 Hilleroed Denmark

Tel.: +45 7010 3370 Fax: +45 7010 3371

info@foss.dk www.foss.dk

