

# S grain

Near Infrared Grain Analyser



**Portable near-infrared grain and flour analyser for determining the ingredients of whole grains, oil seeds and flours.**

# Unique in category

## Scanning Grating Monochromator – high accuracy

Infracont SGrain is the only small-scale, portable grain analyser in the world that has - similarly to the high-grade grain analysers - a scanning grating monochromator for maximum measurement accuracy.

## Built-in printer

Infracont SGrain is the only portable device on the market that has a built-in thermal printer, so it can print a measurement document in the field.

## Analysing whole grains and flour with one appliance

Infracont SGrain is the only grain analyser of the portable category in the world that can be used to analyse flour.



## Portable design, 12V operation

Infracont SGrain's portability is ensured by its small size and weight and its removable strap. The instrument can also be operated from 12V (eg car cigarette lighter, external battery).

## Easy to use

The Infracont SGrain grain analyser is very easy to use for the average user. SGrain analyses the grain samples without sample preparation and handling. Infracont SGrain is the only small, portable grain analyser on the market that automatically adjusts the path-length for samples of different kernel sizes.

SGrain has a 5.7 "diameter, high resolution and bright touch screen interface. The user interface of the software of the instrument is clear and easy to understand, so it's easy to handle and does not require any pre-qualification.

The measurement process, after selecting the crop to be measured, consists of only three steps: load the sample into the hopper, then press the measurement button and empty the sample from the drawer at the end of the measurement.



## Innovative unique infrared optics



## Single Beam Compensation System

The Infracont SGrain is the only grain analyser of the small, portable category in the world that applies a scanning grating monochromator optics providing the largest measurement accuracy.

Infracont's unique optical configuration called Single Beam Compensation System (SBCS) ensures SGrain's excellent short and long-term stability.

What are the benefits of SBCS?

- very few moving parts, much simpler construction;
- smaller size, lighter weight
- there is no need for regular maintenance (eg. lamp replacement, because the lamp illuminates only when the instrument is measuring, which ensures a very long lifetime)
- low service requirement
- less power, less heat, high light intensity
- no temperature dependency and warm-up time: the instrument can be used immediately after switching on;



### Built-in printer

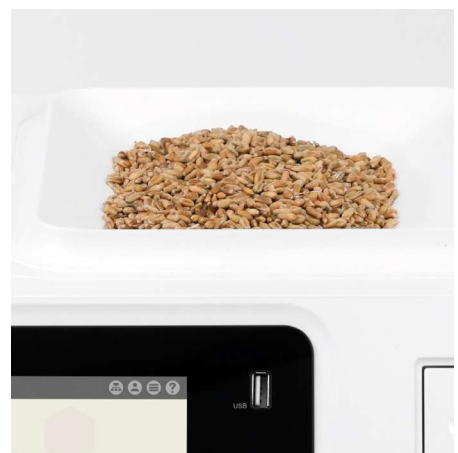
Infracont SGrain has a built-in thermal printer, so the instrument can automatically print a receipt of the measurement in any number of copies right

after the analysis. In addition, previous measurement results and measurement statistics can be printed out later as well. Besides the results, other measurement parameters (e.g. the date and exact time of the analysis, sample ID or the name of instrument owner) are also printed to the receipt.

### Calibrations

Infracont has been continuously improving its calibrations for over 30 years, so we have a large number of calibration databases with samples from different continents, countries, crop years, varieties, etc., which ensure the robustness and accuracy of the calibrations. All of our whole grain calibrations can be uploaded into the Infracont SGrain grain analysers.

Infracont SGrain analyser is also suitable for measuring analysing flour and other powdered or ground samples (eg. soymeal, soybean expeller meal, corn meal, corn grits, etc.). A separate flour cuvette is required to analyse these samples.



### InfraCloud - Cloud-based Internet connection

Infracont SGrain - with an Internet connection available at its operating site - is accessible by the InfraCloud application from a remote computer, phone or tablet. After the analysis, the results are uploaded to the InfraCloud database and can be displayed in a browser of a phone, tablet or computer. Historical data can also be viewed and downloaded. In addition, there are a number of other functions available for remote device management.

## Technical data:

Power supply:	100-240 VAC/12V/10A
Power consumption:	50 VA
Dimensions (W x H x Depth):	350x340x330 mm
Weight:	10 kg
Analysis time:	~1 min.
Measuring surface:	40 cm <sup>2</sup>
Path-length:	4 - 33 mm (automatically set)
Sample quantity:	~ 300 cm <sup>3</sup> (for wheat analysis incl. test weight)
Operating temperature range:	10 – 45 °C
Optics:	Scanning grating monochromator with SBCS
Wavelength Range:	790-1064 nm
Wavelength Accuracy:	0,1 nm
Wavelength Reproduction:	0,02 nm
Detector:	Si PIN photodiode
Source:	Halogen lamp (12V/20W)
User interface:	Capacitive touch screen
Display:	5,7" 640x480 colour TFT
Embedded computer and operating system:	Toradex Colibri iMX6DL, Linux
Printer:	Built-in graphic thermal printer
Connections:	3 x USB 2.0 port; LAN; WIFI

Reseller



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