

Product Data Sheet

## GrainSense Flow Analyzer

Measuring grain quality instantly in combine harvesters and silo/dryer environments

The GrainSense Flow Analyzer has been developed for analyzing real-time grain quality in an environment where grains are actively flowing. Whether installed in an elevator of a combine harvester or in a silo/dryer, the GrainSense Flow Analyzer measures protein and moisture online during harvesting or processing or storage.

With the GrainSense Flow Analyzer, farmers are empowered with the quality data of their grains during the harvesting, drying, and storage processes. The farmer can then make better decisions to maximize the quality and profitability of the harvest.



“Moisture level monitoring in real-time and anywhere is something new for me.”

- Tyrnävä farmer -

“Checking the drying process from anywhere is the key feature for us.”

- Muhos farmer -



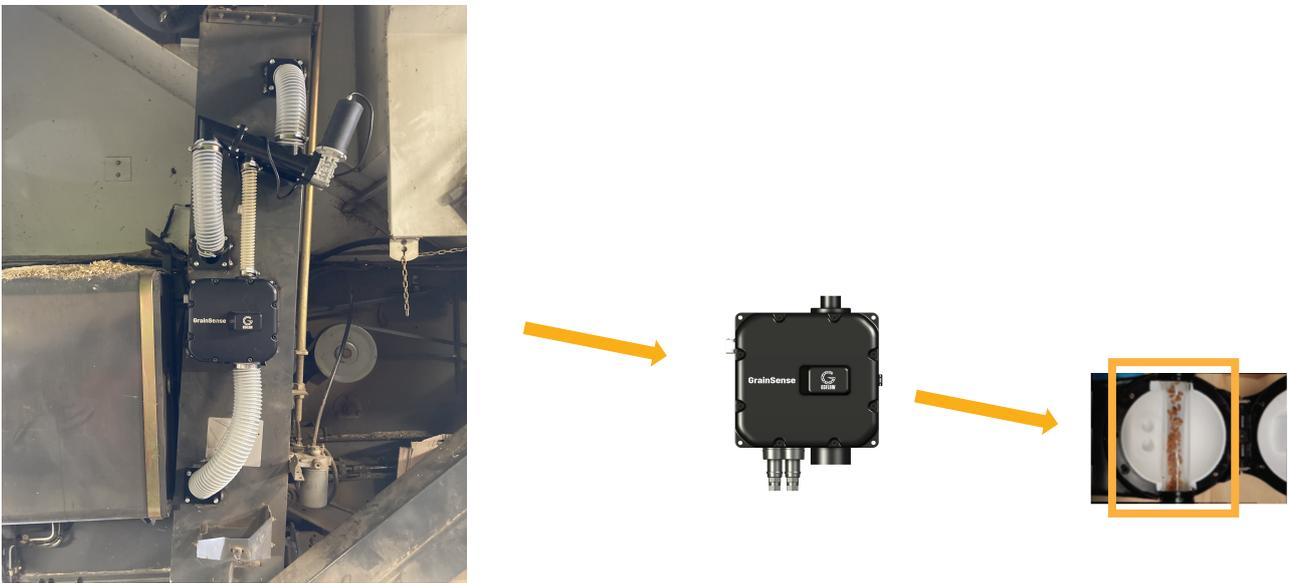
# How does it work?

The GrainSense Flow Analyzer is based on the patented and globally proven GrainSense measurement technology used in the hand-held GrainSense Analyzer to measure protein, moisture, oil, and carbohydrates from stable grain kernel samples. This Near-Infrared Spectroscopy (NIR) technology uses a 360° light penetration method (integrating sphere) enabling to measure exceptionally reliable results with small sample sizes in a short amount of time.

The GrainSense Flow Analyzer is installed to a combine harvester or silo/dryer elevator. Via a grain entry and exit pipe system, grain is constantly flowing through the GrainSense Flow sensor, where real-time analysis is performed. The measurement data is sent to the GrainSense Cloud, enabling the farmer to monitor the measured results in real-time and to make better decisions.

## Optional feature - Camera

With the optional camera, it is possible to detect green and broken kernels from wheat and barley by using state-of-the-art camera technology and artificial network computing.



## Technical specifications

Size	225x225x110 mm
Weight	≈ 5 kg
Power	230/110/12 V
Measurement principle	Near infrared transmittance spectroscopy
Sample size	≈ 100 grams per second flows through the sensor when measurement is ongoing
Species	Wheat, barley, maize and soybean
Storage temperature	-20 to +85 °C
Operation temperature	0 to +45 °C

