



## **Granomat plus**

Fast, precise and easy to operate: Fully automatic whole grain moisture meter for grain and other cereals.







### **Granomat plus**

Moisture measurement with high-frequency technology

#### THE CHALLENGE

### Precise classification and quality assurance

Grain, pulses and oil seeds are natural products which behave differently in every field, depending on the nature of the soil and the weather conditions. Climate change, the use of less fertilizer and cultivation progress have an influence on quality, which the trade has to reliably classify and maintain. Moisture is an important parameter when doing this, and is closely associated with commercial decision-making.

Drying and efficient use of energy during storage require precise measuring technology in order to obtain a sound basis for billing and retain the value of the raw materials for fodder and food production. And the samples must be quickly and optimally penetrated when the moisture is being determined, which requires high measuring frequencies.

#### **OUR SOLUTION**

### Fully automatic whole grain measurement

The Granomat plus is another generation of our whole grain measuring instrument, which is a high-frequency measuring instrument which operates with a measuring frequency of up to 185 MHz

Not only does this guarantee that the grains are fully penetrated, but it also provides a precise measurement result in less than 15 seconds.

#### Core characteristics

- Precise determination of the product moisture, bulk density (kg/hl) and sample temperature of agricultural cereals
- Measurement of the entire grain, without disintegrating the sample beforehand
- Measurement result in less than 15 seconds
- Sample volume of 600 ml
- Easy and clear touch screen operation in 11 languages
- Integrated thermal printer
- Two USB ports and an RJ45 interface
- Complies with German calibration law

In order to do this, the instrument determines the reflection of a measuring signal in accordance with the ,Unified Grain Moisture Algorithm' (UGMA), which is then converted into the complex permittivity. The measured value is corrected depending on the weighed mass, and the temperature is recorded by an IR sensor. The moisture (water content) and the bulk density are calculated by the Granomat plus on the basis of static regression models.



#### Technical data

Product	Voltage	Output	Dimensions	Weight	Item number
Granomat plus	100-240 V, 50/60 Hz	60 VA	488x304x400 mm	21,8 kg	1196 0000

#### Accessories

Accessories	ltem number
Beaker 0.5 liters	3112 8605
Rolls of thermal paper (5 pieces)	3262 8601
Barcode scanner	1920 0900
Data Server database application for MS Access®	1180 0100

### **Easy operation**

The standard version of the Granomat plus is preprogrammed for field beans, spelt (without glumes), durum, peas, barley, oats, maize, rapeseed, rye, soya beans, sunflower, triticale and wheat.

Individual new calibrations can be optionally produced in consultation with Pfeuffer GmbH.

- Large 7" color display
- International symbols make setting, product selection, start of measurement, printout and transmission of measuring results easier
- Touch operation minimizes input errors
- Setup of favorites
- Tried and tested software with three access levels: User, expert and service

### Well thought-out functionality

After putting in the sample, all you need to do is select the product type and press the measuring button. The rest is taken care of by the Granomat plus with maximum precision and reliability.

The measuring result is displayed after 15 seconds, can be printed out using the integrated thermal printer, stored on a USB medium and/or transmitted to the company network for further processing.

- Automatic filling of the measuring cell ensures that you have consistent bulk density.
- A scraper removes excess grains for constant volume and repeat accuracy.
- Automatic emptying of the measuring cell into the drawer of the instrument.
- Easy access to the filling funnel, measuring cell and drawer for cleaning prevents measuring errors caused by deposits.



YOUR BENEFITS

### Precise moisture measurement for optimum grain quality

The Granomat plus whole grain moisture meter provides you with a compact, robust and comfortable solution for reliable grain moisture measurements:

- Precision high frequency measurement
- Intuitive operation using a color touch screen
- Pre-configured for measuring 13 typical cereals
- Wide range of connection options
- Integrated thermal printer



### **Extended connectivity**

The Granomat plus is a real communication talent, and now also has an interface for connecting to higher-order data processing and testing systems. Overview of the most frequent deployment cases:

- Network connection (Ethernet via RJ45 socket) for exporting measuring results via LAN
- Storage of measuring data in an MS Access® database using a data server in the LAN/WLAN
- Two USB ports for connecting a barcode scanner, a keyboard or storage media e.g. for mobile export and simple processing of measuring data in a spreadsheet on a laptop or smartphone.





# Pfeuffer: Technology for professional quality evaluation

As an internationally operating specialist for sampling and grain measuring technology, we have more than 75 years of experience in equipment for agriculture, trade, mills, compound feed plants, seed cultivation, malthouses and breweries. Our product portfolio covers the entire field of grain quality control. The vertical integration of our company - from development and manufacturing to sales and the maintenance of the systems - provides you with maximum quality, precision and investment security.



The quality assurance of our construction, development and production is verified in accordance with ISO 9001:2015.



We develop, design and manufacture all of our products and systems in house.

Do you have any questions about further details of our Granomat plus whole grain moisture meter? Just call or send us an e-mail, and we would be pleased to advise you.

#### PFEUFFER GMBH

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