

PMV 50.5Y

Microwave Moisture Analyzer

- Ultra-short drying time
- Uniform heating of the sample
- Complex database of drying programs



PMV 50.5Y **Highly precise analysis, fast drying process** **Intuitive operation**

Microwaves in Moisture Content Measurement

Sample moisture content measurement performed an innovative system, operation of which system is based on microwaves, requires much less time for drying of the weighed material. This solution is an excellent choice for measurement of products containing significant amount of moisture (up to 100%), i.e. dairy products, meat, fish, syrups, creams, liquid resin.

Ultra-Short Drying Time

The PMV 50.5Y moisture analyzer enables to significantly reduce the drying time. Depending on the type and mass of a sample, the process takes 1 to 10 minutes. In contrast, drying using the traditional halogen moisture analyzer takes 5 to 40 minutes.

Uniform Heating of the Sample

Increase in sample temperature is obtained as a result of absorption of the microwave radiation by sample's polar molecules (mainly water). Reorientation of dipoles of polar molecules causes molecular friction. This brings about a rapid temperature increase in the whole sample volume. The heat may additionally be generated by a directed ions movement, wherein the ions move in the direction of the electric field changes. While moving, the ions collide with other molecules, which generates thermal energy spreading within the structure of the material.

Temperature Sensor

The user can apply one of numerous dedicated drying programs. Program selection is conditioned by sample mass and moisture content (8 - 100%). Properly selected program allows to obtain precise results within the shortest possible time.

Complex Databases

Measuring processes are supported by complex databases, with this management options are unlimited. Expanded 16 GB memory enables record and storage of advanced reports, and time and statistical graphs.

Verification of Operation

When purchasing the PMV 50.5Y moisture analyzer a sample of sodium chloride 10% is provided by the manufacturer. This enables determining whether the device operates correctly at the workstation or not.

PMV 50.5Y

Maximum capacity [Max]	50 g
Readability [d]	0.1 mg
Tare range	-50 g
Maximum sample weight	50 g
Moisture content readability	0.0001 %
Measuring range	Up to 100 % moisture content
Displayed result	Moisture content – %, ppm; dry mass content – %, ppm, g; loss – mg; proportion – %
Filter dimensions	ø 90 mm (glass fibre filter)
Heating module	Microwave radiation emitter
Finish mode	Manual, automatic, time-defined, user-defined
Microwave power regulation	2 % – 100% (every 1%)
Display	5.7" resistive colour touch screen
Communication Interfaces	2xUSB-A, RS 232, Ethernet, 4xIN, 4xOUT, Wi-Fi®

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