

On-line microwave moisture analyzer M300



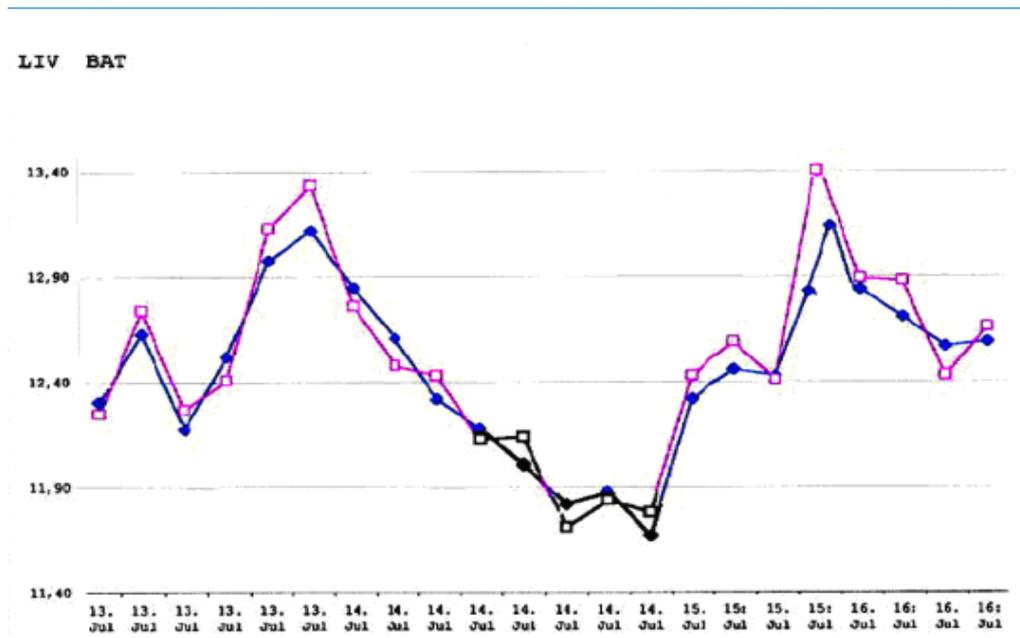
Description

On-line microwave moisture analyzer M300 analyzes and absorbs all current microwave and moisture analyzer technology in the world. It is the latest design and the leading model of microwave moisture measurement instrumentation. It uses the latest technology of microwave measuring and electronic circuitry and is easy to operate and extremely reliable.

The probe of M300 adopts contact measurement fixing on the surface wall and touching the tested materials. The microwave signal is transmitted by the probe and reflected by measured materials and accepted by the probe again. The probe is made of high-strength stainless steel with a power rating of 10mW. All parts are waterproof and dustproof the solid stainless steel case can resist impact and the unit can function for long periods under extreme conditions. The characteristics of high reliability sturdiness and durability, fast response and fine measurement accuracy contact moisture analyzer M300 is designed to measure moisture content on a continuous basis during the production process.

M300 adopts a microwave absorption principle using microwave frequency with high reliability and anti-jamming ability. Measurement data can be gained within 100 milliseconds and accuracy is as high as 0.5%. Measuring scope ranges between 0-30% or higher and it offers a fully automated range without user's adjustment. It can detect moisture in any solid material (not containing too much metal): coal, cement, minerals, paper, sugar, grain, popcorn, flour, seed, cut

tobacco leaf, quartz, sand etc.. Coliy can customize products according to user's requirements.



Red: Laboratory data; Blue: on-site measurement data.
Supplied by Dusseldorf physical Laboratory Germany

When using the M300 you only need to attach the unit to the surface wall and fix the probe to the surface with a flange. To allow the probe to touch the material to be tested then it can measure the moisture content. As the microwave is sensitive to water when it penetrates the measured materials its power and phase changes and by detecting this change M300 can measure moisture content. Easy to install robust and durable M300 is convenient for customers to use. M300 allows the user to adopt special single point demarcation which can give you the exact demarcation data thus greatly lightening the user's workload.

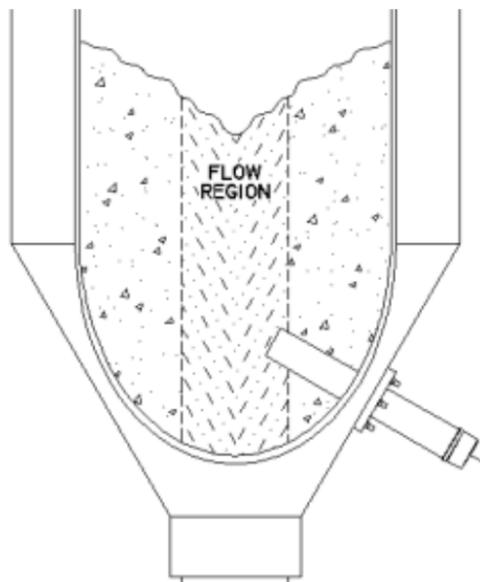
Work Principal

The physical principle of measurement is based on the Law of microwave resonance. The moisture content of the product is determined by attenuation and frequency shift of microwave energy. Due to the small capacity of the microwave energy it won't heat up the sample and microwave can fully penetrate the product so all of the Physical moisture will be measured. Both external and internal moisture can be detected. This microwave technology ensures a high moisture selectivity rate so it can assure high-accuracy measurement of moisture content of all products and the results wouldn't be affected by different color and surface structure of the product.

Accuracy	Ascertain the moisture content of the product and the result is not affected by the weight color or structure of its substances
Calibration	All the physical moisture content in the sample is ascertained by patent methods; to a great extent the calibration is not affected by sorts and with long-term stability.
Fast	Finishes measurement within millisecond;
Stable	No moving parts water-proof and dust-proof maintenance-free;
Simple	The operation is very simple via a user-friendly menu structure and it can carry out self-diagnosis automatically;
Applications	Detect the moisture content of solids on-site or in laboratory.

Features:

1. Connector of all analog input fault alarming when it exceeds up and down limits.
2. Connector of all analog input is available with protection to prevent strong electricity surges
3. With isolated connector 1000V voltage it can't be disrupted in 1 minute.
4. High stability design with industrial grade components solid and durable.



Installation drawing

Specifications

Measurement method	probe touch online measurement
Measured moisture	Measure simultaneously moisture of surface and inside of solid
Range	0-30%
Resolution (Laboratory)	0.1%
Depth penetrating through materials	5-100mm (varies with different materials and moisture content)
Detectable materials	Coal grain plastic granules flour seed mineral powder quartz sand etc..
Accuracy (Laboratory)	0.3%
Temperature for probe	Maximum 80°C
Screen	5" Industrial touch screen
Probe	a stainless all-weather microwave probe
Probe length	500mm default, extendable to 2meter
Diameter of probe	Φ60mm
Host power	10W
Weight	8 kg
Power supply	100 - 230VAC 50/60Hz
Output	4-20mA
Protection Level	IP67



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.