Moisture Analyser Balance PCE-MB Series

**Moisture - Dryness Content 0 ... 100 % / resolution 0.01 % /
Weighing ranges of 0 ... 100 and 0 ... 200 g / resolution 0.001 g /
bargraph display / RS-232-interface and optional software**

The moisture balance is a precision device for the determination of moisture content in small samples of materials by drying the sample with halogen heaters. The moisture analyser balance is in use as a moisture measurement tool as well as for determination of dryness content. Also it can work as a standard mg-balance. The moisture analyzer uses heaters (2 x 200 Watts) to dry the sample in conjunction with a precision balance to measure the minute changes in weight as the sample dries. In general these units can be used in research, development and quality control. The materials to be tested are: food, sugar, salt, granulates, plastics, pellets, fibers, ..., but also liquids as sludge and mixtures of all kinds. So the moisture analyser balance is a multi purpose tool.

The software built into the system provides many different drying programmes and calculates various parameters for humidity and dry mass. A typical drying procedure involves choosing a drying temperature, a time interval - for example 100 degrees for 10 minutes- and a mode – % solids. Automatic external calibration using either 100 g or 200 g calibration weight (depending on the model) guarantees ongoing accurate results. The integrated RS - 232 - interface enables you (with optional software-kit) to automatically send the moisture data into a sequence table.
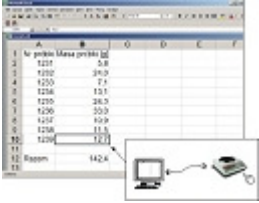
- External calibration

- Date and time

- Backlit LCD with dual display / Capacity

tracker

- Multilingual display (English, German,

  French, Spanish, Italian, Russian, Polish ...)

- Memory for temperature correction for 9

  types of sample (user programmable)

- Memory for 160 drying sequences (user

  programmable)

- RS-232 bi-directional interface

- Calibration certificate (Option)

- Software-Kit (Option)

Technical Data

Balance model	PCE-MB 50	PCE-MB 100	PCE-MB 200
Measurement / Weighing ranges	0 ... 100 % Absolute Moisture		
	0 ... 50 g	0 ... 100 g	0 ... 200 g
Maximum capacity	50 g	100 g	200 g
Readability	0,01 % 0,001 g		
Linearity	± 0,1 g / OIML clase II		
Repeatability	0.0015 g		
Tare range	Full		
Heating	2 quartz halogen heaters (200 W each)		
Temperature range	+50 ℃ ... +160 ℃ in increments of 1 ℃		
Stabilisation time	3 ... 5 s		
Time setting / Sampling interval	2 min ... 9 h 59 min (in increments of 1 s)		
Memory / Drying curve	160 (to memorize user programmable drying curves)		
Work mode / Drying sequence	- Automatic (drying to constant weight) - Semi-automatic (drying stops when loss per unit of time goes below theoretical value) - Manual (by preset time)		
Interface	RS-232 bi-directional interface		
Display	Backlit with dual digits 34 mm (multilingual) and capacity tracker		
Calibration	Automatic external calibration with optional weights (100 / 200 g)		
Pan size	Diameter 100 mm		
Operating Temperature	+18 ... +30 ℃		
Power supply	240 V / 50 Hz		
Housing	die cast aluminium		
Protection	IP54		
Overall dimensions	235 x 245 x 260 mm		
Net weight	ca. 8 kg		

Delivery includes
1 x Moisture Analyser Balance (Model PCE-MB 50 or PCE-MB 100 or PCE-MB 200), 1 x Mains plug, 10 x Aluminium sample pans, User manual (in needed language: English, Russian, Italian,French, Spanish ...)

Options

Software-Kit (PCE-SOFT-MB) The kit includes a software for transferring weighing data to a PC or Portable and a rs-232-cable. The transferred data can also be sent to other calculation software as Excel ... The standard software is in English language (others are available (French, German ...).	
-RS-232-USB-Adaptor (RS232-USB) In case your PC or Portable uses USB-Interfaces, you can use the adaptor in connection with the standard rs-232-cable. A small software (covering all the actual drivers) is included.	

-Printer (PCE-TDP)
The printer is used for direct output of weighing data. It will be delivered including rs-232-cable and net adaptor.
  - thermal paper / paper width 112 mm
  - 230 V / 12 V - Adaptor	

-Aluminium Sample Pans (PCE-MB-PS) (Pack of 50) Can be used several times if not having glueing materials on it (after cleaning). - Diameter: 100 mm	