Mark 3 LTE Moisture Analyzer

Modular Infrared Moisture Analyzer with Quartz Radiator

Moisture Analysis

- Economical and reliable alternative to the drying oven
- Intuitive operation – With a learning curve of a few minutes
- The user starts the measurement by pressing just one button
- Robust and fast, optimal for routine operation
- Multi-module operation enables parallel measurements of up to 2 different samples on one single device
- Sartorius weighing technology meets the highest demands in the lab or in-process

Product Description
Mark 3 is a flexible moisture analyzer system for labs and production facilities. Its optional modular add-ons provide the best solution for every measuring task.

With its resolution of 0.01%, the Mark 3 LTE has been optimized to achieve good reproducibility in routine measurements.

Fast
Quick measuring times give you greater flexibility and let you adapt your production processes fast.

Flexible
Whether your samples are solid, liquid or pasty, the Mark 3 LTE can variably analyze moisture contents ranging from 1.00% to 99.90%. Neither does it matter if you intend to carry out 3 or 300 measurements a day.

Easy
Even inexperienced users can reliably operate the Mark 3 intuitively and easily. Thanks to effective password protection, access can be restricted to pure measuring functions. The press of a button starts the measurement.

Areas of Application:

- Foodstuffs
- Chemical products
- Biomass & water purification
- Building materials
- Paper, pulp and composites
- Cosmetics
- Paint and coating
- Agricultural products

Mark 3 LTE under parallel operation with 2 measuring modules

Equipment Supplied

- Inter-module cable
- Power module cable
- Power cord
- Tweezers
- Sample pans
- Operating instructions manual

Addition for Mark 3 LTE with printer:

- Roll of paper

Specifications

	Mark 3 LTE Moisture Analyzer
Display of results	0.01%
Balance capacity	40 g
Reproducibility of the measurement	Starting at an initial sample weight of approx. 1 g: ± 0.2% Starting at an initial sample weight of approx. 5 g: ± 0.05%
Method of measurement	Loss on Drying
Recommended moisture range	1.00 – 99.90%
Heat source	Four parallel infrared quartz cylinders
Modular configuration	Optional up to 4 heater modules connectable
Internal printer	Optional internal thermal printer, 40 character graphic
Temperature range and adjustment	30 – 210°C in one-degree increments
Temperature steps	Programmable, one or two
Standby temperature	Standby temperature selectable from 30 – 160°C
Temperature display	Display of target temperature and actual temperature during the measurement and in standby mode
Measured value display	Weight loss in mg | % moisture | % dry weight | % volatiles | % moisture/dry weight
Modes of operation	Standard Test or Concentration mode
Endpoint determination	Timer mode, value falls below a defined weight loss per time unit (%/min), trend shutoff
Program storage	60 programs, fail-safe storable
Data storage	Storage 999 results with statistics: average, SD, RSD, high and low
Temperature adjustment	Optional fixture for internal electronic two-point-adjustment
Adjustment of the weighing system	External manual
Ideal initial weight	Audio and visual display for programmable target sample weight addition
Initial sample weight lock	Lockable initial sample weight for optimal repeatability
Pass-Fail-function	Programmable target value including limiting values, pass-fail-information after the measurement
Sample-ID	Numeric, numeric incrementing, alphanumeric or turned off
User management	20 users password protected storable
Password protection	Password protection against undesired adjustment of parameters
Languages	English, Spanish, German, French, Italian, Portuguese
Date and time settings	dd | mm | yy, mm | dd | yy, 12 h- or 24 h-format
Saving mode	Integrated clock timer to switch on and turn off the analyzer Programmable sleeping mode after a longer period of non-use
Display	Illuminated VGA-display
Parameter and data input	Sealed membrane witht audible tactile feedback
Real-time curves	Real-time curves of the loss in weight (% or gram) as well of the temperature pattern during and after the measurement
Acoustical signals	Key stroke, ideal weight met and end of test, selectable on or off
System status indicator lights	Two tri-color LEDs (balance & heater) on front of heater module
Data input | output	Serial and Ethernet
Printout of the protocol	Internal thermal printer, 40 character graphic
Printout format (Printer optional)	Configurable printout: selectable header (3 lines), analyzer info, operator, Sample ID, calibration info, program name, program parameters, interval print, weight info, result and signature line
Weighing system	Monolithic weighing system for high-precision results
Balance spill protection	Reservoir under draft shield to collect liquids, powders or pellets
Operating conditions	15 – 40°C (59 – 104°F) | 10 – 85% rel. humidity, no condensation
Power requirements	90-250 VAC 50 | 60 Hz self-adjusting power supply
Housing dimensions (W × D × H)	41.3 × 49.5 × 23.5 cm (16¼" × 19½" × 9¼") modules combined
Weight	10 kg (22 lbs.) modules combined
Warranty	2 years

Order Numbers

LMA110-SET-P	Mark 3 LTE Moisture Analyzer with printer, consisting of – LMA100PA control module incl. printer – LMA110SQ heater module (1 mg, 40 g)
LMA110-SET	Mark 3 LTE Moisture Analyzer without printer, consisting of – LMA110SA control module – LMA110SQ heater module (1 mg, 40 g)
Add-ons:	
LMA110SQ-000U	Mark 3 LTE heater module (1 mg, 40 g) as modular add-on to a Mark 3 LTE (max. 2 heater modules)

Accessories

A variety of consumables, cables, inspection, measuring and test equipment are available for the Mark 3 moisture analyzer along with other accessories. We will be glad to advise you in the selection of appropriate accessories.

Sartorius Weighing Technology GmbH
Weender Landstrasse 94–108
37075 Goettingen, Germany

Phone +49.551.308.0
Fax +49.551.308.3289

info.mechatronics@sartorius.com
www.sartorius.com

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