

# **MA37**

Fully Automatic Infrared Moisture Analyzer for Daily Routine Operation

# Advantages

- High-speed measurements
- Effortless cleaning
- User-friendly operation
- Status light for display of measurement progress



# **Product Description**

The MA37 is the new Sartorius basic analyzer for moisture determination. It operates even faster and is easier to use than its predecessor MA35. In addition, it features a compact footprint and delivers highly accurate results. Moreover, its BetterClean design also enables effortless cleaning, and the convenient status light indicates the current progress of a measurement. The MA37 is therefore ideal for operations involving identical routine measurement tasks, guiding you step by step throughout moisture analysis.

### **Applications**

The MA37 moisture analyzer is designed for quick and reliable determination of the moisture content of liquids, pastes and solids using the thermogravimetric method. The MA37 is perfectly suited to daily recurring moisture analysis tasks, such as in production or incoming goods inspection.

### Performance

Fully automatic endpoint determination eliminates the inconvenience of time-consuming screening of shutoff parameters. The moisture analyzer monitors the drying process and ends the measurement once it detects a constant sample weight. The built-in weighing system with 1 mg resolution has been specially optimized for use in higher temperature ranges, delivering the required measurement accuracy. A high-performance metal tube heater heats the samples in the MA37. This heater unit is fast, extremely rugged and durable. Unlike glass heating lamps, such as infrared lamps or halogen heaters, it is especially resistant to dirt and vibration. The functionality of the MA37 can be verified at any time by running the built-in performance test with a ReproEasy pad.

# **Technical Specifications**

Max. weighing capacity	70 g
Reproducibility, typical	For initial sample weights of approx. $\geq 1$ g: $\pm 0.2\%$ For initial sample weights of approx. $\geq 5$ g: $\pm 0.05\%$
Readability	1 mg, 0.01%
Typical sample quantity	5 g – 15 g
Display modes for results	Moisture content in %M and g   dry weight in %S and g   ATRO (ratio) in %M/S
Temperature range and settings	40°C – 200°C, in increments of 1°C Standby temperature selectable from 50°C – 120°C
Sample heating	Infrared metal heating elements
Heating programs	Standard drying, gentle drying, MA35 mode
Shutoff parameter	Choice of modes:  - Fully automatic  - Semiautomatic mg (1 mg – 50 mg   5 sec. – 300 sec.)  - Semiautomatic % (0.1% – 5.0%   5 sec. – 300 sec.)  - Timer settings (02:00 – 99.59 min.)  - Manual
Access to sample chamber	Removable hood with wide opening angle; SoftClose mechanism
Measuring program	1 program saved in the non-volatile memory (user-definable method parameters)
Memory for data storage	Results are saved until the start of the next measurement
Operator guidance features	Intuitive user interface, including touch screen and easy-to-understand menu prompts
Languages selectable in menu	English set as the default; can be changed in the menu to Chinese, French, Italian, Japanese, Polish, Portuguese, Russian, Spanish and Turkish
Status light	Displays the status "analysis running/START," "analysis completed/STOP" or "analysis error"
Sample inspection	LED-illuminated sample chamber; inspection window with grid above the hood
Draft shield	Integrated draft shield
Cleaning	Removable hood, grid and sample chamber plate for easy cleaning in a laboratory dishwasher
Printout	<ul> <li>Printout using the optional, internal printer YDP30; alternatively, the printer YDP20-OCE can be used with an adapter (YCC03-D09)</li> <li>GLP-compliant, inalterable standard for printout of the results   paper-saving mode for short record</li> </ul>
Performance test	Menu function for testing the analyzer's performance using a ReproEasy pad
Monitoring and control of the accuracy of the analyzer as inspection, measuring and test equipment	External calibration using optional calibration weights; Temperature adjustment with optional adjustment set
Data interface	Mini USB port  - Automatic detection of the Sartorius printers YDP30 and YDP40  - Direct data transfer to Microsoft® Office programs without any additional software  - Programmable data output interval  - SBI data transfer protocol
Frequency	50   60 Hz
Power consumption	Max. 640 VA
Temperature range	10°C-30°C
Housing dimensions (W $\times$ D $\times$ H)	$215 \times 400 \times 210 \text{ mm } (8.5" \times 15.7" \times 8.3")$
Weight	Approx. 6.2 kg (approx. 13.6 lbs.)

### **Available Models**

MA37-1	Standard model without country-specific additions and with automatic voltage recognition of 115 V   230 V
MA37-1US	Standard model with country-specific additions for the USA

### Accessories

6965542	Disposable sample pans, 80 units, aluminum, 90 mm $\varnothing$
6906940	Glass fiber pads for analysis of pasty and fatty samples, hard quality; 80 units; 90 mm $\varnothing$
6906941	Glass fiber pads for analysis of liquid and fatty samples, soft quality; 200 units; 90 mm $\varnothing$
YCW452-AC-02	External calibration weight, 50 g (E2) with DAkkS* calibration certificate
YDP40	Standard printer
YDP30	Premium GLP laboratory printer
YCC03-D09	Adapter cable for connecting the printer YDP20-OCE
YDP20-0CE	Data printer
YTM15MA	Temperature adjustment set
YHP01MA	ReproEasy pads, 10 units for performance testing to check the functionality of the heating unit and weighing system of the analyzer
YST01MA	Forceps for samples
YMD01B (incl. short report)	Customer-specific service for individual method development at the Sartorius Application Laboratory in Goettingen, Germany, or in the USA

# **Equipment Supplied**

Moisture analyzer, power cord, user manual, aluminum sample pans, glass fiber pads – hard quality

<sup>\*</sup> DAkkS = German accreditation body recognized throughout Europe

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