

MA35

Rugged, Fully Automatic
Infrared Moisture
Analyzer for Use in Routine
Operation



Benefits

- Time-saving alternative to a drying oven – measurement results in only 10 – 20 minutes
- Simple operation
- Rugged design
- Ideal for simple routine checks
- Best price-performance ratio with Sartorius quality – Made in Germany

Product Overview

The MA35 is the ideal basic model for quick and reliable analysis of the material moisture of liquid, pasty and solid substances using the thermogravimetric method. Sartorius's decades of experience in the area of moisture analysis guarantees quick and reliable measurement results and high user-friendliness.

Product Information

Applications

Ruggedness for All Areas of Application

The compact and rugged design, combined with great precision and measurement accuracy, make the MA 35 the ideal device for uniform measuring tasks. The selection of long-lasting and rugged components, impervious to vibration and dirt, guarantees reliable measurement results, even in a harsh environment. An ideal partner for use in production, incoming goods or in the laboratory.

Simple Use

Sartorius's unique, fully automatic endpoint determination makes programming a switch-off criterion unnecessary. This saves time because, on the one hand, time-consuming optimizations are no longer required, and on the other, operation of the device is simplified so that it can be used competently by anyone. This is made possible by continuous monitoring of the drying cycle by the MA35.

This monitoring then completes the measurement fully automatically using a switch-off criterion that is calculated based on the drying curve as soon as the sample weight is constant, and where despite heating, no additional loss of weight is detectable. The measurement accuracy required for this is provided by a Sartorius weighing system with readability to 1 mg, which has been specially optimized for use in high temperature ranges.

Quick Measurement Results

For sample heating, the MA35 features two powerful metal tubular-shaped heating elements generating 360 watts of power. These elements facilitate quick and uniform heating of samples and thus shorten measurement times, which means a significant amount of time is saved compared to the drying oven because the finished end result can already simply be read within a few minutes.

Technical Specifications

Weighing range	35 g
Typical reproducibility of the weighing system	From around 1 g of weight of sample taken: $\pm 0.2\%$ From around 5 g of weight of sample taken: $\pm 0.05\%$
Readability	1 mg; 0.01%
Measurement display	% moisture, % dry mass, % ATRO, g residue
Typical sample quantity	5 – 15 g
Access to the sample compartment	<ul style="list-style-type: none">▪ by lifting top with wide opening angle▪ with viewing window
Windscreen	Integrated windscreen
Switch-off criterion	Optional: <ul style="list-style-type: none">▪ Fully automatic▪ Manual switch-off▪ Allotted time 0.1 – 99 min.
Heating program	Standard drying
Measurement program	The device is power failure-proof, so 1 program can be saved (parameter freely selectable)
Temperature setting	40 – 160 degrees Celsius in increments of 1 degree Celsius
Sample heating	Uniform with an Infrared dark radiator (metal tubular-shaped heating elements)
Measured value storage	Results are safely stored until the start of the next measurement
Log printout	<ul style="list-style-type: none">▪ Non-adjustable GLP log for measurement results Calibration Adjustment▪ Paper-saving brief log for measurement results▪ An optionally available external printer is used for the printout (YDP20 YDP30)
Inspection equipment monitoring	External calibration by means of optionally available calibration weights; temperature adjustment using an optional adjustment set
User guidance	Through symbols that correspond to the selected functions
Language selection	English, German, French, Spanish, Italian, Russian
Data interface	RS232 C-S/V24-V28, 7 Data-bit (ASCII) 1 Parity-bit
Network frequency	50 60 Hz
Power consumption	max. 400 VA
Case dimensions (W × D × H)	224 × 366 × 191 mm
Weight	Approximately 5.8 kg

Models Available

MA35M-230N	Standard version 230 V +15%, -20%
MA35M-115N	Standard version 115 V +15%, -20%
MA35M-115US	Standard version 115 V +15%, -20% with country-specific enhancements for the USA
MA35M-1CN230V1	Standard version 230 V +15%, -20% with country-specific enhancements for China

Accessories

6965542	Disposable sample pans 80 units, Aluminum, round, 90 mm
6906940	Fiberglass filter for use with liquid, pasty and oily samples, 80 units
6906941	Fiberglass filter, for use with liquid and oily samples, soft Quality, 200 count, Ø 90 mm
YDS05MA	Glass panel replacement set Aluminum pane instead of glass to comply with FDA/HACCP guidelines (Conversion kit)
YDP20-OCE	Data printer
YDP30	Premium GLP laboratory printer
69Y03295	RS232 cable for connecting the printer YDP30
6906918	Color ribbon for measured value printer
6906937	Paper rolls for data printer, 5 items at 50 m
YSS43-02	External calibration weight, 30 g ± 0.3 mg DKD [Deutsche Kalibrierdienst; German Calibration Service] certificate
YTM15MA	Temperature adjustment set
YMD01B	Individual method development for the MA35 (including brief report)

Scope of Supply


- Moisture measuring device with data interface
- Network cable
- 80 Aluminum sample pans

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MA37 Moisture Analyzer

For Daily Routine Operation

Simplifying Progress

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Your Reliable Partner for Routine Tasks



MA37 is a next-generation moisture analyzer that continues the success story of the MA35. The MA37 delivers fast, accurate results and is easy to operate. Moreover, this compact device features a BetterClean design for effortless cleaning. The status light makes it easy to track the current progress of a measurement. Therefore, the MA37 is ideal for users who require a fast, 100% reliable moisture analyzer that is easy to operate.

Fast measurements

The new, high-performance heating unit integrated into the MA37 ensures fast and uniform drying of the sample.

Display of the measurement status

The light indicates the status of the analyzer. As a result, you will have everything under control – even from a distance.

User-friendly operation

The intuitive user interface, including the touch screen, and easy-to-understand menu prompts considerably simplify operation of the MA37.

Effortless cleaning

The BetterClean design makes it so easy to thoroughly clean the parts of the sample chamber. You can even remove the chamber hood and the sample chamber plate to clean them in a laboratory washer.

MA35 mode

This mode lets you readily use method parameters already developed for the MA35.

Technical Specifications

Max. weighing capacity	70 g
Reproducibility, typical	Starting at an initial sample weight of approx. 1 g: $\pm 0.2\%$ Starting at an initial sample weight of approx. 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 heating using a metal tube heater
Heating programs	Standard drying, gentle drying, MA35 mode
Shutoff parameter	Fully automatic, semi-automatic, manual and with timer settings
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
Sample inspection	LED-illuminated sample chamber; inspection window with grid above the hood
Interface	Mini USB port; automatic printer detection; direct data transfer to Microsoft® Office programs
Housing dimensions (W × D × H)	215 × 400 × 210 mm (8.5" × 15.7" × 8.3")
Weight	Approx. 6.2 kg (approx. 13.6 lbs.)

Accessories

6965542	Disposable sample pans, 80 units, aluminum, Ø 90 mm
6906940	Glass fiber pads for analysis of pasty and fatty samples, hard quality; 80 units; Ø 90 mm
6906941	Glass fiber pads for analysis of liquid and fatty samples, soft quality; 200 units; Ø 90 mm
YHP01MA	ReproEasy pads, 10 units for performance testing to check the functionality of the analyzer's heating unit and weighing system
YCW452-AC-02	External calibration weight, 50 g (E2) with DAkkS calibration certificate*
YDP40	Standard data printer
YDP30	Premium GLP laboratory printer
YCC03-D09	Adapter cable for connecting the YDP20-OCE printer
YDP20-OCE	Data printer
YST01MA	Forceps for samples
YMD01B (incl. short report)	Customer-specific service for individual method development for the MA37 at the Sartorius Application Laboratory in Goettingen, Germany, or in the USA

*DAkkS = German accreditation body recognized throughout Europe




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