

# MA160 Moisture Analyzer

Manages Your Sophisticated Tasks

Simplifying Progress

**SARTORIUS**

# Fast, Precise and Easy Moisture Analysis

To be able to perform fast and accurate analysis on the widest variety of product samples, you need a reliable instrument that gives you maximum flexibility.

The MA160 uses the thermogravimetric method to determine the moisture content of liquids, pastes and solids – conveniently, reliably and in minimum time. It delivers outstandingly fast, absolutely reproducible results and features an intuitive Method Development Assistant that enables you to develop new methods in just three easy steps. The MA160 gives you the functions you need for professional and secure management of the methods you have created.

These methods can be stored via an SD card and transferred to other MA160 analyzers. During a measurement, a status light indicates the current progress of a measurement.

At the touch of a button, you can run the built-in performance test with a ReproEasy pad to check the functionality of the MA160 – ensuring flawless performance over the long term.

## Applications

With its optimized AURI heating unit, the MA160 delivers high-speed measurements.

The MA160 is ideal for moisture analysis of the widest variety of samples under different conditions. Its Method Development Assistant function enables you to create your own methods for different samples and efficiently manage the methods in a library. This supports your work in the QC lab and in process monitoring. Typical areas of application for the MA160 include moisture analysis of foods, beverages, pharmaceuticals, chemicals, paper materials and products for environmental protection.







# Features



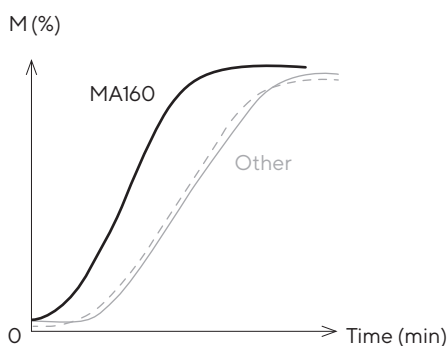
## High memory capacity

MA160 features a high memory capacity, letting you store up to 100 different methods and efficiently manage them in a library. In addition, the results of the last 999 measurements are automatically saved in the data memory, ensuring traceable GMP-compliant documentation at any time.



## High-speed measurements

Both the high-performance AURI heating unit and the sample chamber's geometry ensure rapid heating and fast uniform drying of your sample with up to 30% quicker analysis time.



## Fast and precise development of methods

The MA160's Method Development Assistant function solves the time-consuming problem of having to determine and evaluate the right parameters. It enables you to develop new methods quickly in just three simple steps.





### Display of the measurement status

The light indicates the current status of a measurement in progress: "running | START," "analysis completed | STOP," "analyzer OFF" or "error."



### Reliable performance testing

A ReproEasy Pad in combination with the built-in performance test lets you check the functionality of the entire MA160 moisture analyzer within just 5 minutes. This test guarantees reliable results, saving you from going to the trouble of performing extensive temperature adjustment.



### Compatibility with Sartorius MA150

The downward compatibility of the analyzer lets you readily use MA150 method parameters. The additional MA35 mode even enables you to run moisture analysis with parameters developed for the MA35.



### Effortless cleaning

The BetterClean design lets you easily and thoroughly clean the instrument parts. Additionally, the heating unit and the sample chamber plate are removable for cleaning in a laboratory washer.



### User-friendly operation

The MA160's intuitive user interface, including a touch screen, and easy-to-understand menu prompts for guidance enable you to easily operate the analyzer – without having to study the manual first.

# Technical Specifications

Max. weighing capacity	200 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 an AURI heating unit, 600 W
Heating programs	Standard drying, gentle drying, MA35 mode
Shutoff parameter	Fully automatic, semi-automatic, manual and with timer settings
Forceps for samples	For easy handling of sample pans
Data interface	Mini USB port; automatic printer detection, direct transfer to Microsoft® Office
Data transfer	SD card; function for importing and exporting methods and results
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
YCW512-AC-02	External calibration weight, 100 g (E2) with DAkkS calibration certificate*
YDP40	Standard laboratory printer
YDP30	Premium GLP laboratory printer
YCC03-D09	Adapter cable for connecting the YDP20-OCE printer
YDP20-OCE	Data printer
YST01MA	Forceps for samples
YMD02B (incl. short report)	Customer-specific service for individual method development for the MA 160 at the Sartorius Application Laboratory in Goettingen, Germany, or in the USA

\*DAkkS = German accreditation body recognized throughout Europe

## Disposable sample pans



## ReproEasy pad

