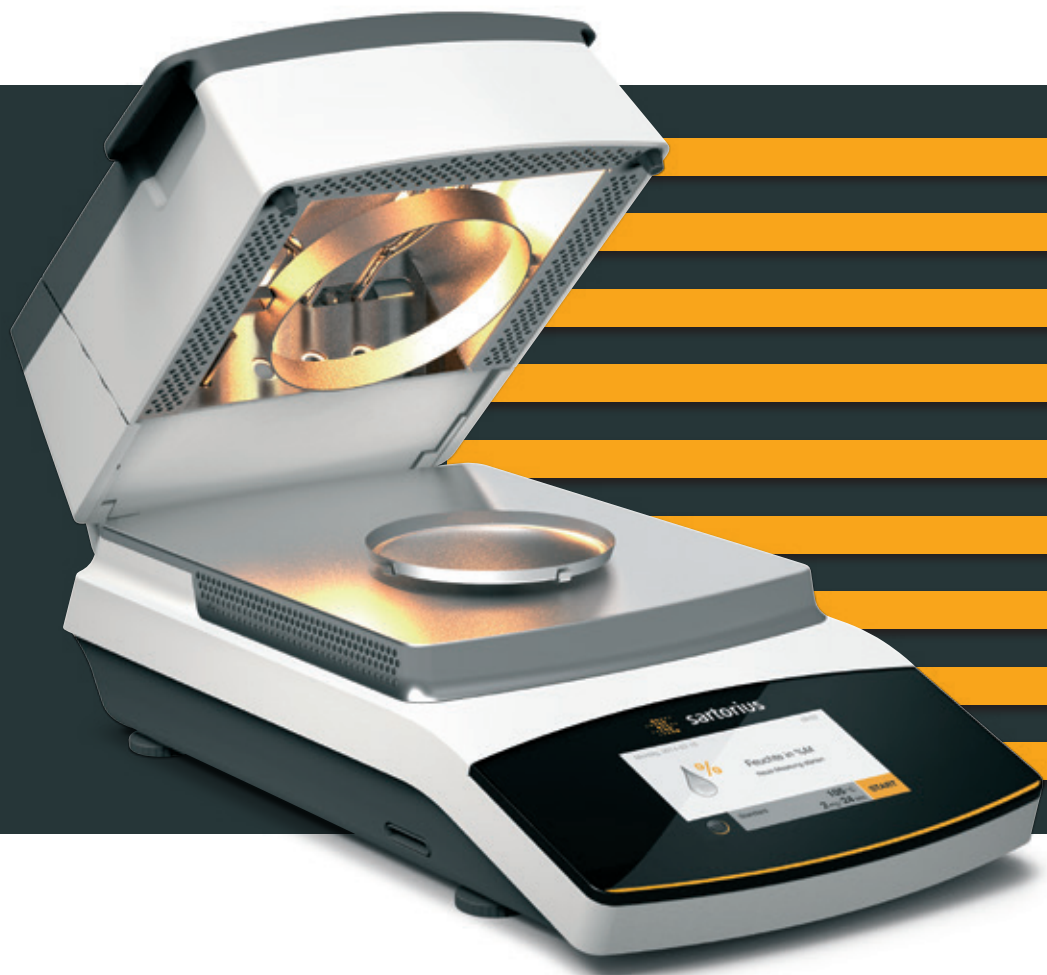


## The New MA160 Moisture Analyzer Manages Your Sophisticated Tasks



# 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.

High-speed measurements

Reliable Method Development Assistant function

High memory capacity for results and methods

User-friendly operation

Effortless cleaning

Display of the measurement status

Reliable performance testing

Compatibility with Sartorius MA150

MA35 mode

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.

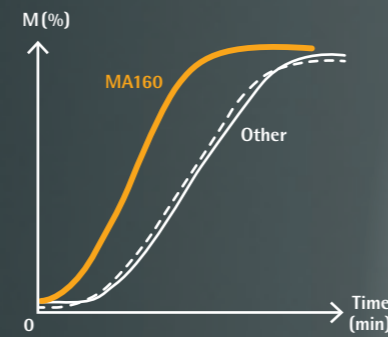
Typical areas of application for the MA160 include moisture analysis of foods, beverages, pharmaceuticals, chemicals, paper materials and products for environmental protection.



## Features

### High-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.



### 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.

### 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.

### 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.



## 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 x D x H)	215 x 400 x 210 mm (8.5" x 15.7" x 8.3")
Weight	Approx. 6.2 kg (approx. 13.6 lbs.)

### Accessories

6965542	Disposable sample pans, 80 units, aluminum, 90 mm Ø
6906940	Glass fiber pads for analysis of pasty and fatty samples, hard quality; 80 units; 90 mm Ø
6906941	Glass fiber pads for analysis of liquid and fatty samples, soft quality; 200 units; 90 mm Ø
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 a YDP20-OCE printer
YDP20-OCE	Data printer
YST01MA	Forceps for samples
YMD02B (incl. short report)	Customer-specific service for individual method development at the Sartorius Application Laboratory in Goettingen, Germany, or in the USA

\* DAkkS = German accreditation body recognized throughout Europe



Disposable sample pans



ReproEasy pad

# Sales and Service Contacts

For further contacts, visit [www.sartorius.com](http://www.sartorius.com)

## Europe

### Germany

Sartorius Lab Instruments  
GmbH & Co. KG  
Otto-Brenner-Strasse 20  
37079 Goettingen  
Phone +49.551.308.0  
Fax +49.551.308.3289

### France & Suisse Romande

Sartorius France  
2, rue Antoine Laurent de Lavoisier  
ZA de la Gaudrée  
91410 Dourdan  
Phone +33.1.70.62.50.00  
Fax +33.1.64.59.76.39

### Austria

Sartorius Austria GmbH  
Modecenterstrasse 22  
1030 Vienna  
Phone +43.1.7965760.0  
Fax +43.1.7965760.24

### Belgium

Sartorius Belgium N.V.  
Rue Colonel Bourg 105  
1030 Bruxelles  
Phone +32.2.756.06.90  
Fax +32.2.481.84.11

### Finland & Baltics

Sartorius Biohit Liquid Handling Oy  
Laippatie 1  
00880 Helsinki  
Phone +358.9.755.951  
Fax +358.9.755.95.200

### Hungary

Sartorius Hungária Kft.  
Kagyó u. 5.  
2092 Budakeszi  
Phone +3623.457.227  
Fax +3623.457.147

### Ireland

Sartorius Ireland Ltd.  
Unit 41, The Business Centre  
Stadium Business Park  
Ballycoolin Road  
Dublin 11  
Phone +353.1.8089050  
Fax +353.1.8089388

### Italy

Sartorius Italy S.r.l.  
Viale A. Casati, 4  
20835 Muggiò (MB)  
Phone +39.039.4659.1  
Fax +39.039.4659.88

### Netherlands

Sartorius Netherlands B.V.  
Phone +31.30.60.53.001  
Fax +31.30.60.52.917  
[info.netherlands@sartorius.com](mailto:info.netherlands@sartorius.com)

### Poland

Sartorius Poland sp.z o.o.  
ul. Wrzesinska 70  
62-025 Kostrzyn  
Phone +48.61.6473830  
Fax +48.61.6473839

### Russian Federation

LLC "Sartorius RUS"  
Uralskaya str. 4, Lit. B  
199155 St. Petersburg  
Phone +7.812.327.53.27  
Fax +7.812.327.53.23

### Spain & Portugal

Sartorius Spain, S.A.  
Avda. de la Industria, 32  
Edificio PAYMA  
28108 Alcobendas (Madrid)  
Phone Spain +34.913.586.095  
Phone Portugal +351.800.855.800  
Fax Spain +34.913.589.623  
Fax Portugal +351.800.855.799

### Switzerland

Sartorius Mechatronics Switzerland AG  
Ringstrasse 24a  
8317 Tagelswangen (ZH)  
Phone +41.44.746.50.00  
Fax +41.44.746.50.50

### U.K.

Sartorius UK Ltd.  
Longmead Business Centre  
Blenheim Road, Epsom  
Surrey KT19 9QQ  
Phone +44.1372.737159  
Fax +44.1372.726171

### Ukraine

LLS "Sartorius RUS"  
Post Box 440 "B"  
01001 Kiev, Ukraine  
Phone +380.44.411.4918  
Fax +380.50.623.3162

## Americas

### USA

Sartorius Corporation  
5 Orville Drive, Suite 200  
Bohemia, NY 11716  
Phone +1.631.254.4249  
Toll-free +1.800.635.2906  
Fax +1.631.254.4253

### Argentina

Sartorius Argentina S.A.  
Int. A. Avalos 4251  
B1605ECS Munro  
Buenos Aires  
Phone +54.11.4721.0505  
Fax +54.11.4762.2333

### Brazil

Sartorius do Brasil Ltda  
Avenida Senador Vergueiro 2962  
São Bernardo do Campo  
CEP 09600-000 - SP- Brasil  
Phone +55.11.4362.8900  
Fax +55.11.4362.8901

### Canada

Sartorius Canada Inc.  
2179 Dunwin Drive #4  
Mississauga, ON L5L 1X2  
Phone +1.905.569.7977  
Toll-Free +1.800.668.4234  
Fax +1.905.569.7021

### Mexico

Sartorius de México, S.A. de C.V.  
Libramiento Norte de Tepetzotlan s/n,  
Colonia Barrio Tlacateco,  
Municipio de Tepetzotlan,  
Estado de México,  
C.P. 54605  
Phone +52.55.5562.1102  
Fax +52.55.5562.2942  
[leadsmex@sartorius.com](mailto:leadsmex@sartorius.com)

### Peru

Sartorius Peru S.A.C.  
Av. Emilio Cavenecia 264 San Isidro  
15073 Lima, Perú  
Phone +51.1.441 0158  
Fax +51.1.422 6100

## Asia | Pacific

### Australia

Sartorius Australia Pty. Ltd.  
Unit 5, 7-11 Rodeo Drive  
Dandenong South Vic 3175  
Phone +61.3.8762.1800  
Fax +61.3.8762.1828

### China

Sartorius (Shanghai) Trading Co., Ltd.  
3rd Floor, North Wing, Tower 1  
No. 4560 Jinke Road  
Zhangjiang Hi-Tech Park  
Pudong District  
Shanghai 201210, P.R. China  
Phone +86.21.6878.2300  
Fax +86.21.6878.2882

### Hong Kong

Sartorius Hong Kong Ltd.  
Unit 1012, Lu Plaza  
2 Wing Yip Street  
Kwun Tong  
Kowloon, Hong Kong  
Phone +852.2774.2678  
Fax +852.2766.3526

### India

Sartorius Weighing India Pvt. Ltd.  
#69/2-69/3, NH 48, Jakkasandra,  
Nelamangala Tq  
562 123 Bangalore, India  
Phone +91.80.4350.5250  
Fax +91.80.4350.5253

### Japan

Sartorius Japan K.K.  
4th Fl., Daiwa Shinagawa North Bldg.  
8-11, Kita-Shinagawa 1-chome  
Shinagawa-ku, Tokyo, 140-0001 Japan  
Phone +81.3.3740.5408  
Fax +81.3.3740.5406

### Malaysia

Sartorius Malaysia Sdn. Bhd  
Lot L3-E-3B, Enterprise 4  
Technology Park Malaysia  
Bukit Jalil  
57000 Kuala Lumpur, Malaysia  
Phone +60.3.8996.0622  
Fax +60.3.8996.0755

### Singapore

Sartorius Singapore Pte. Ltd  
1 Science Park Road,  
The Capricorn, #05-08A,  
Singapore Science Park II  
Singapore 117528  
Phone +65.6872.3966  
Fax +65.6778.2494

### South Korea

Sartorius Korea Ltd.  
8th Floor, Solid Space B/D,  
PanGyoYeok-Ro 220, Bundang-Gu  
SeongNam-Si, GyeongGi-Do, 463-400  
Phone +82.31.622.5700  
Fax +82.31.622.5799

### Thailand

Sartorius (Thailand) Co. Ltd.  
129 Rama 9 Road,  
Huaykwang  
Bangkok 10310  
Phone +66.2643.8361-6  
Fax +66.2643.8367



◀ [www.sartorius.com](http://www.sartorius.com)

Microsoft® is a registered trademark of Microsoft Corporation, USA.