

# MA100C Moisture Analyzer

Fully Automatic Infrared Moisture Analyzer with Ceramic Heating Element



- Time-saving and convenient alternative to a drying oven
- Comprehensive range of options for flexible adaptation to various drying tasks
- Ideally suited for ambitious measuring tasks in the fields of quality control or research
- Utmost safety due to self-calibrating system and full GMP suitability
- Particularly well suited for samples with demanding drying behaviour and very dry samples

Max. weighing capacity	100 g
Repeatability, typical	Starting at an initial sample weight of approx. 1 g: $\pm$ 0.1%   starting at an initial sample weight of approx. 5 g: $\pm$ 0.02%
Readability	1 mg, 0.01%   0.1 mg, 0.001%
Typical sample quantity	5 – 15 g
Reading display	% moisture content (optionally available with conversion factor)   % dry weight   RATIO value   mg weight loss   g residue   g/kg residue   g/l residue
Temperature range and settings	30°C–180°C, stand-by temperature selectable from 30–100°C in increments of 1 degree
Sample heating	Infrared heating using a round ceramic heating element
Heating programs	Standard, quick, gentle and phase drying
Shutoff criteria	Optional:  - Fully automatic  - SPRM mode (optimization to a reference system)  - Semi-automatic (1–50 mg/5–300 sec.)  - Semi-automatic (0.1–5.0%/5–300 sec.)  - Timer setting (3× 0.1–999 min.)  - Timer setting + fully/semi-automatic (2× 0.1–999 min. + automatic)  - Manual
Access to sample chamber	Motorized cover
Measuring program	30 programs saved in a non-volatile memory (freely selectable parameters)
Data storage	Result statistics for the last 9999 measurements/program
Operator guidance features	Menu-driven, alphanumeric dialogue text (5 languages selectable)
Parameter   data entry	<ul><li>Optimized text entry via softkeys</li><li>Numeric entry via keypad</li><li>Optional data entry via barcode scanner</li></ul>
Report printout	<ul> <li>Printout using the optional, internal printer YDP01MA</li> <li>Configurable GLP-report for measuring results   calibration  </li> </ul>

adjustment (5 languages selectable)



Easy to clean



With optional printer YDP01MA

Test equipment monitoring	<ul> <li>Internal calibration weight</li> <li>Automatic reproTEST for the weighing system</li> <li>Automatic temperature calibration with optional temperature adjustment set YTM03MA</li> <li>Documentation in accordance with the applicable quality assurance requirements</li> </ul>
Safety	Parameter settings password-protected against unauthorized access
Voltage frequency	48-60 Hz
Power consumption	Max. 700 VA
Operating temperature range	10°C30°C
Housing dimensions $(W \times D \times H)$	350 × 453 × 156
Weight	Approx. 8.0 kg

	Supply voltage	
MA100C-000115V1	115 V +15%, -20%	
MA100C-000230V1	230 V +15%, -20%	

## Accessories

6965542	Disposable sample pans, 80 units, aluminum, round, ∅ 90 mm
6906940	Fiberglass pad, $\varnothing$ 90 mm for pasty and fatty samples, hard quality, 80 units
6906941	Fiberglass pad, $\varnothing$ 90 mm for liquid and fatty samples, soft quality, with high suction force, 200 units
YAT01MA	Single-use pipettes for weighing liquid samples, 500 units
YDS03MA	Panel replacement set, aluminum panels for replacing glass panels, to meet FDA HACCP regulations (conversion kit)
YSC02	SartoCollect, software for data communication between moisture analyzer and PC (connecting cable must be ordered separately) Prerequisite: MS Windows 2000   Windows XP Professional, Vista Ultimate, Windows 7 Ultimate.
YCW4528-02	External calibration weight, 50 g (E2) with DKD certificate
YTM03MA	Temperature adjustment set with manufacturer certificate for adjustment of the heat source
YDP01MA	Data printer, suitable for integration
YDP20-0CE	Data printer, suitable for external verification, with date, time, statistics, numerator including cable
6906918	Ink ribbon for data printer
6906937	Paper rolls for data printer, 5 rolls, 50 m each

## **Equipment Supplied**

- Moisture analyzer with data interface
- Power cord
- User manual
- 80 alu sample pansIn-use dust cover for keypad
- 1 pair of forcepsLaminated short-form manual (6 languages)

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-mechatronics.com

Subject to change without notice.
Printed in Germany on paper that has been bleached without any use of chlorine. | W
Publication No.: W--2034-e11081
Order No.: 98649-012-44



# MA100H Moisture Analyzer

Fully Automatic Infrared Moisture Analyzer with Halogen Heater



- Time-saving and convenient alternative to a drying oven
- Comprehensive range of options for flexible adaptation to various drying tasks
- Ideally suited for ambitious measuring tasks in the fields of quality control or research
- Utmost safety due to self-calibrating system and full GMP suitability
- Ideally suited for samples with high moisture content due to quick control behaviour

Max. weighing capacity	100 g
Repeatability, typical	Starting at an initial sample weight of approx. 1 g: $\pm$ 0.1%   starting at an initial sample weight of approx. 5 g: $\pm$ 0.02%
Readability	1 mg, 0.01%   0.1 mg, 0.001%
Typical sample quantity	5 – 15 g
Reading display	% moisture content (optionally available with conversion factor)   $%$ dry weight   RATIO value   mg weight loss   g residue   g/kg residue   g/l residue
Temperature range and settings	30°C–180°C, stand-by temperature selectable from 30–100°C in increments of 1 degree
Sample heating	Infrared heating using a halogen round heater
Heating programs	Standard, quick, gentle and phase drying
Shutoff criteria	Optional:  - Fully automatic  - SPRM mode (optimization to a reference system)  - Semi-automatic (1–50 mg/5–300 sec.)  - Semi-automatic (0.1–5.0%/5–300 sec.)  - Timer setting (3× 0.1–999 min.)  - Timer setting + fully/semi-automatic (2× 0.1–999 min. + automatic)  - Manual
Access to sample chamber	Motorized cover
Measuring program	30 programs saved in a non-volatile memory (freely selectable parameters)
Data storage	Result statistics for the last 9999 measurements/program
Operator guidance features	Menu-driven, alphanumeric dialogue text (5 languages selectable)
Parameter   data entry	<ul><li>Optimized text entry via softkeys</li><li>Numeric entry via keypad</li><li>Optional data entry via barcode scanner</li></ul>
Report printout	<ul> <li>Printout using the optional, internal printer YDP01MA</li> <li>Configurable GLP-report for measuring results   calibration   adjustment (5 languages selectable)</li> </ul>



Easy to clean



With optional printer YDP01MA

Test equipment monitoring	<ul> <li>Internal calibration weight</li> <li>Automatic reproTEST for the weighing system</li> <li>Automatic temperature calibration with optional temperature adjustment set YTM03MA</li> <li>Documentation in accordance with the applicable quality assurance requirements</li> </ul>
Safety	Parameter settings password-protected against unauthorized access
Voltage frequency	48-60 Hz
Power consumption	Max. 700 VA
Operating temperature range	10°C30°C
Housing dimensions $(W \times D \times H)$	350 × 453 × 156
Weight	Approx. 8.0 kg

	Supply voltage
MA100H-000115V1	115 V +15%, -20%
MA100H-000230V1	230 V +15%, -20%

### Accessories

Accessories	
6965542	Disposable sample pans, 80 units, aluminum, round, ∅ 90 mm
6906940	Fiberglass pad, $\ensuremath{\mathcal{O}}$ 90 mm for pasty and fatty samples, hard quality, 80 units
6906941	Fiberglass pad, $\varnothing$ 90 mm for liquid and fatty samples, soft quality, with high suction force, 200 units
YAT01MA	Single-use pipettes for weighing liquid samples, 500 units
YSC02	SartoCollect, software for data communication between moisture analyzer and PC (connecting cable must be ordered separately) Prerequisite: MS Windows 2000   Windows XP Professional, Vista Ultimate, Windows 7 Ultimate.
YCW4528-02	External calibration weight, 50 g (E2) with DKD certificate
YTM03MA	Temperature adjustment set with manufacturer certificate for adjustment of the heat source
YDP01MA	Data printer, suitable for integration
YDP20-0CE	Data printer, suitable for external verification, with date, time, statistics, numerator including cable
6906918	Ink ribbon for data printer
6906937	Paper rolls for data printer, 5 rolls, 50 m each

## **Equipment Supplied**

- Moisture analyzer with data interface
- Power cord
- User manual
- 80 alu sample pans
- In-use dust cover for keypad1 pair of forceps
- Laminated short-form manual (6 languages)

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-mechatronics.com

Subject to change without notice.
Printed in Germany on paper that has been bleached without any use of chlorine. | W
Publication No.: W--2030-e11081
Order No.: 98649-012-20



## MA100Q Moisture Analyzer

Fully Automatic Infrared Moisture Analyzer with Coiled Quartz Heating Element (CQR)



- Time-saving and convenient alternative to a drying oven
- Comprehensive range of options for flexible adaptation to various drying tasks
- Ideally suited for ambitious measuring tasks
   in the fields of quality control or research
- Utmost safety due to self-calibrating system and full GMP suitability
- Excellently suited for high-temperature drying up to 230°C and standard applications

100 g
Starting at an initial sample weight of approx. 1 g: $\pm$ 0.1%   starting at an initial sample weight of approx. 5 g: $\pm$ 0.02%
1 mg, 0.01%   0.1 mg, 0.001%
5 – 15 g
% moisture content (optionally available with conversion factor)   % dry weight   RATIO value   mg weight loss   g residue   g/kg residue   g/l residue
30°C–230°C, stand-by temperature selectable from 30–100°C in increments of 1 degree
Infrared heating using a coiled quartz heating element (CQR)
Standard, quick, gentle and phase drying
Optional:  - Fully automatic  - SPRM mode (optimization to a reference system)  - Semi-automatic (1–50 mg/5–300 sec.)  - Semi-automatic (0.1–5.0%/5–300 sec.)  - Timer setting (3× 0.1–999 min.)  - Timer setting + fully/semi-automatic (2× 0.1–999 min. + automatic)  - Manual
Motorized cover
30 programs saved in a non-volatile memory (freely selectable parameters)
Result statistics for the last 9999 measurements/program
Menu-driven, alphanumeric dialogue text (5 languages selectable)
<ul><li>Optimized text entry via softkeys</li><li>Numeric entry via keypad</li><li>Optional data entry via barcode scanner</li></ul>
<ul> <li>Printout using the optional, internal printer YDP01MA</li> <li>Configurable GLP-report for measuring results   calibration   adjustment (5 languages selectable)</li> </ul>



Easy to clean



With optional printer YDP01MA

Test equipment monitoring	<ul> <li>Internal calibration weight</li> <li>Automatic reproTEST for the weighing system</li> <li>Automatic temperature calibration with optional temperature adjustment set YTM03MA</li> <li>Documentation in accordance with the applicable quality assurance requirements</li> </ul>
Safety	Parameter settings password-protected against unauthorized access
Voltage frequency	48-60 Hz
Power consumption	Max. 700 VA
Operating temperature range	10°C30°C
Housing dimensions $(W \times D \times H)$	350 × 453 × 156
Weight	Approx. 8.0 kg

	Supply voltage	
MA100Q-000115V1	115 V +15%, -20%	
MA100Q-000230V1	230 V +15%, -20%	

### Accessories

6965542	Disposable sample pans, 80 units, aluminum, round, ∅ 90 mm
6906940	Fiberglass pad, $\varnothing$ 90 mm for pasty and fatty samples, hard quality, 80 units
6906941	Fiberglass pad, $\varnothing$ 90 mm for liquid and fatty samples, soft quality, with high suction force, 200 units
YAT01MA	Single-use pipettes for weighing liquid samples, 500 units
YSC02	SartoCollect, software for data communication between moisture analyzer and PC (connecting cable must be ordered separately) Prerequisite: MS Windows 2000   Windows XP Professional, Vista Ultimate, Windows 7 Ultimate.
YCW4528-02	External calibration weight, 50 g (E2) with DKD certificate
YTM03MA	Temperature adjustment set with manufacturer certificate for adjustment of the heat source
YDP01MA	Data printer, suitable for integration
YDP20-0CE	Data printer, suitable for external verification, with date, time, statistics, numerator including cable
6906918	Ink ribbon for data printer
6906937	Paper rolls for data printer, 5 rolls, 50 m each

## **Equipment Supplied**

- Moisture analyzer with data interface
- Power cordUser manual
- 80 alu sample pans
- In-use dust cover for keypad
- 1 pair of forceps
  Laminated short-form manual (6 languages)

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-mechatronics.com

Subject to change without notice.
Printed in Germany on paper that has been bleached without any use of chlorine. | W
Publication No.: W--2035-e11081
Order No.: 98649-012-50



# MA150C Moisture Analyzer

Fully Automatic Infrared Moisture Analyzer with Ceramic Heating Element



- Time-saving and convenient alternative to a drying oven
- Utmost measurement accuracy and durability "made in Germany"
- 20 program memory modules for quick method changing
- Very even heat distribution, ideally suited for thermally sensitive samples
- Optional version without glass, for use in food production applications

Max. weighing capacity	150 g
Repeatability, 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 – 15 g
Reading display	% moisture content   % dry weight   RATIO value   g residue   g/kg residue   g/l residue
Temperature range and settings	40°C–180°C, stand-by temperature selectable from 40–100°C in increments of 1 degree
Sample heating	Infrared heating using a round ceramic heating element
Heating programs	Standard drying, gentle drying
Shutoff criteria	Optional: - Fully automatic - Semi-automatic (1–50 mg/5–300 sec.) - Semi-automatic (0.1–5.0%/5–300 sec.) - Timer setting (0.1–99.9 min.) - Manual
Access to sample chamber	Hinged cover
Measuring program	20 programs saved in a non-volatile memory (freely selectable parameters)
Data storage	Results are saved until the start of the next measurement
Operator guidance features	Menu-driven, alphanumeric dialogue text (5 languages selectable) and symbols
Parameter   data entry	Via softkeys, menu-specific key allocation
Report printout	<ul> <li>Printout using the optional, external printer YDP20-0CE</li> <li>Configurable GLP-report for measuring results   calibration   adjustment (5 languages selectable)</li> </ul>



Open sample chamber



MA150C featuring the accessory YDS04MA: To replace glass panels with metal panels for use in food production

Test equipment monitoring	<ul> <li>External calibration using optional weight sets</li> <li>Automatic temperature calibration with optional temperature adjustment set YTM03MA</li> </ul>
Safety	Parameter settings password-protected against unauthorized access
Voltage frequency	48-60 Hz
Power consumption	Max. 700 VA
Operating temperature range	10°C30°C
Housing dimensions $(W \times D \times H)$	213 × 320 × 180.5
Weight	Approx. 5.5 kg

	Supply voltage
MA150C-000115V1	115 V +15%, -20%
MA150C-000230V1	230 V +15%, -20%
Accessories	
6965542	Disposable sample pans, 80 units, aluminum, round, $arnothing$ 90 mm
6906940	Fiberglass pad, $\varnothing$ 90 mm for pasty and fatty samples, hard quality, 80 units
6906941	Fiberglass pad, $\varnothing$ 90 mm for liquid and fatty samples, soft quality, with high suction force, 200 units
YAT01MA	Single-use pipettes for weighing liquid samples, 500 units
YDS04MA	Panel replacement set, aluminum panels for replacing glass panels, to meet FDA HACCP regulations (conversion kit)
YSC02	SartoCollect, software for data communication between moisture analyzer and PC (connecting cable must be ordered separately) Prerequisite: MS Windows 2000   Windows XP Professional, Vista Ultimate, Windows 7 Ultimate.
YCW5128-02	External calibration weight, 100 g (E2) with DKD certificate
YTM03MA	Temperature adjustment set with manufacturer certificate for adjustment of the heat source
YDP20-0CE	Data printer, suitable for external verification, with date, time, statistics, numerator including cable
6906918	Ink ribbon for data printer
6906937	Paper rolls for data printer, 5 rolls, 50 m each

## **Equipment Supplied**

- Moisture analyzer with data interface

- Moisture analyzer with data in
   Power cord
   User manual
   80 alu sample pans
   In-use dust cover for keypad
   1 pair of forceps

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-mechatronics.com

Subject to change without notice.
Printed in Germany on paper that has been bleached without any use of chlorine. | W
Publication No.: W--2033-e11102
Order No.: 98649-012-38