

# Model MB23 and MB25 Basic Moisture Analyzers



## Speed, Simplicity and Affordability

The new OHAUS MB23 and MB25 Basic Moisture Analyzers combine high quality and durable construction into a sleek, compact design. The MB23 and MB25 offer dependable, accurate, results for a wide variety of applications.

### **Standard Features Include:**

- Flexible Performance The OHAUS MB23 and MB25 provide accurate results at either 0.1% or 0.05% readability. And with your choice of infrared or halogen heating, they are ideal for textiles, wastewater, ceramics, food and other applications that require IR heating elements and measurements to 0.1% or 0.05%.
- Simple to Operate Set up and operation is extremely easy. Just press and hold the temperature or time buttons to set drying parameters, add your sample and begin the test process. This makes the MB23 and MB25 ideal for routine tasks performed by operators of all skill levels.
- **Compact, Easy-to-Clean Design** The compact footprint (17 x 13 x 28 cm) of the OHAUS MB23 and MB25 is designed to take up less space. Their easy-to-clean heating chamber is ideal for frequent use and inexpensive maintenance.

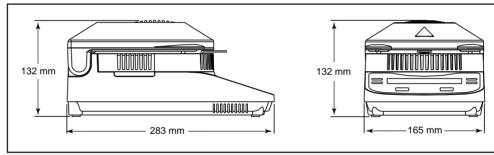
# MB23 and MB25 Basic Moisture Analyzers

#### **Specifications**

Model	MB23	MB25	
Capacity	110g		
Repeatability (Std Dev) (g)	0.3% (3g sample) 0.2% (10g sample)	0.2% (3g sample) 0.05% (10g sample)	
Readability	0.1% / 0.01g	0.05% / 0.005g	
Sample Size	3g to 20g typical, 0.5g min.		
Interface	Bidirectional RS-232		
Timer	1 - 99 minutes, 30-second increments to 60 minutes		
Heating Technology	Infrared (no glass)	Halogen	
Temperature Range	50°C to 160°C in 5° increments		
Power	100 to 240 VAC, 50/60 Hz		
Tare Range	To capacity by subtraction		
Operating Temperature Range	5° to 40°C		
Display Type	Custom backlit LCD		
Displays	% moisture or % solids or weight (g), temperature, time		
Pan Size (Diameter)	90 mm		
Dimensions (W x H x D)	17 x 13 x 28 cm		
Net Weight	2.3 kg		
Shipping Weight	3.9 kg		
Included Accessories			
Sample Pans (Quantity 50)	Standard		
In Use Cover	Standard		
Sample Pan Handler	Optional (PN 11113873)	Standard	

Models are CE, CSA/UL and FCC approved

#### **Outline Dimensions**



**Ohaus Number** 

#### Options and Accessories

Security Locking Cable	80850000
Security Lock (Kensington® type)	80850043
Temperature Calibration Kit	
50g M1 Calibration Weight	
Sample Pans (80/Box)	
Pads, Glass Fiber (200/Box)	
Reusable Sample Pans (3/pk)	
STP103 Thermal Printer EU	
STP103 Thermal Printer UK	
CBM910 Impact Printer EU	80252043
SRP275 Impact Printer UK	80251989
Cable, STP103	
Cable, CBM910	80252571
Cable, SRP275	
Collect Software	80500746

#### **Industry Leading Quality and Support**

All OHAUS MB Series Moisture Analyzers are manufactured under an ISO 9001:2000 Registered Quality Management System. Our rugged construction and stringent quality control have been hallmarks of all OHAUS products for over a century.



With it's small footprint, the OHAUS MB23 and MB25 are compact enough to fit on any benchtop



The OHAUS MB23 comes with an infrared heating element, while the MB25 uses halogen technology

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\* ISO 9001:2000 Registered Quality Management System









## Ideal for routine moisture analysis requiring precise results.

The new OHAUS MB27 Basic Moisture Analyzer combines high quality and durable construction into a sleek, compact design. The MB27 offers dependable, accurate results for a wide variety of moisture analysis applications.

### **Standard Features Include:**

### Flexible Performance

The MB27 provides accurate results at 0.01% (0.001g). With a large capacity of 90 grams, it is ideal for food, agriculture, chemical, pharmaceutical and other applications that require measurements up to 0.01% (0.001g).

### • Simple to Operate

Set up and operation is extremely easy. Just press and hold buttons to set drying parameters. The MB27 is ideal for routine tasks performed by operators of all skill levels.

### Compact, Easy-to-Clean Design

The compact footprint ( $17 \times 14 \times 28$  cm) of the OHAUS MB27 is designed to take up less space. The easy-to-clean heating chamber is ideal for frequent use and inexpensive maintenance.

# **MB27** Moisture Analyzer

Model	MB27
Capacity	90 g
Repeatability (Std Dev ) (g)	0.2% (3 g sample) 0.05% (10 g sample)
Readability	0.01%/0.001 g
Sample size	3g to 20g typical, 0.5g min.
Interface	Bidirectional RS232
Timer	1-99 minutes, 30-second increments to 60 minutes
Heating Technology	Halogen
Temperature Range	50 °C to 160 °C in 5 °C increments
Power	100 to 240 VAC, 50/60 Hz
Tare Range	To capacity by subtraction
Operating Temperature Range	41 °F to 104 °F/5 °C to 40 °C
Display Type	Backlit LCD
Displays	%moisture or %solids or weight (g), temperature, time
Pan Size (Diameter)	3.5 in/90 mm
Dimensions (W $\times$ H $\times$ D)	6.5 × 5 × 11 in/17 × 14 × 28 cm
Net Weight	5 lb/2.3 kg
Shipping Weight	8.5 lb/3.9 kg

## Compliance

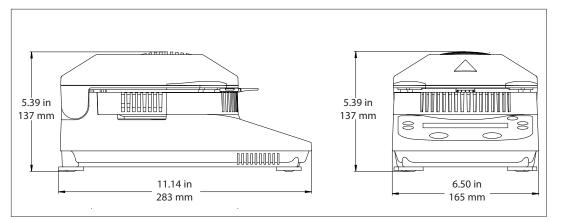
• Product Safety: CAN/CSA C22.2 61010-1, CAN/CSA C22.2 61010-2-010, UL 61010-1,

• Electromagnetic Compatibility: FCC Part 15 Class A, ICES-003 Class A,

### Accessories

Temperature Calibration Kit, MB Series	13857
Anti-Theft Device	\$50043
Aluminum Sample Pans, 80 Pcs	350086
Pads, Glass Fiber, Qty 200 Pcs	350087
In-Use-Cover	252475
Pan Holder, MB Series 802	252476
Sample Cage, MB Series	252477
Reusable Sample Pans, 3 Pcs, 7mm, MB Series 802	252478
Reusable Sample Pans, 3 Pcs, 14mm, MB Series 802	252479
Impact Printer SF40A 300	64203
Thermal Printer, STP-103, US	251992

### **Outline Dimensions**



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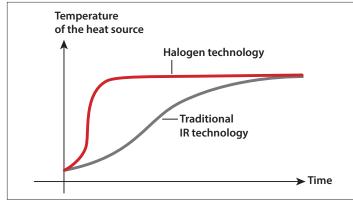
## Combining Speed and Precision in One Moisture Analyzer –Test More Samples in Less Time

Measuring moisture content has never been easier than with the MB90 Moisture Analyzer. The MB90's halogen heating distributes heat uniformly over the sample and speeds up the drying process— delivering fast and precise measurements. Designed for tool-free cleaning, the MB90's components can be easily removed for quick and easy maintenance. Operating the MB90 is intuitive with the icon-driven menu navigation on the touchscreen display.

### Standard Features Include:

- Outstanding Halogen Heating Guarantees Fast and Precise Results
- The MB90's precisely controlled halogen heating dries samples quickly and ensures uniform heating to yield fast, precise and repeatable results of 0.01% readability.
- Effortless Maintenance with the Tool-Free Cleaning Design Designed with effortless maintenance in mind, the MB90 features a removable pan handler and heating chamber components that make cleaning quick and easy—no tools needed.
- Touchscreen Icon-Based Menu Navigation Guides Users Through Every Step Icon-based menu navigation on the easy-to-read touchscreen display makes operating the MB90 intuitive. Perform routine sample testing in three easy steps—no training required.

# MB90 Moisture Analyzer



Fast Heating Time



Uniform Drying

# **Exceptional Precision**

# The MB90 provides precise results for more confident testing.

- Fast Halogen Heating Technology Halogen heating dries samples in seconds and performs up to 40% faster than traditional infrared methods.
- Uniform Drying for Precise, Repeatable Results The reflective sample chamber ensures uniform heating of each sample to yield reliable results of 0.01% readability.
- Flexible and Powerful

Features a full operating temperature range of 40–200 °C in 1 degree increments.

• Two Drying Profiles to Ensure Accuracy Customize heating of specific samples with temperature control for one-step drying—set temperature and time and begin!

Fast: Quickest possible time to temperature

*Standard:* Minimal overshoot while achieving temperatures quickly

• Shut-Off Criteria for Automatic Test Completion Customize your own test endpoint criteria to automatically end the test once moisture loss is no longer detected. Choose from 3 criteria—Manual, Timed and Auto.

# **Easy Tool-Free Cleaning**

## The MB90 features a patented pan handler and removable parts for convenient maintenance.

- Stainless Steel Drying Pan Wipe down quickly
- Removable Heating Chamber Components No tools required—simply remove glass and tray to clean



# **Testing Made Simple**

## The MB90 features a wide, bright touchscreen display and intuitive menu navigation for fast, accurate moisture analysis.

- Touchscreen Display Easy to read and understand
- Icon-Driven Menu Navigation Easy to follow—no training required
- 4 Mechanical Keys for Fast One-Step Operation Tare, Start/Stop, Print, On/Off
- USB and RS232 Ports Quick connections to a PC or flash drive
- Moisture Analysis Made Simple Just 3 easy steps for routine sample testing!
  - 1. Tare empty sample pan
  - 2. Add sample according to best practices
  - 3. Press start and see your results!





# **Multiple Ways to Connect**

Versatile connectivity options to handle data collection and transfer needs—enhancing the user experience.

- USB and RS232 Ports Quick connections to a PC or flash drive
- Data Collection and Transfer You can simply save and transfer data from the moisture analyzer to a USB drive

# **MB90** Moisture Analyzer

Model	MB90
Capacity	90 g
Readability	0.01%/0.001 g
Repeatability (Std Dev) (g)	0.18% (3 g sample) 0.02% (10 g sample)
Moisture Range	0.01% to 100% (0.01% to 1000% for regain mode)
Output	RS232, USB Host, USB Device
Heating Element	Halogen
Temperature Range	40–200 °C
Power	120 or 240 VAC 50/60 Hz
Operating Temperature Range	50–104 °F/10–40 °C
Display Type	4.3 in/109 mm, QVGA, TFT touch screen
Display Results	%moisture, %solids, %regain, time, temperature, weight, method name, drying curve and statistics
Pan Size	3.5 in/90 mm
Dimensions (W $\times$ H $\times$ D)	8.3 × 7.7 × 14.0 in/211 × 180 × 355 mm
Net Weight	11.5 lb/5.23 kg
Shipping Weight	18.4 lb/8.35 kg

## Compliance

• Product Safety: IEC/EN 61010-1; IEC/EN 61010-2-010; CAN/CSA C22.2 61010-1; CAN/CSA C22.2 61010-2-010; UL 61010-1

• Electromagnetic Compatibility: IEC/EN 61326-1 Class B, Basic environments; FCC Part 15 Class A; ICES-003 Class A

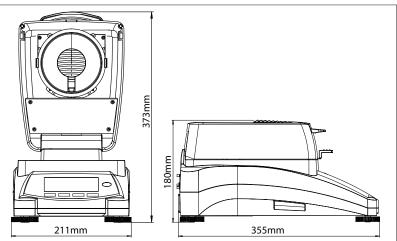
## **Additional Features**

ABS top housing, stainless steel pan support, in-use cover, storage up to 2 methods and 100 test results for each method, user-guide, 13 operational languages

### Accessories

Pan Handler	
In-Use-Cover	
Scoop	
Temperature Calibration Kit	
Anti-Theft Device	
Aluminum Pan (set of 80)	
Glass Fiber Pads (set of 200)	
Cage, Sample	
Reusable Pan Set of 3, 7mm High	
Reusable Pan Set of 3, 14mm High	
SF40A Impact Printer	

## **Outline Dimensions**



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## Moisture Analysis Made Simple—and Powerful.

The MB120 delivers functionality and precision that you can rely on, and is easy to operate and clean—you can test more samples in less time! Advanced features such as a temperature guide help to analyze optimum drying temperature, and methods and results storage allows statistical analysis of measurements. Three levels of user management ensure data safety—set up and lock temperature settings and method parameters with administrator access.

### **Standard Features Include:**

Advanced Functionality for Professional Moisture Analysis

MB120's Temperature Guide analyzes a sample and determines the optimal drying temperature. Store up to 100 drying methods for easy recall and up to 1000 total results for statistical analysis.

- Precise and Fast Results with Halogen Heating Increases Efficiency in the Lab Precisely controlled halogen heating dries samples uniformly, producing repeatable results of 0.01% readability. Four drying profiles and seven shut-off criteria help to perform customized sample tests.
- Easy Tool-Free Cleaning and Intuitive Operation with the Icon-Driven Menu Navigation The MB120 features a removable pan handler and sample chamber for easy cleaning. Operating the MB120 is intuitive—simply follow the guided instructions on the touchscreen display. The robust housing and die-cast base guarantee durability.

# MB120 Moisture Analyzer

## **Advanced Functionality**

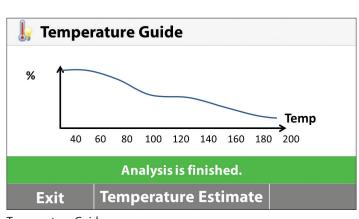
# Test a wide variety of materials for a range of applications with MB120.

Temperature Guide

Easily analyze a sample of a specific material and determine the optimum drying temperature.

- **100 Methods Library Makes Testing Faster** Program the parameters for up to 100 different types of samples, then select and run your test with the push of a button.
- Store Up to 1000 Results for All Methods for Statistical Analysis Quickly retrieve data and save to flash drive.
- Three-Level User Management

Set up and lock temperature settings and method parameters with admin access, so users can't modify settings.



### Temperature Guide

			A
Cake Mix			-
Corn Powder			
Ground Coffee			
Milk Powder			-
Back	New	Export	Import

💙 Grour	d Coffee		
02/16/2016 -	12:11 PM	2.95	%MC 4
02/16/2016 -	12:00 PM	3.21	%MC
02/16/2016 - 11:49 AM		3.04	%MC
Back	Export	Statistics	Delete

Method Library

**Results Storage** 



# **Testing Made Simple**

The MB Series features a wide, bright touchscreen display and intuitive menu navigation for fast, accurate moisture analysis.

- Touchscreen Display Easy to read and understand
- Icon-Driven Menu Navigation
  Easy to follow no training required
- 4 Mechanical Keys for Fast One-Step Operation Tare, Start/Stop, Print, On/Off
- USB and RS232 Ports Quick connections to a PC or flash drive
- Moisture Analysis Made Simple Just 3 easy steps for routine sample testing!
  - 1. Tare empty sample pan
  - 2. Add sample according to best practices
  - 3. Press start and see your results!

# **Exceptional Precision**

# The MB120 provides precise results for more confident testing.

- Fast Halogen Heating Technology Halogen heating dries samples in seconds and performs up to 40% faster than traditional infrared methods.
- Uniform Drying for Precise, Repeatable Results The reflective sample chamber ensures uniform heating of each sample to yield reliable results of 0.01% readability.
- Flexible and Powerful Features a full operating temperature range of 40–230 °C in 1 degree increments.
- Four Drying Profiles to Ensure Accuracy Customize heating of specific samples with temperature control for one-step drying—set temperature and time and begin!
  - Fast: Quickest possible time to temperature

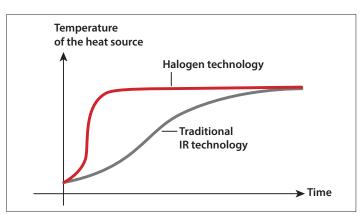
**Standard:** Minimal overshoot while achieving temperatures quickly

Ramp: Controlled ramping to temperatures

Step: Set three temperatures at three time intervals

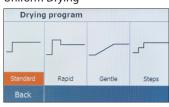
• Shut-Off Criteria for Automatic Test Completion Customize your own test endpoint criteria to automatically end the test once moisture loss is no longer detected. Choose from 7 criteria—Manual, Timed, AutoFree percent weight loss per second, AutoFree mg loss per second, A30, A60 and A90.

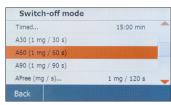












Four Drying Profiles

**Customized Endpoints** 

# **Easy Tool-Free Cleaning**

## The MB120 features a patented pan handler and removable parts for convenient maintenance.

- Stainless Steel Drying Pan Wipe down quickly
- Removable Heating Chamber Components
  No tools required—simply remove glass and tray
  to clean

# **MB120** Moisture Analyzer

Model	MB120
Capacity	120 g
Readability	0.01%/0.001 g
Repeatability (Std Dev) (g)	0.05% (3 g sample) 0.015% (10 g sample)
Moisture Range	0.01% to 100% (0.01% to 1000% for regain mode)
Output	RS232, USB Host, USB Device
Heating Element	Halogen
Temperature Range	40–230 °C
Power	120 or 240 VAC 50/60 Hz
Operating Temperature Range	50–104 °F/10–40 °C
Display Type	4.3 in/109 mm, QVGA, TFT touch screen
Display Results	%moisture, %solids, %regain, time, temperature, weight, method name, drying curve and statistics
Pan Size	3.5 in/90 mm
Dimensions (W $\times$ H $\times$ D)	8.3 × 7.7 × 14.0 in/211 × 180 × 355 mm
Net Weight	11.5 lb/5.23 kg
Shipping Weight	18.4 lb/8.35 kg

### Compliance

• Product Safety: IEC/EN 61010-1; IEC/EN 61010-2-010; CAN/CSA C22.2 61010-1; CAN/CSA C22.2 61010-2-010; UL 61010-1

• Electromagnetic Compatibility: IEC/EN 61326-1 Class B, Basic environments; FCC Part 15 Class A; ICES-003 Class A

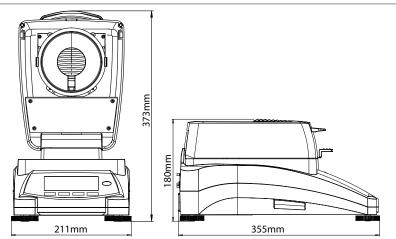
### Additional Features—MB120

ABS top housing, stainless steel pan support, in-use cover, user-guide, 13 operational languages

### Accessories

Pan Handler	0246947
In-Use-Cover	0284478
Scoop	0284477
Temperature Calibration Kit1	1113857
Anti-Theft Device8	0850043
Aluminum Pan (set of 80)8	0850086
Glass Fiber Pads(set of 200)8	0850087
Cage, Sample	0252477
Reusable Pan Set of 3, 7mm High8	0252478
Reusable Pan Set of 3, 14mm High8	0252479
SF40A Impact Printer	0064203

## **Outline Dimensions**



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