# Touch Screen Moisture Balance - Halogen Moisture Analyzer with Stage Mode - 220 g, 0.01% Readability

Model **MSBA-M500SWISS** | Brand **Master Science**






The Master Science Touch Screen Moisture Balance is made for any industry that needs a fast moisture figure. It handles solids, granules, powders, colloids and liquids, so one instrument can serve both the laboratory and the production line.

### KEY HIGHLIGHTS

- Handles almost any sample form
- Even, thorough drying
- Full picture of each test
- Methods for difficult samples
- No consumables

### AT A GLANCE

**0.01%**
MOISTURE READABILITY

**Diameter 100 mm**
SAMPLE PAN

**: the stainless steel pan is reused.**
RUNNING COSTS FROM DISPOSABLE PANS

**Request a Quotation**
Contact us for pricing, configuration options and delivery details.

support@themsci.com
www.themsci.com

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## Overview

A ring-shaped tungsten halogen source heats the sample evenly while the load cell follows the weight loss. The 7-inch capacitive screen of the Master Science Touch Screen Moisture Balance plots moisture, weight and temperature curves together, and four test modes, including staged heating at different temperatures, cover a wide variety of sample types.

The Master Science Touch Screen Moisture Balance serves laboratory and production moisture checks on:

## Key Benefits

**Handles almost any sample form**
: solids, granules, powders, colloids and liquids.

**Even, thorough drying**
: ring heating source on the Master Science Touch Screen Moisture Balance.

**Full picture of each test**
: three curves and 12 parameters on screen.

**Methods for difficult samples**
: stage mode steps through different temperatures.

**No consumables**
: reusable stainless steel sample pan.

For trace water determination by titration, see the Master Science Karl Fischer titrator.

## Technical Specifications

### GENERAL

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|---|---|
| General | Specifications of the Master Science Touch Screen Moisture Balance are listed below. |
| Brand | Master Science |
| Model Number | MSBA-M500SWISS |
| SKU | MSBA-M500SWISS |
| Weighing Range | **0 to 220 g** |
| Weighing Accuracy | **0.005 g (5 mg)** |
| Moisture Readability | **0.01%** |
| Temperature Range | **Start temperature to 225°C** |
| Moisture Measurement Range | **0.01 to 100%** |
| Weighing Sensor | Load cell |
| Heating Mode | Fast |
| Test Modes | Automatic, timed, manual, stage |
| Timing Range | **1 to 360 min (expandable)** |
| Sample Pan | Diameter 100 mm |
| Heating Light Source | Tungsten halogen ring heating light source |

### DISPLAY & DATA

| | |
|---|---|
| Display Parameters | Moisture %, solid content %, moisture curve, solid content curve, temperature curve, test duration, constant weight time, measurement mode, set temperature, measured temperature, initial weight, final weight |
| Display Language | English |
| Data Storage | Latest 50 sets of measurement data (expandable) |
| Display Curves | Three test curves shown together: moisture M, weight W, temperature T |
| Display | 7-inch capacitive touch display |

### DIMENSIONS & WEIGHT

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|---|---|
| Product Dimensions (L x W x H) | 390 x 220 x 170 mm |
| Net Weight | 3.65 kg |

### COMMON PROBLEMS THIS BALANCE SOLVES

| | |
|---|---|
| Common Problems This Balance Solves | Quick moisture checks often fail for practical reasons. |
| Uneven drying gives scattered results | : the ring heater warms the whole sample surface. |
| One temperature does not suit a complex sample | : stage mode runs several temperature steps in one test. |
| Operators need long training | : guided touch-screen operation can be used on the line. |
| Running costs from disposable pans | : the stainless steel pan is reused. |

## Applications

- **Solids and granules**
- **Powders**
- **Colloids**
- **Liquids**

## Measurement

- Compact structure with fast measurement, convenient operation and reliable data
- Ring heating light source heats the sample more evenly for thorough, faster drying
- Load cell design addresses temperature drift and time drift for better accuracy
- High-sensitivity temperature control components keep the test temperature accurate and controllable
- Four test modes: automatic, timing, manual and stage measurement
- Stage measurement tests a sample at different temperature stages

## Display and Data

- 7-inch capacitive touch screen: intuitive, clear and responsive
- Three curves shown at the same time: moisture M, weight W and temperature T
- 12 displayed parameters, including moisture %, solid content %, test duration and constant weight time
- Stores the latest 50 sets of measurement data for history review
- Zero consumables in use: stainless steel sample plate is reusable
- Simple guided operation that needs no special training