Fully Automatic Biochemistry Analyzer - Clinical Chemistry Analyzer - 120 Tests per Hour

Model **MSBA-A-120SWISS** | Brand **Master Science**





The Master Science Auto Biochemistry Analyzer is a random-access clinical chemistry system for blood, urine and other biological samples. It measures parameters such as glucose, cholesterol, enzymes and proteins at a constant 120 tests per hour, with single or double reagents.

KEY HIGHLIGHTS

- Steady throughput
- Low running cost
- Reagents stay fresh
- Fewer errors
- Built-in QC

AT A GLANCE

0 to 4.0 Abs / 0.0001 Abs ABSORBANCE RANGE / RESOLUTION	**37 ±0.1 °C** REACTION TEMPERATURE

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

support@themsci.com
www.themsci.com

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Overview

The reagent tray holds 80 positions cooled around the clock to 2 to 14 °C, and the sample tray takes 40 tubes. An enclosed optical system reads up to 8 wavelengths at once, and the open system accepts any reagent brand.

Key Benefits

Steady throughput
the Master Science Auto Biochemistry Analyzer runs 120 tests per hour.

Low running cost
open system for any reagent, small reaction volume.

Reagents stay fresh
non-stop 2 to 14 °C cooling.

Fewer errors
level sensing, collision protection and auto checks.

Built-in QC
Westgard rules and control charts.

For ELISA-based tests, see the Master Science ELISA microplate reader.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSBA-A-120SWISS
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System Type	Random access; open reagent (locked reagent optional)
Throughput	Constant 120 tests/hour (single or double reagent)
Principle	Colorimetry, turbidimetry
Methods	1-point end, 2-point end, fixed time, kinetics
Calibration	Linear and non-linear, up to 8 points
Sample Tray	40 positions; micro cups, test tubes, blood collection tubes Ø12-13 × 25-100 mm
Sample Volume	2 to 30 µL, 0.1 µL steps
Reagent Tray	80 positions (40 R1, 40 R2), 24 h Peltier cooling 2 to 14 °C
Reagent Volume	20 to 300 µL, 1 µL steps
Probes	Liquid level sensing, collision protection, internal and external washing
Syringe	Ceramic piston, dispensing down to 0.1 µL
Reaction Tray	50 optical plastic cuvettes, 150 to 330 µL
Reaction Temperature	37 ±0.1 °C
Mixer	Paddle type with PTFE coating
Quality Control	Westgard rules, control plots, cumulative QC

OPTICAL PERFORMANCE

Light Source	Halogen lamp
Wavelengths	**340, 405, 450, 505, 546, 578, 630, 700 nm (4 more optional)**
Absorbance Range / Resolution	**0 to 4.0 Abs / 0.0001 Abs**

DISPLAY & DATA

Software	Windows; auto dilution, result checking, patient records, 6 report formats
Interface	TCP/IP

POWER

Power	AC 110/220 V ±10 %, 50/60 Hz, 650 W
Water Consumption	Up to 6 L/h

DIMENSIONS & WEIGHT

Dimensions (L × W × H)	750 × 550 × 490 mm
Weight	70 kg

COMMON LABORATORY PROBLEMS AND HOW THIS ANALYZER HELPS

Common Laboratory Problems and How This Analyzer Helps	How the Master Science Auto Biochemistry Analyzer improves routine chemistry testing:
Slow manual chemistry testing	120 tests per hour automatically.
Reagent waste	small reaction volumes and cooled storage.
Carry-over between samples	probe washing and coated mixer.
QC paperwork	built-in Westgard and charts.

The Master Science Auto Biochemistry Analyzer is used in

- **Hospital clinical chemistry labs**
- **Diagnostic and pathology laboratories**
- **Clinics and health centres**
- **Research and teaching laboratories**
- **Routine blood and urine chemistry testing**

Sampling

- Liquid level sensing probes
- Ceramic syringe, 0.1 µL steps
- Automatic dilution

Reaction and Optics

- 50 reusable cuvettes at 37 °C
- 8 wavelengths read simultaneously
- Low 150 µL reaction volume

Software

- Multi-point calibration
- Westgard QC
- Patient database and reports

Optional Accessories

- Sample barcode reader
- Reagent barcode reader
- Locked reagent mode