Blood Gas and Electrolyte Analyzer, pH pCO2 pO2 K Na Cl Ca Hct, 95 µL, <90 s Result

Model **MSBGA-95-8SWISS** | Brand **Master Science**





The Blood Gas and Electrolyte Analyzer measures pH, pCO2, pO2, K+, Na+, Cl-, ionized Ca++ and Hct from 95 µL of whole blood or 50 µL of capillary blood, with results in under 90 seconds. It also accepts serum, plasma, dialysate and cerebrospinal fluid and calculates parameters such as HCO3, TCO2, base excess, SO2%, anion gap and AaDO2.

KEY HIGHLIGHTS

- Small Sample Volume
- Safer Waste Handling
- Less Maintenance
- Built-In Quality Control

AT A GLANCE

6.000-9.000 PH RANGE	**5.0-200.0 mmHg (0.667-26.67 kPa)** PCO2 RANGE
0-800.0 mmHg (0-106.7 kPa) PO2 RANGE	**15-30°C / 5-40°C** OPERATING / STORAGE TEMPERATURE

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

support@themsci.com
www.themsci.com

Scan to view online

Overview

A disposable calibrant cartridge holds flush solution, mixed gas, liquid calibrants and the waste container, which reduces biohazard exposure for operators. The Blood Gas and Electrolyte Analyzer runs from a 10.4-inch touch screen with on-screen tutorials, reads barcodes, prints on a built-in 70 mm thermal printer and connects to a LIS under HL7.

For electrolyte-only testing, see our ISE Electrolyte Analyzer, which complements the Blood Gas and Electrolyte Analyzer.

Critical-care labs meet the issues below. The Blood Gas and Electrolyte Analyzer addresses each one.

Key Benefits

Small Sample Volume
Only 95 µL of whole blood or 50 µL of capillary blood is needed.

Safer Waste Handling
Waste is collected inside the disposable calibrant cartridge.

Less Maintenance
Long-life, maintenance-free electrodes and an all-in-one cartridge reduce routine work.

Built-In Quality Control
An optional Auto QC cartridge runs three QC levels automatically and stops testing after a failed QC.

Technical Specifications

UNDEFINED

Brand	Master Science
Model Number	MSBGA-95-8SWISS
SKU	MSBGA-95-8SWISS
Measured Parameters	pH, pCO2, pO2, K+, Na+, Cl-, Ca++, Hct
pH Range	**6.000-9.000**
pCO2 Range	**5.0-200.0 mmHg (0.667-26.67 kPa)**
pO2 Range	**0-800.0 mmHg (0-106.7 kPa)**
K+ Range	**0.50-10.00 mmol/L**
Na+ Range	**50.0-200.0 mmol/L**
Cl- Range	**20.0-200.0 mmol/L**
Ca++ Range	**0.10-5.00 mmol/L**
Hct Range	**12.0-65.0%**
Barometric Pressure	500-800 mmHg
Calculated Parameters	pH/pCO2/pO2 (TC), TCO2, HCO3, BEb, BEecf, SBC, SO2%, Ca++(7.4), TCa, AG, RI, AaDO2, O2SAT, tHb(c)
Sample Types	Whole blood, serum, plasma, dialysate, CSF
Sample Volume	95 µL whole blood; 50 µL capillary blood
Analysis Time	< 90 s from aspiration; < 120 s sample to sample
Input Parameters	Patient temperature, hemoglobin, FiO2, barometric pressure
Calibration	Automatic, programmable 1-point and 2-point
Calibrant Cartridge	Test volumes 300/200/150/100/50; 30 days on board; room-temperature storage
Display	10.4-inch TFT touch screen
Data Storage	> 10,000 results
Printer	Built-in 70 mm thermal printer
Barcode Reader	Integrated, up to 14 barcode types
Interfaces	RS-232, TCP/IP, USB; LIS under HL7
Battery	Ni-MH, 3.0 Ah
Dimensions (W × H × D)	400 × 574 × 344 mm
Calibrant Pack Size (W × H × D)	258 × 180 × 70 mm
Auto QC Cartridge Size (W × H × D)	103 × 180 × 70 mm
Weight	30 kg
Operating / Storage Temperature	15-30°C / 5-40°C

UNDEFINED	
Power Supply	100-240 V, 50/60 Hz

PROBLEMS THE BLOOD GAS AND ELECTROLYTE ANALYZER SOLVES	
Large blood draws from neonates and ICU patients	Only 95 µL of whole blood or 50 µL capillary blood is needed.
Biohazard from liquid waste	Waste stays sealed in the disposable cartridge.
Frequent electrode maintenance	Long-life electrodes are maintenance-free.
QC runs forgotten	The optional Auto QC cartridge runs three levels on a schedule.
Manual entry errors	Barcode input and LIS connection under HL7 cut typing.

Applications

- **Arterial blood gas analysis in ICU and emergency departments**
- **Acid-base and oxygenation assessment**
- **Electrolyte and ionized calcium testing at the point of care**
- **Hematocrit measurement during surgery**
- **Dialysate and CSF analysis**

Touch Screen Interface

- 10.4-inch high-resolution touch screen
- Status area shows analyzer condition at a glance
- Online operation and self-diagnostic tutorials
- Infrared operator detection

Calibrant Cartridge

- Contains flush solution, mixed gas, liquid calibrants and waste container
- Test volume options: 300, 200, 150, 100 or 50
- 30 days on board, stored at room temperature
- Expiration alarm and remaining-test display

Measurement Unit

- Long-life, maintenance-free electrodes
- Preheats reagents and sample
- Sample adaptor for syringe and capillary samples
- Probe wiper for sample integrity and user safety

Data Management

- Barcode input for sample, patient and consumables
- RS-232, TCP/IP and USB backup
- LIS connection under HL7
- Ni-MH battery, 3.0 Ah

Standard Accessories Included

- Blood gas and electrolyte analyzer main unit
- Built-in thermal printer
- Integrated barcode reader

Optional Accessories

- Auto QC cartridge with three QC levels
- Calibrant cartridges in 300, 200, 150, 100 or 50 test sizes