

Easy-to-use, proven technology to advance your critical care testing

RAPIDPoint 500 Blood Gas Analyzer Product Specifications

siemens.com/rp500

System Description

Point-of-care blood gas analyzer

System Menu

pH	Na+	Glucose
pCO ₂	K+	CO-oximetry
pO ₂	Ca ⁺⁺	Lactate
	Cl ⁻	

Parameter Specifications

Analyte	Units	Reporting Range
pH	-	6.500–7.800
Pleural pH*	-	7.000–7.500
pO ₂	mmHg kPa	10.0–700.0
pCO ₂	mmHg kPa	5.0–200.0 0.66–26.66
Na ⁺	mmol/L	100.0–200.0
K ⁺	mmol/L	0.50–15.00
Ca ⁺⁺	mmol/L	0.20–5.00
Cl ⁻	mmol/L	65.0–140.0
Glucose	mmol/L mg/dL	1.1–41.6 20.0–750.0
Lactate	mmol/L mg/dL	0.18–30.00 1.6–270.3

CO-oximetry Parameters

	Units	Reporting Range
tHb	g/dL	2.0–25.0
	g/L	20–250
	mmol/L	1.2–15.5
nBili	mg/dL	2.0–30.0
	μmol/L	34–513
sO ₂	%	0–100
FO ₂ Hb	%	0–100
FHHb	%	0–100
FCOHb	%	0–100
FMetHb	%	0–100

Calculated Parameters

pH(T)	BO ₂
pCO ₂ (T)	pO ₂ (A-a)(T)
pO ₂ (T)	pO ₂ (a/A)(T)
HCO ₃ ⁻ act	p50
HCO ₃ ⁻ std	Qsp/Qt(T)
BE(B)	Qsp/Qt(T)(est)
BE(ecf)	RI(T)
ctCO ₂	pO ₂ /FiO ₂
Ca ⁺⁺ (7.4)	ctO ₂ (a- \bar{v})
AnGap	tO ₂ ([a- \bar{v}]/a)
sO ₂	VO ₂
O ₂ SAT(est)	DO ₂
Hct	ctO ₂ ()
mOsm	

Input Parameters

Patient Demographics

Patient ID	Sex
Last Name	Date of Birth
First Name	

Sample Demographics

Location	Temperature
Physician ID	tHb
Draw Date	FiO ₂
Draw Time	Flow
Accession No.	Resp Rate
Operator ID	pATM

Up to 10 custom demographic fields available

Ventilator Settings (optional)

Ventilator Flow
Respiratory Rate
Continuous Positive Airway Pressure
Positive End Expiratory Pressure
Peak Inspiratory Pressure
Tidal Volume
Allen Test



RAPIDPoint® 500 Blood Gas Analyzer

Product Specifications

Sample Types

Heparinized whole blood, syringe and capillary, pleural fluid,* dialysate†

Sample Size (All Parameters)

Syringe: 200 µL whole blood, pleural fluid, dialysate

Capillary: 100 µL whole blood

Time to Result

Approximately 60 seconds

Measurement Cartridge

Use Life: 28 days, or maximum number of tests

Size: 100/250/400/750 tests

Calibration

1-point calibration every 30 minutes; 2-point calibration every 2 hours; full calibration every 8 hours

Quality Control

Automatic Quality Control (AQC) cartridge—three levels of independent quality-control solutions; customizable QC schedule; ampule QC

System Dimensions

Width: 30.0 cm (11.5 in.)

Depth: 42.0 cm (16.0 in.)

Height: 55.0 cm (21.5 in., display at highest position)

Weight: 16.55 kg (36.5 lb, excluding cartridges)

Touchscreen: 21.1 x 15.8 cm (8.3 x 6.2 in.)

Integrated Bar-code Scanner

1D Bar-code Symbologies: Code 128, Codabar, Code 39, Character/ Digit, Interleaved 2 of 5

2D bar code for ampule QC data entry only

External Interfaces

Universal serial bus (USB)—three ports; RS232 port; 10BaseT Ethernet; bar-code scanner

Power Requirements

Rating: 150 VA

Voltage: 100–240 VAC

Freq: 48–62 Hz

Environmental Requirements

Temp: 15–30°C

Humidity: 5–85% noncondensing

Barometric Pressure: 523–800 mmHg

Safety

TUV-listed, CSA, EN/IEC 61010-1, JIS

EMC

EN 60601-1-1:2007, IEC60601-1-2 Ed. 2.1

Operating System

Microsoft Windows® XP embedded

Data Capacity

Patient Samples: 250

QC Samples: 250

Operators: 5000

Communication

Wireless

LIS

Dual-port transmission via Ethernet and serial port

RAPIDComm® Data Management System

Features and specifications are subject to manufacturer change.

*Available for sale only in select countries.

†Not available for sale in the U.S. Product availability varies by country.

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Product availability may vary from country to country and is subject to varying regulatory requirements. Please contact your local representative for availability.

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