



## RAPIDPoint® 500e Blood Gas System Product Specifications

With  
Integri-sense  
Technology

# Inspired by patients. Empowered by technology.

[siemens-healthineers.com/rapidpoint500e](http://siemens-healthineers.com/rapidpoint500e)

### System Description

Blood gas analyzer

### System Menu

pH	K <sup>+</sup>	Lactate
pCO <sub>2</sub>	Ca <sup>++</sup>	tHb
pO <sub>2</sub>	Cl <sup>-</sup>	CO-oximetry
Na <sup>+</sup>	Glucose	nBili

### Parameter Specifications

Analyte	Units	Reporting Range
pH	-	6.500–7.800
Pleural pH	-	7.000–7.500
pO <sub>2</sub>	mmHg kPa	10.0–700.0 1.33–93.32
pCO <sub>2</sub>	mmHg kPa	5.0–200.0 0.66–26.66
Na <sup>+</sup>	mmol/L	100.0–200.0
K <sup>+</sup>	mmol/L	0.50–15.00
Ca <sup>++</sup>	mmol/L mg/dL	0.20–5.00 0.8–20.0
Cl <sup>-</sup>	mmol/L	65.0–140.0
Glucose	mmol/L mg/dL	1.1–41.6 20–750
Lactate	mmol/L mg/dL	0.18–30.00 1.6–270.3

### CO-oximetry Parameters

Analyte	Units	Reporting Range
tHb	g/dL g/L mmol/L	2.0–25.0 20–250 1.2–15.5
nBili	mg/dL μmol/L	2.0–30.0 34–513
sO <sub>2</sub>	%	15.0–100.0
FO <sub>2</sub> Hb	%	0.0–100.0
FHHb	%	0.0–100.0
FCO <sub>2</sub> Hb	%	0.0–100.0
FMetHb	%	0.0–100.0

### Calculated Parameters

pH(T)	BO <sub>2</sub>
pCO <sub>2</sub> (T)	pO <sub>2</sub> (A-a)(T)
pO <sub>2</sub> (T)	pO <sub>2</sub> (a/A)(T)
HCO <sub>3</sub> <sup>-</sup> act	p50
HCO <sub>3</sub> <sup>-</sup> std	Qsp/Q <sub>t</sub> (T)
BE(B)	Qsp/Q <sub>t</sub> (T)(est)
BE(ecf)	RI(T)
ctCO <sub>2</sub>	pO <sub>2</sub> /F <sub>i</sub> O <sub>2</sub>
Ca <sup>++</sup> (7.4)	ctO <sub>2</sub> (a), ctO <sub>2</sub> (V)
AnGap	ctO <sub>2</sub> ([a-V]/a)
Hct	ctO <sub>2</sub> (v), ctO <sub>2</sub> (a-V)
sO <sub>2</sub>	ctO <sub>2</sub> (Hb)
O <sub>2</sub> SAT(est)	VO <sub>2</sub>
mOsm	DO <sub>2</sub>

### Input Parameters

#### Patient Demographics

Patient ID	Sex
Last Name	Date of Birth
First Name	

#### Sample Demographics

Location	Temperature
Physician ID	tHb
Draw Date	F <sub>i</sub> O <sub>2</sub>
Draw Time	Flow
Accession No.	Resp Rate
Operator ID	pATM

Up to 10 custom demographic fields are available.

#### Ventilator Settings (optional)

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



Integri-sense™ technology is the guardian of patient results. It is a comprehensive series of analyzer functional checks and flagging mechanisms designed to deliver accurate test results.

# RAPIDPoint 500e Blood Gas System

## Product Specifications

### Sample Types

Whole blood (arterial, venous, mixed venous, and capillary); pleural fluid; dialysate\*

### Measurement Volume

Sample volume: 100 µL

### Time to Result

Approximately 60 seconds

Cycle time: approximately 120 seconds

### Measurement Cartridge

Use life: 28 days, or maximum number of tests

Size: 100/250/400/750 tests

Cartridge initialization time: approximately 24 minutes

### 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 and External Bar-code Scanner†

For patient ID, operator ID, and ampule QC

1D bar-code symbologies: Code 128, Codabar, Code 39, Interleaved 2 of 5

2D bar-code symbologies: PDF417, MicroPDF417, Datamatrix, QR Code, Micro QR Code, Aztec and MaxiCode

### External Interfaces

USB (3 ports); RS232; 10BASE-T Ethernet; bar-code scanner

### Power Requirements

Rating: 150 VA

Voltage: 100–240 VAC

Frequency: 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

61326-2-6: Class B

### Operating System

MICROSOFT WINDOWS 10 IoT Enterprise (1809)

### Data Security

Patient data encryption

MCAFEE enabled anti-malware

Endpoint configuration

Firewall

Two-step operator authentication

No hard-coded password

USB on/off functionality

### Data Capacity

Patient samples: 250

QC samples: 250

Operators: 5000

### Communication

Wireless†

LIS

Dual-port transmission via Ethernet and serial port

POCcelerator™, UniPOC™, RAPIDComm®—Data Management Systems

*Features and specifications are subject to manufacturer change.*

*\*Feature not available in the U.S.*

*†External scanner is optional and is not included with the analyzer.*

*‡This feature applies only to facilities that implement an external wireless bridge between the RAPIDPoint 500e system and a DMS.*

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### Siemens Healthineers Headquarters

Siemens Healthcare GmbH  
Henkestr. 127  
91052 Erlangen, Germany  
Phone: +49 9131 84-0  
siemens-healthineers.com

### Legal Manufacturer

Siemens Healthcare Diagnostics Inc.  
Laboratory Diagnostics  
511 Benedict Avenue  
Tarrytown, NY 10591-5005  
USA  
Phone: +1 914-631-8000

### Local Contact Information

Siemens Healthcare Diagnostics, Inc.  
Point of Care Diagnostics  
2 Edgewater Drive  
Norwood, MA 02062-4637  
USA  
Phone: +1 781-269-3000