



cobas b 121 POC system
Speed and efficiency in blood gas testing



Critical Care Testing is a daily challenge

- *Reliability*
- *Efficiency*
- *Speed*
- *Flexibility*
- *Convenience*

cobas b 121 POC system

In Critical Care Testing every minute counts



Ten of the most important critical care parameters

Measured parameters cobas b 121 POC system

Blood gases	pH, PO ₂ , PCO ₂
Electrolytes	Na ⁺ , K ⁺ , Ca ²⁺ , Cl ⁻
Total hemoglobin	tHb
Oxygen saturation	SO ₂
Hematocrit	Hct

Reliability

- Maximum up-time due to system concept requiring only minimal operator intervention
- Sample volume of 60 µL provides you with results out of a small sample

Efficiency

- Essential critical care parameters at low costs
- Improved uptime through less maintenance
- Economy mode helps save calibration solution
- Reusable waste bottles

Speed

- Core critical care testing results within 50 seconds allow immediate medical decision

Flexibility

- Fill port enhances operator safety by automatic aspiration or manual injection of patient samples into the system
- Flexible, individually adjustable parameter configurations
- user definable display
- intuitive user interface
- micro mode allows you to measure samples with limited volume

Convenience

- Minimal maintenance
- Durable and long-life, maintenance-free sensors
- High-volume, reusable reagent containers
- Liquid calibration instead of using gas tanks
- Automatic QC reduces the level of operator intervention

cobas b 121 <BGE> POC system

Efficiency through economic operation



Extended emergency profile

Measured parameters cobas b 121 <BGE> POC system

Blood gases	pH, PO ₂ , PCO ₂
Electrolytes	Na ⁺ , K ⁺ , Ca ²⁺ , Cl ⁻
Hematocrit	Hct

Reliability

- Maximum up-time
- Minimal operator intervention
- Sample volume of 60 µL

Efficiency

- Clear focus on cost effective operation
- Economy mode helps save calibration solution
- Improved uptime through less maintenance

Speed

- Core critical care testing results within 50 seconds
- Facilitates immediate medical decision making

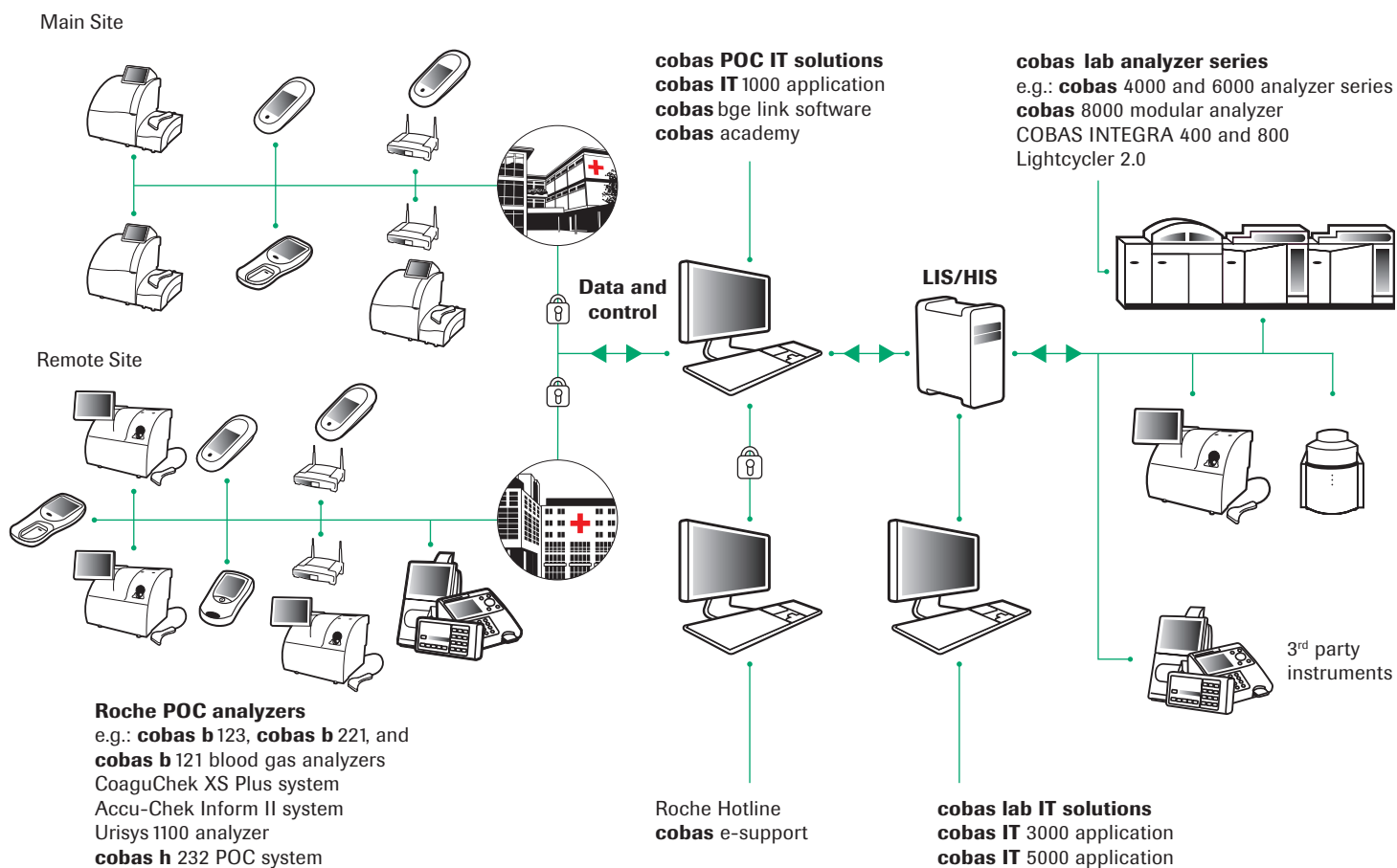
Convenience

- Minimal maintenance
- Durable and long-life, maintenance-free sensors
- High-volume, reusable reagent containers
- Liquid calibration instead of using gas tanks

cobas b 121 POC system and cobas b 121 <BGE> POC systems

Connectivity that works

Fulfilling your testing needs no matter where



cobas hospital POC solution

Accu-Chek® Inform II system
Connected blood glucose
meter with wireless
RF functionality



cobas b 221 POC system
Multiparameter
blood gas, electrolyte,
COOX and metabolite
analyzer



Reflotron® Plus system
17 clinical chemistry
parameters



cobas IT 1000 application
Comprehensive POC management
functions
cobas bge link software
Remote control for POC blood gas
cobas academy
Advanced user recertification

CoaguChek® XS Pro system
Efficient, convenient and
rapid PT/INR testing



cobas h 232 POC system
Rapid determination
of troponin T, NT-proBNP,
D-dimer, CK-MB
and myoglobin



Urisys® 1100 analyzer
Rapid, efficient and
convenient urine
testing



3rd party instruments
More than 20 drivers for the
most common non-Roche
analyzers





Improve your critical care testing.

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cobas b 121 POC system

Product specifications

Measured parameters	
Blood Gas parameters	Total specified range
pH	6.0 – 8.0
PCO ₂	4.0 – 200 mmHg
PO ₂	0 – 800 mmHg
Electrolyte parameters	
Sodium (Na ⁺)	20.0 – 250 mmol/L
Potassium (K ⁺)	0.2 – 20 mmol/L
Chloride (Cl ⁻)	20.0 – 250 mmol/L
Calcium (Ca ²⁺)	0.1 – 4.0 mmol/L
Hemoglobin parameters	
Hematocrit (Hct)	10.0 – 80.0 %
Total hemoglobin (tHb)	3.0 – 25.0 g/dL
Oxygen saturation (SO ₂)	50.0 – 100.0 %
Total hemoglobin and oxygen saturation (SO ₂) available for the cobas b 121 system only	
Calculated parameters	H ⁺ , cHCO ₃ ⁻ , ctCO ₂ (P), BE, BE _{act} , BE _{ecf} , BB, pH _{st} , cHCO _{3-st} , PAO ₂ , nCa ²⁺ , Qs/Qt, P50, SO ₂ (c), AaDO ₂ , a/AO ₂ , avDO ₂ , AG, OER, Hct (c), PAO ₂ ^t , RI ^t , pH ^t , PCO ₂ ^t , PO ₂ ^t , H ⁺ ^t , AaDO ₂ ^t
Operating parameters	
Typical sample volume [μL]	< 60 μL
Volume limitation by sample sensor [μL]	68 μL
Time to display	< 50 sec
Sample throughput	30/h
Temperature controlled measuring chamber	37±0.2 °C (BG, ISE, tHb, SO ₂)
Sample types	Whole blood, Serum, Plasma, Dialysate, QC Material/Aqueous



Sample containers	Capillary, syringe, Roche MICROSAMPLER, ampoule adapters	
Calibration	Intervals	
System calibration	every 24 hours (programmable 8, 12 or 24 hours)	
1 point-calibration	every 30 minutes (alternatively 1 hour)	
2 point-calibration	every 12 hours (programmable 4, 8 or 12 hours)	
Warm-up	Power on with calibration 30 min approx.	
Warm-up	Power fail < 1 min < 2 min	
Data processing		
Power PC	With standard Ethernet interface	
Monitor	Built in flat color LCD 5.7 inch screen (touchscreen)	
Thermal printer	Built in 58 mm, graphic capability	
Barcode scanner	standard accessory	
Electrical requirements		
Power rating	100 – 240 VAC (+6 %/ – 10 % permission to tolerance), 150 W, 50/60 Hz autoselecting	
Ambient temperature	+15 to +33 °C (59 to 91.4 °F)	
Relative humidity, not condensed	+15 < T < 31 °C: 20 – 95 %, 31 < T < 33 °C: 20 – 90 %	
Test certificate		
FDA	510 (k)	
UL	UL3101-1	
CE-Conformity	IVD-Directive 98/79/EC (EN61326-1)	
Dimension / Weight	Instrument only	Optional AutoQC Unit on cobas b 121 system
Width	35.4 cm (13.94 in.)	19.5 cm (7.68 in.)
Height	46.7 cm (18.39 in.)	19.8 cm (7.80 in.)
Depth	41 cm (16.15 in.)	39.5 cm (15.55 in.)
Weight	23 kg (48.4 lbs) in carton	5.9 kg (12.4 lbs)

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