

Active	Siemens RAPIDPoint 500 System Critical Care Analyser SOP		Version: 1.10
Author: S.Phillips	Doc Manager: K.Ashton	Authorised by: Kath Ashton Signature :	Ver Date: 14/02/13

The Royal Liverpool and 
Broadgreen University Hospitals
 NHS Trust

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Related Documents	
COSHH	Siemens RAPIDPoint 500 measurement cartridge_COSHH_148915 Siemens RAPIDPoint 500 wash waste cartridge_COSHH_149025 Siemens AQC cartridge_56782
Risk Assessments	Siemens RAPIDPoint 500 system critical care analyser
Others	Siemens RapidComm SOP Siemens Rapidlab 1200 operators guide

Significant changes from previous version

Additional analyser maintenance information.

Purpose

To describe the use of the Siemens RAPIDPoint 500 series critical care analysers for patient blood gas, co-oximetry and electrolyte testing by healthcare professionals.

All POCT must comply with the Trust Point of Care Policy, which can be found under policies and procedures on the Trust Staff Intranet site.

User Training and Competency

All users of Siemens critical care analysers must be trained by the Blood Sciences Department. Training includes care and use of the analysers. Additional training is provided for staff who undertake the routine maintenance of the analysers. On completion of training users are issued with an individual password/PIN barcode, which is required to access the analysers. **Sharing of passwords is strictly prohibited.**

Training can be arranged via the POCT team, Blood Sciences (see contacts).

Clinical indications / purpose of examination

The Siemens RAPIDPoint 500 system analyser provides quantitative measurements of pH, pCO₂, PO₂, Na⁺, K⁺, Cl⁻, Ca⁺⁺, glucose, lactate and co-oximetry (Hb, O₂Hb, COHb, MetHb) parameters. These parameters, along with derived parameters, aid in the diagnosis of a patients acid-base status, electrolyte and metabolite balance and oxygen delivery capacity. A definitive clinical diagnosis must only be made after all clinical and laboratory findings are evaluated and should not be based on the results of a single test.

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Principles of examination

Potentiometric – pH, pCO₂, Na⁺, K⁺, Cl⁻, Ca⁺⁺

Amperometric – pO₂, glucose, lactate

Spectrophotometry – co-oximeter parameters

Calculated values: Standard bicarbonate, Base excess.

For further information refer to the Siemens Rapidlab 1200 operators guide.

Specimen requirements

Whole blood - freshly drawn into a heparinised syringe. Ensure all air is expelled, cap and mix by rotation.

Analyse immediately.

Minimum volume is 0.5mL

ONLY use the syringes supplied for taking samples. Other sampling devices may give erroneous results and/or damage the analyser.

Other body fluids (e.g. pleural fluids for pH) MUST be sent to the laboratory for analysis. Samples must be centrifuged in the laboratory prior to analysis to remove all particulate matter and potential clots.

To send a sample to the laboratory for analysis:

- Ensure the sample is labelled and is accompanied by a completed laboratory request form (refer to the 'Laboratory Investigations- Minimum Data Standard Policy').
- Pack the sample with crushed ice & water.
- Transport to the laboratory must not be via the pneumatic tube system.
- Samples must be received within 30 minutes of collection.
- DO NOT send with the needle still attached

Failure to comply with any of the above will result in rejection of the sample.

Instrumentation

Siemens RAPIDPoint 500 system critical care analyser.

The analyser is a modular system that may be configured in a number of ways, to include blood oxygen, carbon dioxide, pH, calcium, sodium, potassium, chloride, lactate, glucose and co-oximeter parameters. Parameters available on each instrument vary according to location, and are indicated on the analyser screen after logging on.

The analysers are managed by the Siemens Rapidcomm software which links into the hospital PAS system and the laboratory LIMS.

The analysers are designed for professional use only, in a point-of-care or laboratory setting.

Equipment

- Syringes – stores are held in each location. Orders are made by Blood Sciences on behalf of all other Directorates. Syringes are obtained from: Siemens Medical Solutions Diagnostics Limited (see below).
- Disposable gloves

Reagents

The reagents for the 500 series analysers are cartridge based.

1. Measurement cartridge - contains the sensors, reagents, and electronic and fluidic components needed to analyze patient and QC samples and to calibrate the RAPIDPoint 500 system. The cartridge is

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- stable for 28 days after installation on the analyser. Unused cartridges are stable until the expiry date when stored at 2° to 8°C.
2. Wash/waste cartridge - contains the wash reagent, which cleans the sample path after analysis and calibration. The cartridge also stores liquid waste. Each cartridge is stable for 10 days after installation. Unused cartridges are stable until the expiry date when stored at room temperature, 2° to 25°C.
 3. Automatic QC cartridge - contains quality control material, plus the electronic, mechanical, and fluidic components needed to analyze QC samples. Each cartridge is stable for 28 days after installation. Unused cartridges are stable until the expiry date when stored at 2° to 8°C.

All reagents are obtained from:

Siemens Medical Solutions Diagnostics Limited
 Sir William Siemens Square
 Frimley, Camberley
 Surrey, GU16 8QD
 Tel: 0845 600 1955 (24hr. service)
 0845 600 1966 (orders)

Stocks of all analyser consumables are ordered by Blood Science on behalf of all other Directorates and are held centrally in the laboratory at RLH. Reagent stocks for the BGH theatres analyser are stored in theatres. At least one replacement reagent, QC and wash cartridge and waste container is kept in the BGH lab. A small stock of some consumables (i.e. printer paper and waste bottles) are kept by each analyser.

Reagent stocks held in the laboratory are stored according to the manufacturers' instructions: either at 2-8°C in fridge room 4063, or at room temperature in room 4010 and are used until the expiry date.

Calibration

Calibration of all the parameters is carried out automatically at pre-programmed intervals.

A one-point calibration is performed every 30 minutes and takes ~2 minutes

A two-point calibration is performed every 2 hours and takes ~5 minutes

A full two-point calibration is performed every 8 hours and takes ~8 minutes.

DO NOT cancel calibrations. Calibration is essential for the generation of correct patient results and cancellation will result in the parameter being disabled.

If the calibration of a parameter fails the system will automatically repeat the calibration up to 2 times. If the problem remains the parameter is automatically disabled and will not be available for patient testing.

Cumulative calibration data for all analysers is archived by and may be viewed from Rapidcomm by laboratory staff

Quality Control

INTERNAL QUALITY CONTROL

Three levels of IQC solution are stored on board the analyser in the AQC cartridge. IQC analysis is carried out automatically, one level every 4 hours according to a pre programmed timetable. Any sensor failing IQC at one or more levels is disabled by the analyser until the errors are resolved. Disabled parameters can only be reactivated following successful re-calibration and repeat IQC.

All three levels of IQC are performed following the replacement of the measurement cartridge.

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DO NOT cancel IQC analysis. Quality control is essential for the generation of correct patient results and cancellation will result in the parameter being disabled.

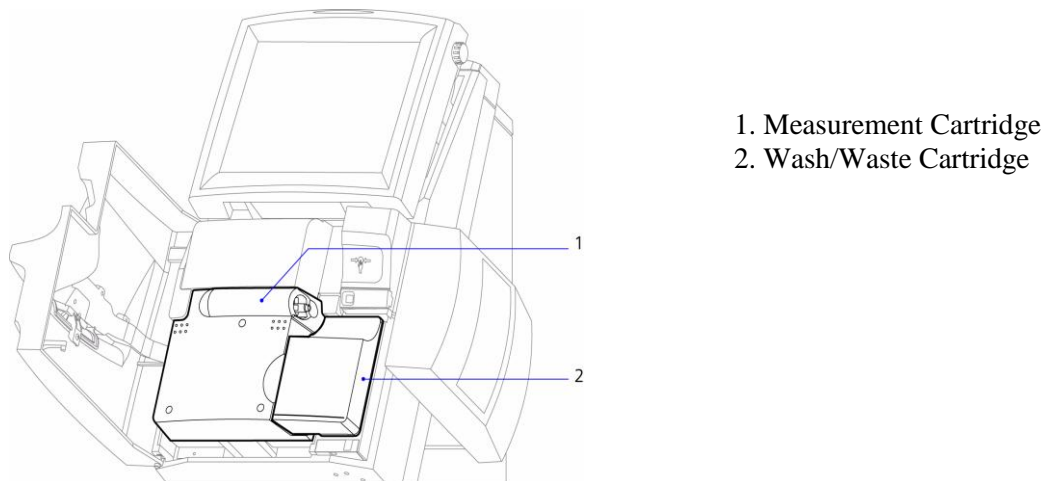
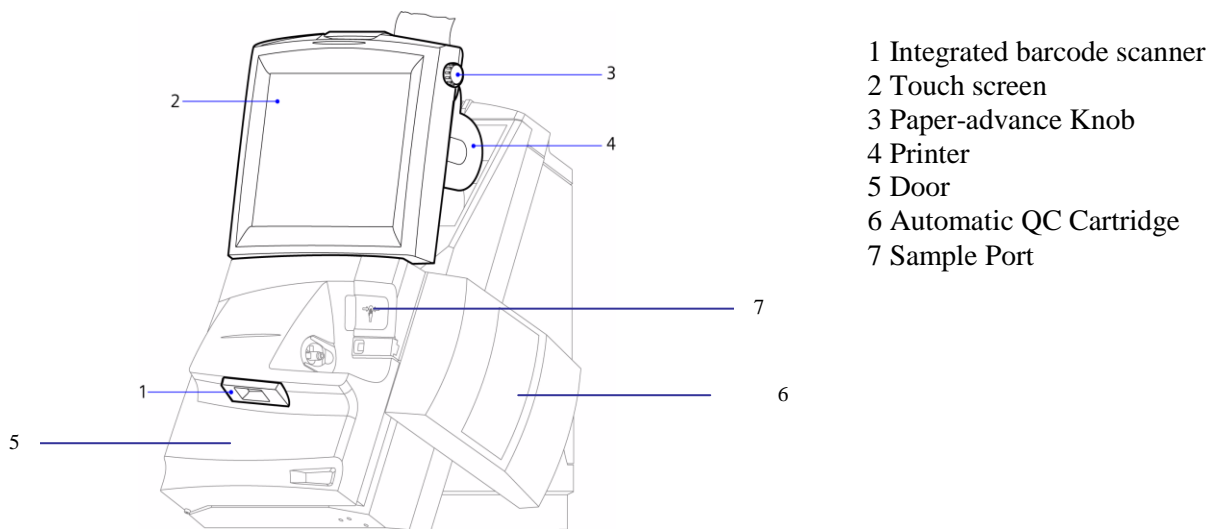
Cumulative IQC performance for all analysers is archived by and may be viewed from Rapidcomm by laboratory staff

EXTERNAL QUALITY CONTROL

All analysers are registered for monthly EQA under WEQAS. Analysis of EQA samples is carried out by Clinical Chemistry Staff.

System overview

Hardware overview



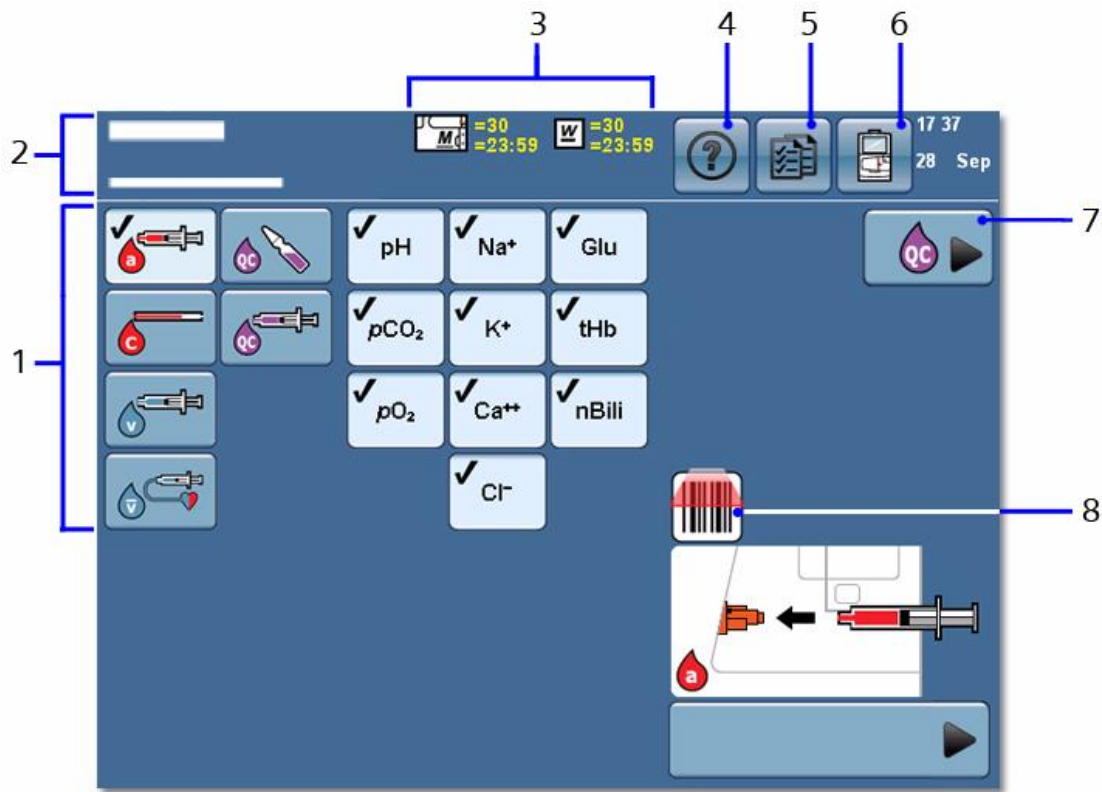
Software overview

- All communication with the analyser is by the touch sensitive screen or bar code reader. The touch sensitive screen must be operated with fingers only, use of pens or sharp objects will cause serious damage to the analyser.

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- The screen consists of a banner area (2) and a display area.(1)
 - The banner (2) is at the top of all screens.
 - The left hand side contains information about system status and cartridge status (3).
 - The right-hand side has buttons for accessing the four main system screens: 1) the **Analysis screen** (shown), the **Recall screen** (5) for archived patient/calibration/QC data, the **Status screen** (6) for analyser status, maintenance and set up and the **Help** files (4).
 - The display area (1) contains the options and information for the task you are performing.



• Navigation buttons

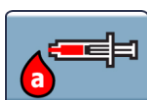


Continue Displays the next screen. If you make a selection or enter data the selection or data is saved.

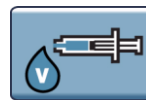


Return Displays the previous screen. The system does not save your selections and entries when you select the **Return** button.

• Sample type buttons



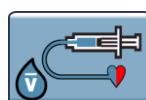
Arterial sample



Venous sample



Capillary arterial sample



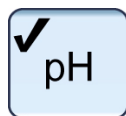
Mixed venous sample

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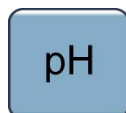
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- Available parameters

The list of available parameters for the analyser is displayed on the **Analysis screen**. Their availability status is displayed follows:



Parameter available & is selected



Parameter available & is not selected



Parameter is unavailable due to failed calibration.



Parameter unavailable. Failed calibration and is unlikely to become available with further calibrations.



Parameter is unavailable as scheduled QC not performed.



Parameter is unavailable due to failed OC.

Accessing the analyser

- Access to any of the blood gas analysers is by password / barcode. The Blood Science Department will issue individual passwords / barcodes following training.
- To log-on to the analyser enter your password or Laboratory access code and press the 'continue' arrow in the bottom right corner of screen or scan your barcode using the integrated barcode scanner. This will take you to the **Analysis screen**.
- Access to the analysers will be disabled under the following circumstances: -
 - 1) If the manager of the unit owning the analyser requests that an individual is to be removed.
 - 2) When a member of staff leaves the employment of the trust.
 - 3) When an individual's access code has become compromised or is suspected to be compromised.
 - 4) In event of serious misuse of an analyser.
 - 5) Repeated failure to follow the 'Standard Operating Procedure' for the use of an analyser.
 - 6) Failure to attend periodic training updates.

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To perform a patient test

1. To perform a test on the wards the operator must have been present when the sample was drawn.
2. Check that the status message in the top left hand corner of the banner area indicates “**Ready**”. Otherwise DO NOT proceed. DO NOT cancel QC/calibrations.
3. From the **Analysis screen** check on the parameter list that the assays you require are available.
4. Select the sample type on the left-hand list (default is syringe of arterial blood).
5. Insert the syringe into the sample port.
6. Press the ‘start’ button.
7. Remove the sample when prompted and press the ‘continue’ arrow button.
8. Enter the patient demographics as follows: All fields shown below are mandatory and MUST be completed.

PATIENT ID: FULL UNIT NUMBER – Enter all alphanumeric characters. Manual input should only be used if scanning is not possible.
Acceptable unit numbers are RQ6-----, 5NL-----, W----- (LWH) or NHS number.

If the patient has no unique identifier number (no hospital number or NHS number) or is of unknown identity see procedure ‘for unknown patients’ below.

LAST NAME: Patient’s family name. (**NB.** If the RQ6 number is used as patient ID the analyser should automatically populate this field)

FIRST NAME: First name

FiO2: Enter the patients inspired oxygen as a percentage (e.g. On air = 21%). This will then be printed on the report to aid interpretation of results.

For unknown patients: enter the following into the patient ID and last name fields:

PATIENT ID: Enter Date and Time in the format **DDMMYYHHMM** (e.g. analysis performed at 18:26 on 23rd February 2012 would be entered as 2302121826)

LAST NAME: For a male patient enter **UNKNOWN M** for a female enter **UNKNOWN F**.

9. Check all information is correct before proceeding.
10. Press the ‘continue’ arrow.
11. When analysis is complete the results will be printed.
12. Press the ‘continue’ button when done.

NOTE: If the analyser detects a short sample it will offer the option of ‘micro sample’. DO NOT accept. Low volume samples have poor sample integrity and give unreliable results. Follow the on screen instructions to exit to the initial log-on screen.

Common Error Messages

1. A yellow triangle with legend ‘ANALYSER REQUIRES OPERATOR ATTENTION’. This is for laboratory information ONLY and may not indicate an immediate problem with the analyser. The analyser can be used as normal although some parameters may be unavailable.

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2. Waste symbol displayed on the banner area.
This is displayed when the waste is 70% full. The waste bottle should be replaced at a time when the system is not busy. See maintenance procedures.
3. A yellow triangle with legend 'replace the sample port'. An obstruction (possible clot) has been detected and you need to change the sample port. Follow the instructions on the screen to change the port.

Recording, calculation and reporting of results

All calculations are performed by the analyser.

All results falling outside the reference range / analytical range are flagged as follows

- ↑ The result is above the reference range.
- ↓ The result is below the reference range.
- ↑ The result is above the reporting range.
- ↓ The result is below the reporting range.
- ? The system has an atypical response when measuring this parameter.

A print out of the results is available immediately after analysis. Additionally up to 2000 patient results are held on the analyser for review.

When appropriate patient ID has been used to perform the test all the results are automatically transmitted from the analyser to the laboratory Telepath system and subsequently reported in the patients electronic record and available for review on the hospital ICE system.

Responsibilities of personnel in authorising, reporting and monitoring reports:

- (i) Users are responsible for ensuring results outside the expected range are communicated immediately to the relevant member of staff (Doctor or Senior nurse), as highlighted in training and in accordance with the Trust POCT Policy.
- (ii) Although most results are available on the ICE system, users are also responsible for ensuring results are recorded in the patient notes, in accordance with the Trust POCT Policy.
- (iii) Any therapeutic decision based on the POCT result is the responsibility of the Clinical Director, as highlighted in the Trust POCT Policy. A definitive diagnosis should not be made on the results of a single test, all clinical and laboratory findings must be considered.
- (iv) Laboratory staff are responsible for checking the Siemens Rapidcomm system to ensure I.T communications between all the analysers and the hospital and laboratory systems are working and that all appropriate results have been transmitted to the patients electronic record on ICE (see Rapidcomm SOP).

Reference Ranges

Arterial:

pH	7.38 - 7.44
H ⁺ ion	36 – 42 nmol/L
pCO ₂	4.7 – 6.0 kPa
pO ₂	11.3 – 14.0 kPa
Std bicarb	22 – 26 mmol/L
Base excess	-2.3 - +2.3 mmol/L
Hb	12.0 – 18.0 g/dL
O ₂ Hb	94.0 – 97.0%

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HHb	0.0 – 5.0%
MetHb	0.0 – 1.5%
COHb	0.1- 0.4% (non smokers)
Sodium	135 – 145 mmol/L (plasma – lower in whole blood)
Potassium	3.5 – 5.3 mmol/L (plasma – lower in whole blood)
Chloride	99 – 109 mmol/L (plasma – lower in whole blood)
Ionized Ca	1.15 – 1.30 mmol/L
Glucose	3.5 – 6.0 mmol/L
Lactate	0.5 – 2.2 mmol/L

Interferences

All data was generated using RAPIDPoint 400 or 405 systems. In respect to performance characteristics, the RAPIDPoint 500 system is similar to the RAPIDPoint 400 and 405 systems.

- CO-oximetry interferences:
 - Any substance that absorbs light in the same regions as whole blood could potentially cause an interference, or error, in CO-ox measurement.
 - Substances showing no detectable interference (Concentration Tested)
 - Beta carotene (40 mg/dL) Hemolysis (10% volume) Lipid (5% intra-lipid in serum)
 - Indocyanine Green (5 mg/L) Bilirubin (40 mg/dL) Fetal Hemoglobin (20%, 40%, 85%)
 - Air pollution and smoking cause significantly higher levels of carboxyhaemoglobin.
- pO2 interferences
 - Substances showing no detectable interference, <2 mmHg error (Concentration Tested):
 - Isoflurane (3%) Halothane (3%) Nitrous oxide (84%)
- pCO2 interferences
 - Substances showing no detectable interference, <2mmHg error (Concentration Tested):
 - Ibuprofen (40 mg/dL)
- pH interferences
 - Substances showing no detectable interference, <0.016 pH error (Concentration Tested):
 - Paracetamol (200 mg/L)
- Sodium interferences:
 - Substances showing no detectable interference, <2 mmol/L error (Concentration Tested):
 - Paracetamol (200 mg/L) Ofloxacin (6 µg/mL) Vancomycin (63 µg/mL) Perphenazine (1.25 µg/mL)
 - Substances showing significant interference (Concentration Tested) ((Interference))
 - Dobutamine (5 mg/dL) ((+6 mmol/L))
 - Benzalkonium Heparin (see potassium section) ((+> 50 mM))
 - Heparine Leo (800–850 U/mL) ((-12.6 mM))
- Potassium interferences:
 - Benzalkonium Heparin has been shown to interfere with potassium sensor, increasing apparent levels by >0.15 mmol.

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- Chloride interferences:
 - Substances Showing No Detectable Interference, <2 mmol/L error (Concentration Tested)
Paracetamol (200 mg/L) Heparin (90 U/mL) Acetylsalicylic acid (50 mg/dL)
 - Substances showing significant interference (Concentration Tested) ((Interference))
Salicylic acid (500 mg/L) ((+9.5 mmol/L))
- Calcium interferences:
 - Substances showing no detectable interference (Concentration Tested)
Paracetamol (200 mg/L) Ibuprofen (40 mg/dL) Acetylsalicylic acid (50 mg/dL)
 - Substances showing significant interference (Concentration Tested) ((Interference))
Salicylic Acid (500 mg/L) ((-6%)), Salicylic Acid (300 mg/L) ((-3%))
 - Samples containing Irenat (sodium perchlorate) can cause interference when measuring ionized calcium because Irenat can falsely lower ionized calcium results.
- Glucose interferences:
 - Substances showing no detectable interference, <4 mg/dL error. substance (concentration tested)
Salicylic acid (500 mg/L), Ethanol (350 mg/dL), Acetylsalicylic acid (50 mg/dL,) Dopamine (10 mg/dL), Dobutamine (20 mg/dL), Heparin (90 U/mL), Paracetamol (20 mg/L) Pralidoxime Iodide (128 µg/mL).
 - Falsely decreased glucose results may be reported due to ethylene glycol metabolites.
- Lactate interferences:
 - Ethylene Glycol and its metabolites (Glycolic Acid, Formic Acid, Oxalic Acid and Glyoxylic Acid) have a positive interference with the lactate assay.

Limitations

Room Air	Especially samples having very low or high pO ₂ content. Similarly, pCO ₂ may be affected and subsequently pH and Ca ⁺⁺ results as well.
Metabolic Changes	Errors can occur due to metabolic changes if there is a delay in the measurement of the samples.
Improper Mixing	Errors will be introduced for measurement of Co-ox parameters if the sample is not properly mixed prior to measurement.
Under-Heparinised Sample	Blood clot can form in the sensor chamber causing various sensor failures if sample is not properly heparinised.
Haemolysed sample	Potassium results will be falsely elevated.

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Assay characteristics

Linearity

pH	6.500–7.800 (pH units)
pCO ₂	0.67–26.66 kPa
pO ₂	1.33–93.32 kPa
Na ⁺	100.0–200.0 mmol/L
K ⁺	0.50–15.00 mmol/L
Ca ⁺⁺	0.20–5.00 mmol/L
Cl ⁻	65–140 mmol/L
Glu	1.1 – 41.6 mmol/l
tHb	2.0–25.0 g/dL
FO ₂ Hb	0.0–100.0 %
FCO ₂ Hb	0.0–100.0 %
FMetHb	0.0–100.0 %
FHHb	0.0–100.0 %

Turnaround time

Samples are analysed immediately upon receipt.

Maintenance procedures

The Blood Science Department will provide a daily service visit to each analyser between 0900h and 1700h Monday to Friday. This visit includes routine maintenance and replenishment of consumables. Additional visits outside these hours or in case of breakdown will only be made according to availability of Laboratory staff, **contact phone numbers are:- 4230 or 4235**(out of hours).

In case of analyser malfunction/breakdown samples can be sent to the laboratory for analysis 24/7.

All users are able to carry out basic maintenance procedures including changing the sample port and replacing the printer paper.

To change the sample port

Replace the sample port if you detect a problem or if the system prompts you as a result of one of the following conditions

- No sample device inserted during analysis
- Obstructions such as fibrin clots
- Bubbles in the sample
- Insufficient sample volume
- Sample not detected
- Problems with reagent flow

1. Wear protective gloves
2. Select the **Status screen** from the banner area.
3. Select > Replace port. Select the video button.
4. Follow the instructions in the video.
 - i. Squeeze the tabs on the sample port and remove it from the system. Dispose of the sample port according to your institution's protocol for disposal of biohazardous materials.
 - ii. Squeeze the tabs on the new sample port.
 - iii. Insert the sample port on the system and release the tabs.

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- iv. **Wiggle the sample port from side to side to ensure it is attached correctly.**
5. Select the 'continue' button.
6. The system performs a wash to clear the system.

To change the printer paper

1. A red line appears across the paper when it is running out.
2. Open the paper compartment and remove the old roll. **DO NOT** discard the spindle.
3. Insert the spindle in the new roll and place in the grooves of the holder with the paper unwinding from the bottom.
4. Turn the paper advance knob clockwise to move ~5cm of paper through the top of the printer.
5. Close the paper compartment.

Advanced Maintenance Procedures

This following section is for designated users in some ward areas and laboratory staff who have access level 3 and above.

Wear disposable gloves when carrying out all maintenance procedures.

A. To replace the Wash/Waste cartridge

1. Select the **Status** button. N.B The Wash/Waste Cartridge symbol appears in the banner when the cartridge nears expiration.
2. select the **Wash/Waste Cartridge** button.
3. Select **Replace**. The system plays a video that shows how to perform this procedure.
4. View the video before you begin if required.
5. Open the door. **Note** Select the **Video** button to play the video again if you need help while replacing the cartridge.
6. Replace the cartridge.
 - a) Remove the wash/waste cartridge and dispose of in clinical waste.
 - b) Insert a new wash/waste cartridge into the system, and then push firmly on the dot until the cartridge locks in place.
 - c) Close the system door.
7. The **Wait** screen appears while the system prepares the cartridge. The **Analysis** screen appears when the cartridge is ready for use. **NB.** A wash/waste cartridge is designed for single use only. Once removed it cannot be inserted into the system again.

B. To replace the Measurement cartridge

NB. When you replace a measurement cartridge, you must replace the wash/ waste cartridge at the same time. The air filter should also be cleaned (see below).

1. Select the **Status** button. **NB.** The Replace Cartridges symbol appears in the banner when the cartridge nears expiration.
2. At the **Status** screen, select the **Measurement Cartridge** button.
3. Select **Replace**. The system plays a video that shows how to perform this procedure.
4. View the video before you begin if required. If an AutomaticQC cartridge is installed, push in and slide the connector on the AutomaticQC cartridge to the right.
5. Open the door. **NB** Select the **Video** button to play the video again if you need help while replacing the cartridges.
6. Remove the wash/waste cartridge and dispose of in clinical waste.
7. Remove the measurement cartridge.
 - a) Lift up the latch that holds the measurement cartridge in place as far as possible until the cartridge is ejected.

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- b) Lift the measurement cartridge up and out of the system.
8. Insert a new measurement cartridge:
 - a) Align the grooves on the sides of the cartridge with the grooves on the system.
 - b) Position the cartridge into the system, and then with your thumbs placed on the raised dots give a strong, firm push in and upwards to lock the cartridge in place.
 - c) Lower the latch to secure the measurement cartridge.
9. Insert a new wash/waste cartridge into the system, and then push firmly on the dot until the cartridge locks in place.
10. Close the door. If an AQC cartridge is installed, slide the connector on the AQC cartridge to the left to close it.
11. The **Wait** screen displays while the system prepares the cartridges.
12. The **Analysis** screen appears when the cartridges are ready for use.
13. The system is set-up to run 3 levels of quality control on the new measurement cartridge before a patient sample can be analysed. Total time from cartridge installation to 'ready' is approx 30 minutes.
14. After changing the measurement cartridge a serum based sample **MUST** be analysed to proteinise the sensors before patient samples can be analysed. A stock of samples are kept with the analysers at BGH for this purpose. Samples for the RLH analysers are kept in the laboratory.

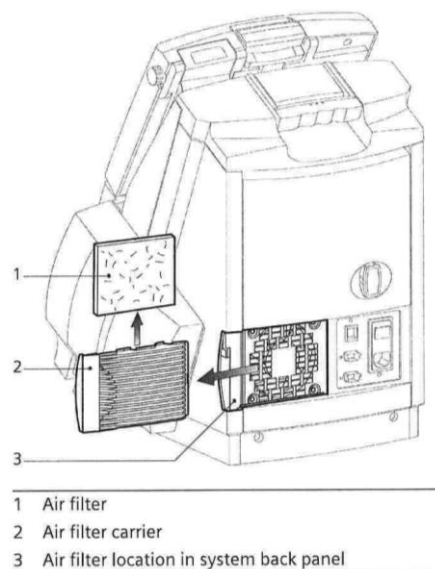
C. To Clean the Air Filter

This should be performed whenever the measurement cartridge is replaced.

The air filter is located on the lower right side of the back panel of the system.

1. Pull the air filter carrier out of the system.
2. Remove the filter from its carrier.
3. Clean the filter by dry dusting and blowing with air.
4. Reinsert the filter into the carrier.
5. Replace the carrier into the system.

N.B If the filter is very dirty replace it and bring the old one back to Biochemistry to be cleaned.



D. To replace the AQC cartridge

NB. You can reinstall an AQC cartridge if the following criteria apply: (1) the cartridge is reinstalled within 6 hours on the system from which it was removed, (2) the cartridge contains at least 1 sample left for all levels of AQC testing, and (3), the cartridge has at least 1 day of use-life before expiration.

1. Select the **Status** button. **NB.** The AQC Cartridge symbol appears in the Banner area when the cartridge nears expiration.
2. At the **Status** screen, select the **AQC Cartridge** button.
3. Select **Replace**. The system plays a video that shows how to perform this procedure.
4. View the video before you begin if required. **NB** Select the **Video** button to play the video again if you need help while replacing the cartridge.
5. Push in and then slide the connector on the AQC cartridge to the right.
6. Wait for the AQC cartridge to eject from the system.
7. Remove the AQC cartridge and dispose in clinical waste.

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Active	Siemens RAPIDPoint 500 System Critical Care Analyser SOP		Version: 1.10
Author: S.Phillips	Doc Manager: K.Ashton	Authorised by: Kath Ashton Signature :	Ver Date: 14/02/13

8. Insert a new AQC cartridge:
 - Get the new cartridge and remove the yellow card from under the lever.
 - Press down on the lever firmly, near the raised dots, to close and lock the lever in the cartridge.
 - Insert the cartridge in the system, and then push firmly on the circle indicated by the arrows until you hear the cartridge lock in place.
9. Slide the cartridge connector to the left to close it. The **Wait** screen appears while the system prepares the cartridge. The **Analysis** screen appears when the cartridge is ready for use.

Troubleshooting

To reconnect BGH Theatre 500 analyser to the network.

Contact Dave Harrison Tel Ext 1943/1945

1. From the main screen select the System icon (machine icon top right hand screen)
2. Select SET UP
3. Enter Password – only staff with level 2 password can perform this task
4. Select Printer and Devices
5. Select Communications
6. Select CompleNet
7. Press the arrow (bottom left hand side screen) to apply.

Health and Safety

The components of the Siemens RAPIDPoint 500 series critical analysers and related consumables must be treated as potentially bio hazardous waste. Users must be aware that any object being exposed to human blood is a potential source of infection.

To reduce the risk of infection users must:

- Use gloves.
- Ensure that the area around the analysers is kept tidy and any spillage of sample is cleaned up IMMEDIATELY.

Used syringes MUST be disposed of as sharps waste.

To clean the analyser use a mild detergent e.g. HOSPEC and wipe dry. Ensure water does not enter any part of the analyser.

To decontaminate the analyser, first clean any spills/splashes, as above, then wipe with a Sanicloth (contains 70% isopropanol).

Alcohol wipes must not be used as they damage the analyser

All COSHH and risk assessment documents for the Siemens 1200 series rapidlab critical care reagents are available from POCT if required (see contacts).

Adverse Incident Reporting

Report any adverse incident to Departmental/Ward Manager, Clinician or POCT Team Tel ext 5587.

Do not use the analyser if the integrity of results is in doubt.

Contacts

Trust POCT Manager:	Kath Ashton	Tel: 0151 706 5587
POCT laboratory	Office	Tel: 0151 706 4249
Department of Biochemistry:	Office	Tel: 0151 706 4230

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