

cobas[®] pro integrated solutions

Simplicity meets Excellence





Introducing cobas® pro integrated solutions

Simplicity meets Excellence





01 Sample supply unit

Up to **1,000** samples per hour processing capacity
Up to **300** samples direct loading
Up to **300** samples direct unloading
or bi-directional connectivity to lab automation

02 ISE analytical unit

Up to 900 tests per hour

03 cobas c 503 analytical unit

Up to **1,000** tests per hour **60** reagent positions

04 cobas e 801 analytical unit

Up to **300** tests per hour **48** reagent positions



Get answers fast with short and predictable turnaround times

Boost your efficiency with fast analytical units, intelligent sample routing, and short assay incubation times. Empower your physicians to take action faster, with best-in-class 9 minutes STAT and 18 minutes routine immunochemistry assays^{1,2}.







Free up staff time with reduced maintenance efforts

With **cobas® pro** integrated solutions, every effort has been made to reduce maintenance tasks to a minimum. The new and smart concept of self-operating maintenance executes maintenance tasks automatically in the background and reduces the manual burden of daily maintenance to zero for **cobas c** 503 analytical unit, and to only five minutes for **cobas e** 801 analytical unit.

Ensure non-stop operation with continuous loading

Save time and costs with cobas AutoCal

The all-new **cobas** AutoCal is a revolution in calibration. With **cobas** AutoCal, new reagent lots are calibrated automatically, without the need for manual calibration.



Use your space intelligently with cobas® green packs

More tests per pack

Up to 3 300 tests per **cobas c** pack green allow for long walk-away times and less loading, ordering and handling events for reagents.

Our best reagent carriers ever in clinical chemistry and immunochemistry

Closed onboard, more tests per pack. Preparation-free. From the fridge to the analyzer, without any preparation. This is as easy as it can get.



Best-in-class onboard stability³

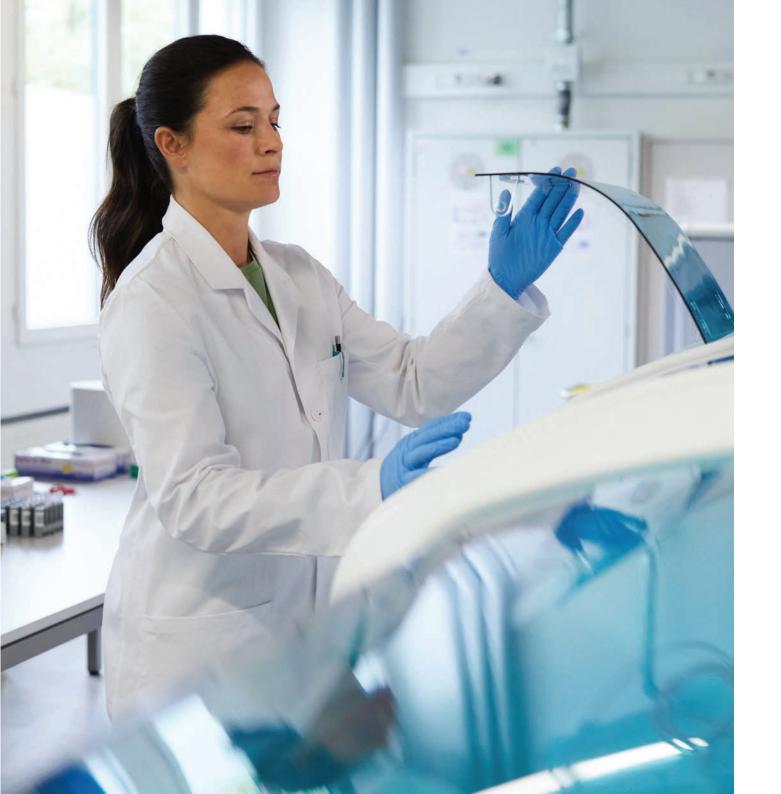
With up to 6 months of onboard stability for the all-new **cobas® c** pack green, and up to 4 months of onboard stability for the **cobas e** pack green.

- · Consolidate low- and high-throughput testing
- Bring low volume send out testing in-house
- · Minimize reagent waste









Reduce tedious manual work with ready to use reagents



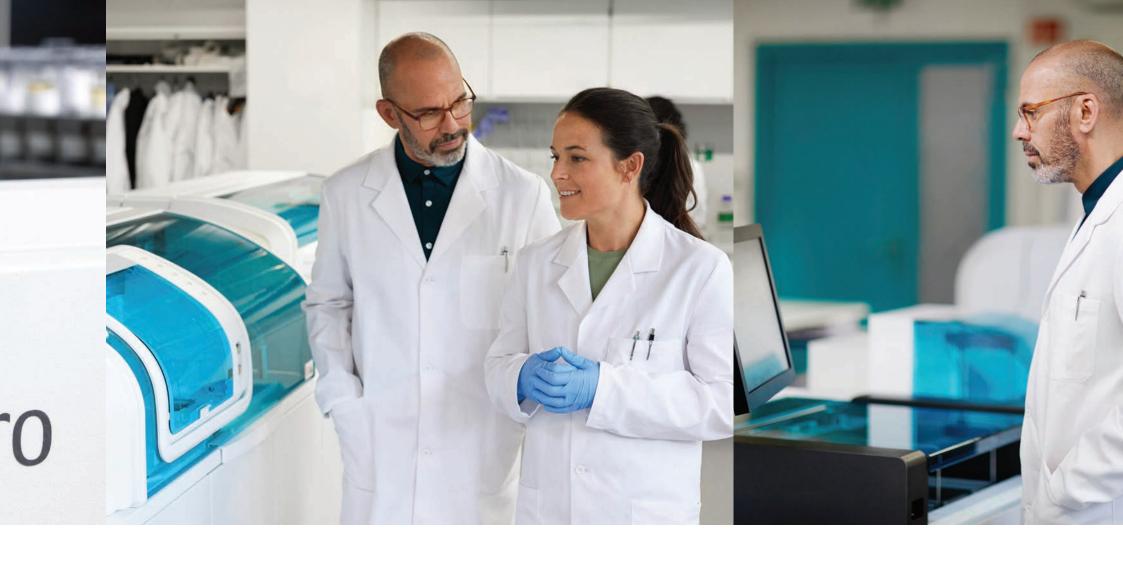
Enable error-free handling with RFID*-tagged reagents and consumables

*Radio-frequency identification.

Enhance sample integrity with cobas[®] Sonic Wash

Unprecedented cleanliness of the sample probe with cobas® SonicWash.

SonicWash cleans the sample probe with ultrasound technology so thoroughly that only a few parts per billion are detectable⁴. In addition, SonicWash eliminates the daily maintenance of the sample probe and reduces clot events.



Ensure peace of mind for your team with reliable and safe solutions

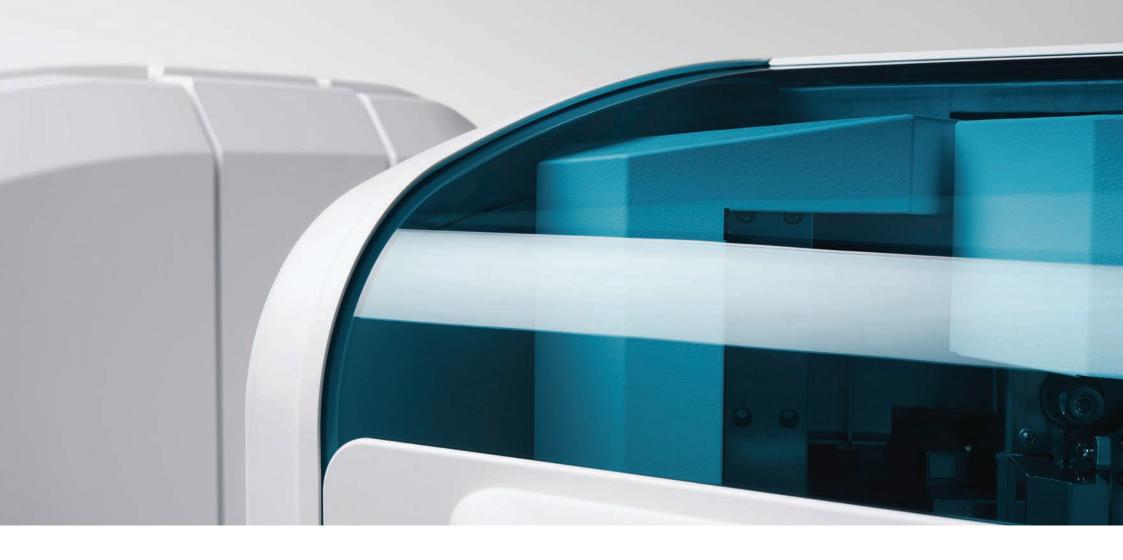
cobas® pro integrated solutions is designed to achieve more than 300 days between unplanned repair visits. This means less unplanned interruptions and smooth workflows. Every day.

Reduce tedious manual work through integration into lab automation





Partner with a company that has a proven track record of pioneering lab solutions and sustainable development



Standardize your operations with cobas® integrated solutions



Make a difference when every drop of blood counts with industry's smallest sample volumes³

Support better outcomes by delivering greater medical value

cobas[®] **pro integrated solutions**

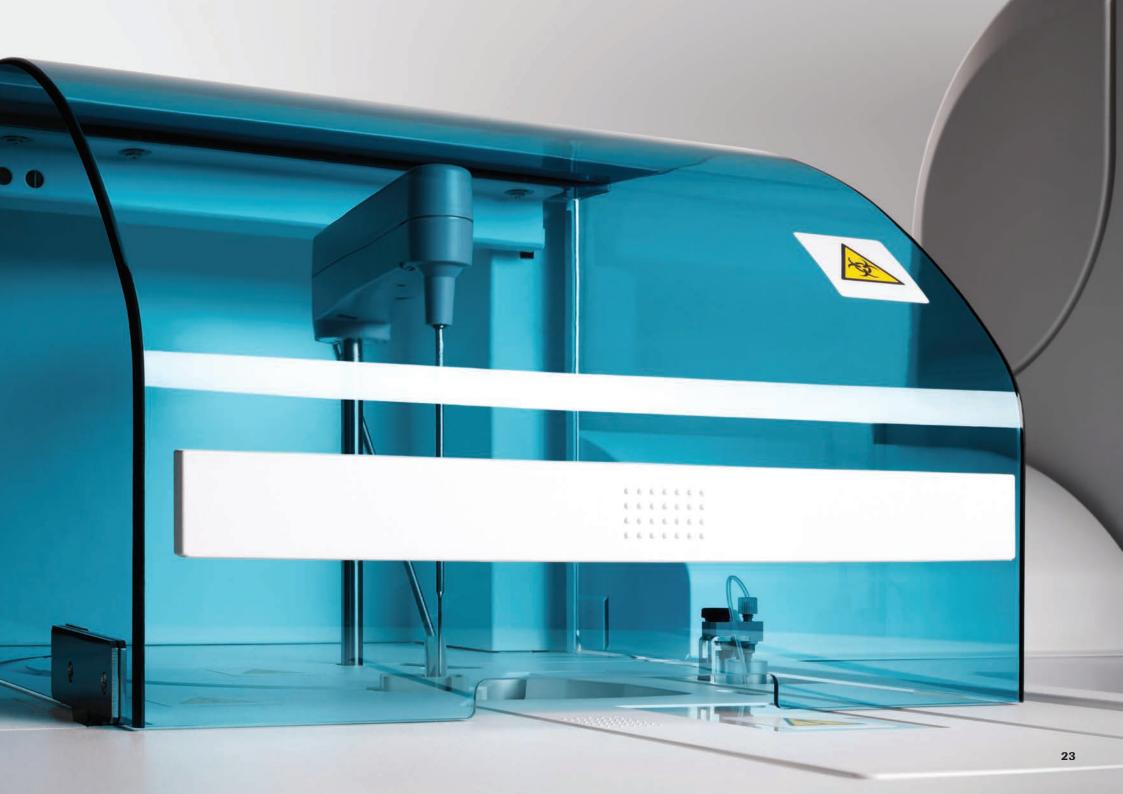
General technical specifications

Dimensions and weights	Width	Depth	Height	Units	Weight
Sample unit (SSU), including monitor	1320 52,0	1185 46,7	1430 56,3	mm inch	250 kg 551 lb
ISE	450 17,7	1150 45,3	1160 45,7	mm inch	170 kg 375 lb
cobas c 503 (incl. SB and SBL)	1500 59,1	1140 44,9	1355 53,3	mm inch	790 kg 1742 lb
cobas e 801 (incl. SB and SBL)	1500 59,1	1140 44,9	1350 53,3	mm inch	780 kg 1610 lb
Specifications of the electrical power supply	cobas® pro i	ntegrated solutions			
Distance to the instrument	≤ 5 m ≤ 16 feet				
Output	200 / 208 / 220 50 / 60 Hz	200 / 208 / 220 / 230 / 240 V 50 / 60 Hz			
Max. power fluctuation	< 10 %	< 10 %			
Power consumption	Whole System: ≤ 5.5 kVA Sample Supply Unit and Sample Buffers: < 0.8 kVA ISE: < 0.4 kVA cobas c 503: < 2.4 kVA cobas e 801: < 2.4 kVA Single Phase				
List of concentrated liquid waste volumes	cobas c 503			cobas e 801	
Max. liquid waste volumes		Concentrated liquid waste volume: < 2 L/h Normal liquid waste volume: < 30 L/h		Concentrated liquid waste volume: < 7 L/h Normal liquid waste volume: < 22 L/h	

x. liquid waste volumes cobas c 503		
≤ 5 m ≤ 16 feet	≤ 5 m ≤ 16 feet ≤ 1.0 μS/cm	
≤ 1.0 µS/cm		
50 to 340 kPa 0.5 to 3.4 bar	50 to 340 kPa 0.5 to 3.4 bar > 12°C > 53.6 °F	
> 12°C > 53.6 °F		
approx. 32 L/h ISE: < 2 L/h	< 30 L/h	
cobas c 503 2,000 m	cobas e 801 2,000 m	
≤ 0.5 % inclination	≤ 0.5 % inclination	
Load bearing: 175 kg or more per adjust foot installation surface	Load bearing: 175 kg or more per adjust foot installation surface	
	Load bearing: 175 kg or more per adjust	
foot installation surface	Load bearing: 175 kg or more per adjust foot installation surface	
foot installation surface 18-32°C (during operation)	Load bearing: 175 kg or more per adjust foot installation surface 18-32°C (during operation)	
•	≤ 5 m ≤ 16 feet ≤ 1.0 μS/cm 50 to 340 kPa 0.5 to 3.4 bar > 12°C > 53.6 °F approx. 32 L/h ISE: < 2 L/h cobas c 503 2,000 m	

ISE analytical unit

Applications	Na+: Sodium K+: Potassium Cl-: Chloride	
Sample types	Serum, urine Ion-selective electrodes: 3 (Na+, K+ and Cl-) Reference electrode 1	
Max. throughput	900 tests/hour (300 samples/hour)	
Max. liquid waste volumes	Concentrated liquid waste volume: < 2,8 L/h	
Sampling cycle time	12 seconds	
Electrode handling	2D barcode placed on the electrode package	
Sample Liquid level detection	Available	
Sample clot detection	Available	
Sample foam detection	Available	
Number of applications	ISE: max. 60 (20 sample types available)	
Sample pipetting volums	15 μl (Default) Selectable from 10 μl	
Reagent volumes per sample	DIL: 450 µl (330 µL/sample: dilution vessel washing in case of discontinous measurement, 600 µl DIL is used before IS measurement IS: Total 720 µl (220 µl Dilution vessel washing, 500 µl: IS measurement) REF: 130 µl	
Measuring range	Na+: Sodium 10-250 mml/L (technical measuring range) 450 µl Diluent 15 µl Sample volume (default) 20-375 mml/L (technical measuring range) 450 µl Diluent 10 µl Sample volume K+: Potassium 1-100 mml/L (technical measuring range) 450 µl Diluent 15 µl Sample volume (default) 1-150 mml/L (technical measuring range) 450 µl Diluent 10 µl Sample volume Cl-: Chloride 10-250 mml/L (technical measuring range) 450 µl Diluent 15 µl Sample volume (default) 20-375 mml/L (technical measuring range) 450 µl Diluent 10 µl Sample volume	



The all-new cobas® c 503 analytical unit

Excellent performance, simple to use and beautifully designed. The all-new **cobas c** 503 analytical unit brings all that it takes to set new standards in reliability, maintenance and efficiency. 1,000 tests per hour. 60 reagent channels onboard.

Reagent pack type	cobas c pack green
Reagent loading/unloading	Automatic
Reagent identification	RFID
Capacity of reagent manager	5 reagent packs
Capacity of reagent disk	60 packes Inner ring: 24 (1-24 position) Outer ring: 36 (25-60 position)
Reagent storage temperature	5-15 °C
Number of applications	680
Max. throughput	Photometric: 1,000 tests/h HbA1c: 500 samples/h
Number of reaction cells	221
No. of reaction cell segments	13 (17 cells/segment)
Reaction volume	75-185 μl
Incubation bath temperature	37 ± 0.1 °C (98.6 ± 0.1 °F)
Reaction time	3-10 min
Mixer	Ultrasonic



cobas e 801 analytical unit

Launched in 2016, the **cobas e** 801 analytical unit combines excellence in results with the speed and efficiency that is required to fulfil the highest expectations, especially during peak hours. 300 tests per hour. 48 reagent channels onboard.

Reagent pack type(s)	cobas e pack green
Reagent loading/unloading	Automatic
Cap pre-opener	Yes
Reagent identification	RFID
Capacity of reagent disk	48 reagents packs
Reagent storage temperature	5-10 °C
Incubator temperature	37 °C ± 0.3 °C 98.6 °F ± 0.5 °F
Reaction times for tests	9/18/27 min
Measuring cell	ECL measuring cell
Number of measuring cells	2
Cycle time per channel	24 seconds
Overall cycle time (2 channels)	12 seconds
Max. throughput	300 tests/h





References

- 1. Internal market research of immunoassay vendors (Roche, Siemens, Abbott). Data on file.
- 2. Roche cobas e 801 Immunoassay Method Sheets.
- 3. Method sheets cobas c 503, cobas e 801, Beckman Unicel Dxl/DxC, Abbott ARCHITECT c/i, Abbott Alinity c/i, Siemens Atellica CH/IM, Siemens Vista, Siemens Centaur.
- 4 Based on R&D report. Data on file.

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