



cobas[®] pro integrated solutions
Simplicity meets Excellence



Only for use by registered medical practitioners, hospitals or laboratories.

cobas[®]

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



Your time is precious
We help you use it wisely

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}.





*Simplify your routine
with minimal operator
intervention*



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.



Your space is limited
We help you make the best of it

*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.





*Maximize reagent
utilization with industry's
longest onboard stability²*

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



Increase revenue through expanded testing services

A photograph of two female scientists in white lab coats. One is seen from the back, with long dark hair in a ponytail. The other is facing her, looking slightly to the side with a thoughtful expression. The background is a bright, out-of-focus laboratory setting.

Your team is pushed to their limits

We help them focus on the tasks that matter



*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® SonicWash*

**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*



Your future is unpredictable
*We help you succeed through
continuous access to innovations*

HITACHI



*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	1185	1430	mm	250 kg
	52,0	46,7	56,3	inch	551 lb
ISE	450	1150	1160	mm	170 kg
	17,7	45,3	45,7	inch	375 lb
cobas c 503 (incl. SB and SBL)	1500	1140	1355	mm	790 kg
	59,1	44,9	53,3	inch	1742 lb
cobas e 801 (incl. SB and SBL)	1500	1140	1350	mm	780 kg
	59,1	44,9	53,3	inch	1610 lb

Specifications of the electrical power supply	cobas [®] pro integrated solutions	
Distance to the instrument	≤ 5 m ≤ 16 feet	
Output	200 / 208 / 220 / 230 / 240 V 50 / 60 Hz	
Max. power fluctuation	< 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	

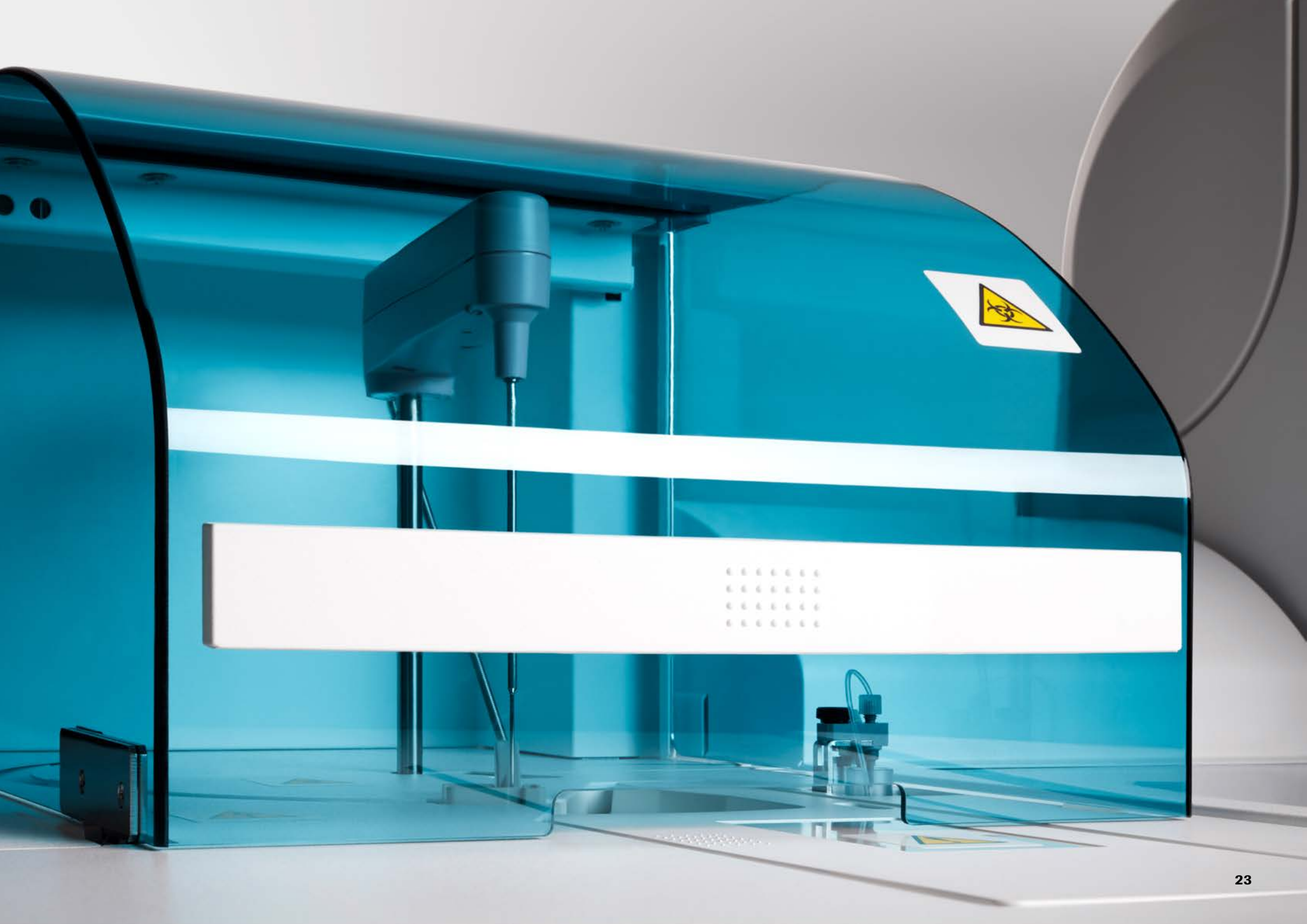
List of concentrated liquid waste volumes	cobas c 503	cobas e 801
Max. liquid waste volumes	Concentrated liquid waste volume: < 2 L/h Normal liquid waste volume: < 30 L/h	Concentrated liquid waste volume: < 7 L/h Normal liquid waste volume: < 22 L/h

Max. liquid waste volumes	cobas c 503	cobas e 801
Distance to instrument	≤ 5 m ≤ 16 feet	≤ 5 m ≤ 16 feet
Conductivity	≤ 1.0 μS/cm	≤ 1.0 μS/cm
Water pressure	50 to 340 kPa 0.5 to 3.4 bar	50 to 340 kPa 0.5 to 3.4 bar
Water temperature	> 12°C > 53.6 °F	> 12°C > 53.6 °F
Deionized water consumption (average)	approx. 32 L/h ISE: < 2 L/h	< 30 L/h

List of environmental conditions during operation	cobas c 503	cobas e 801
Max. altitude above sea level	2,000 m	2,000 m
Floor conditions	≤ 0.5 % inclination Load bearing: 175 kg or more per adjust foot installation surface	≤ 0.5 % inclination Load bearing: 175 kg or more per adjust foot installation surface
Ambient temperature	18–32°C (during operation)	18–32°C (during operation)
Ambient temperature fluctuation	≤ 2°C/hour (≤ 3.6 °F/h)	≤ 2°C/hour (≤ 3.6 °F/h)
Ambient humidity	30–85% (non-condensing)	30–85% (non-condensing)
Noise emission to environment	< 65 dBA in operation < 56 dBA in standby	< 65 dBA in operation < 56 dBA in standby

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 mmol/L (technical measuring range) 450 µl Diluent 15 µl Sample volume (default) 20-375 mmol/L (technical measuring range) 450 µl Diluent 10 µl Sample volume K+: Potassium 1-100 mmol/L (technical measuring range) 450 µl Diluent 15 µl Sample volume (default) 1-150 mmol/L (technical measuring range) 450 µl Diluent 10 µl Sample volume Cl-: Chloride 10-250 mmol/L (technical measuring range) 450 µl Diluent 15 µl Sample volume (default) 20-375 mmol/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 packs 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



cobas e 801

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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Regulatory approvals for certain assays are under process.

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