



cobas[®] pro integrated solutions
Simplicity meets Excellence



Introducing cobas® pro integrated solutions

Simplicity meets Excellence



*Analytical units
can be flexibly
combined to fulfil your
individual needs.*


- 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}.



cobas e 801



*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 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 most advanced reagent carriers 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 stability^{2,3}

With up to 6 months of onboard stability for the 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

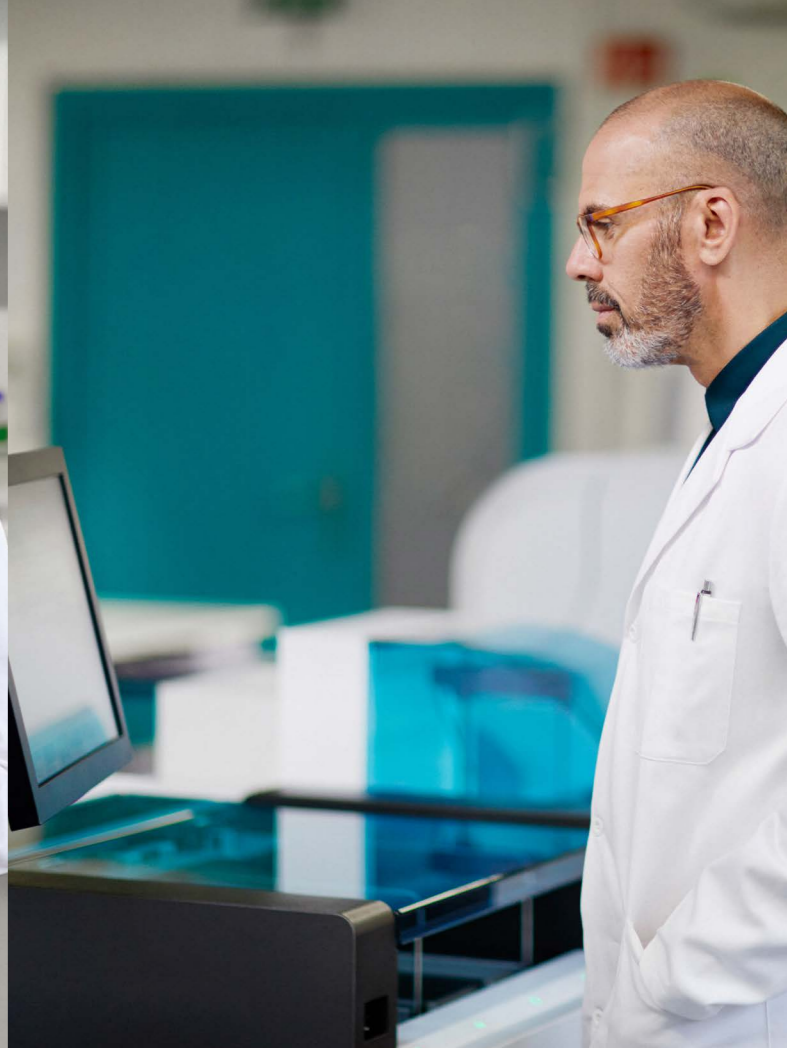
Maximize reagent utilization with industry's longest onboard stability^{2,3}

Increase revenue through expanded testing services

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.

Enable 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



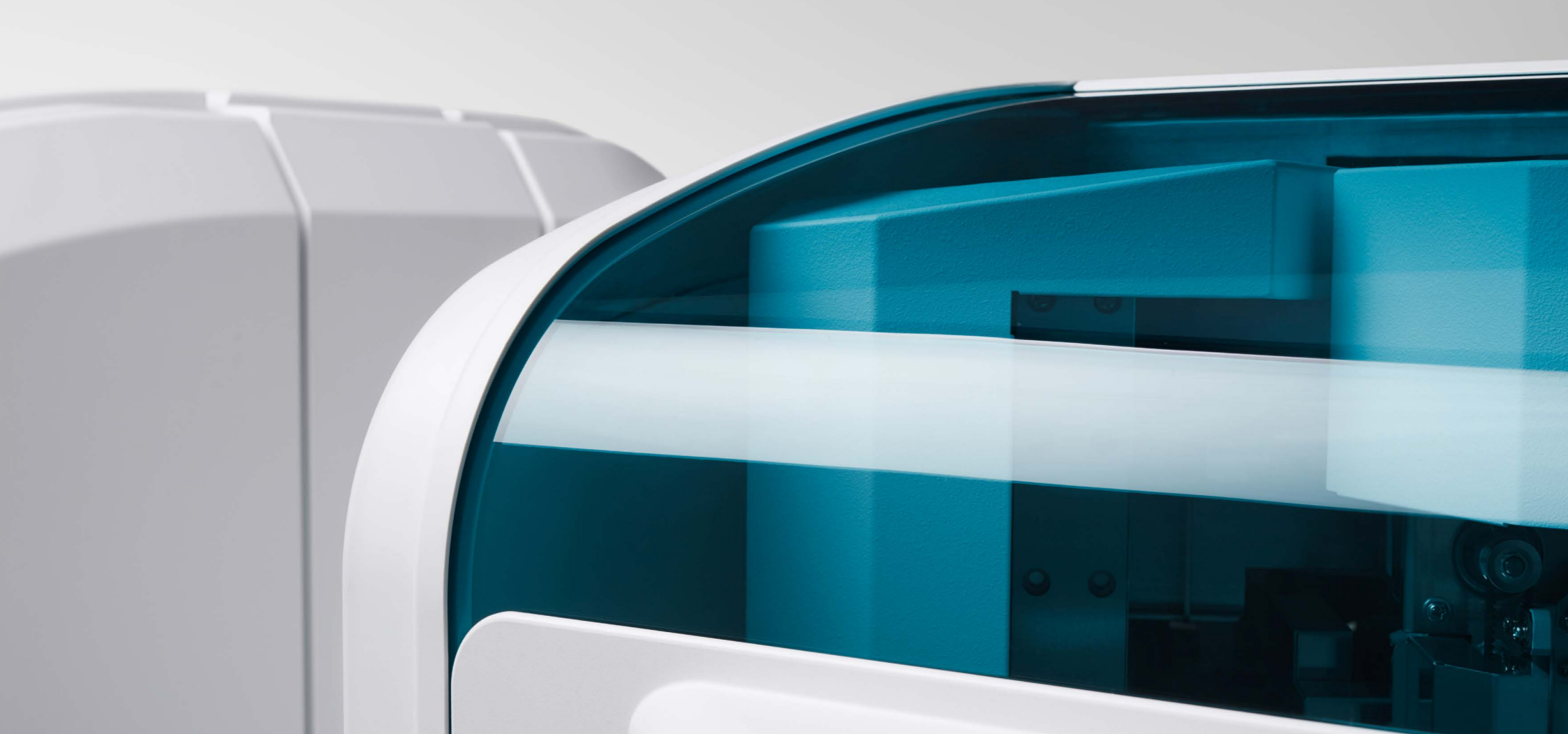
Your future is unpredictable
*We help you succeed through
continuous access to innovations*

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	Sample Supply Unit and Sample Buffers: 0.65 kVA ISE: 0.4 kVA cobas c 503 : 2.4 kVA cobas e 801 : 2.8 kVA Single Phase	

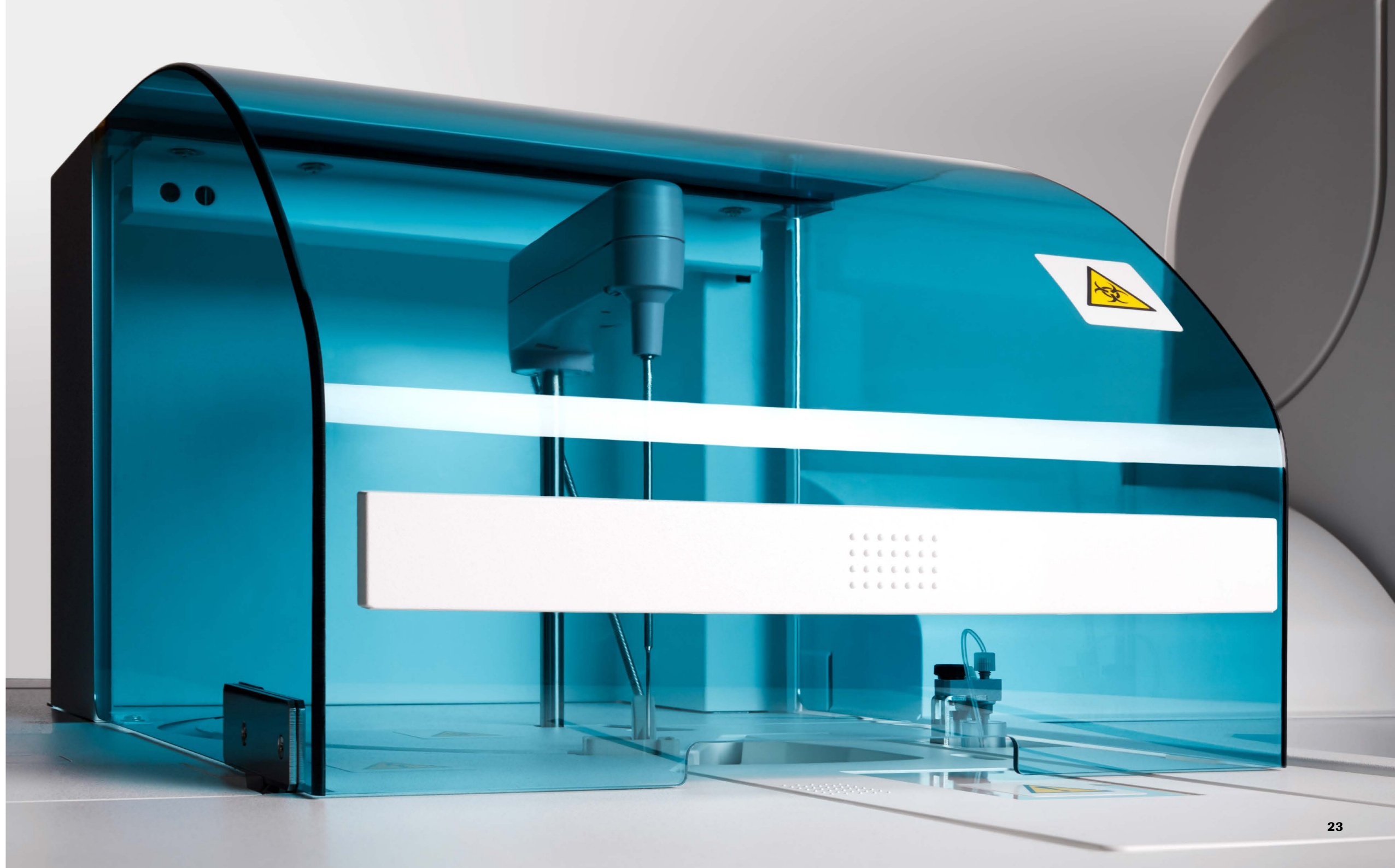
List of concentrated liquid waste volumes	cobas c 503	cobas e 801
Max. liquid waste volumes	Concentrated liquid waste volume: < 2 L/h Normal liquid waste volume: < 30 L/h	Concentrated liquid waste volume: < 7 L/h Normal liquid waste volume: < 22 L/h

	cobas c 503	cobas e 801
Conductivity	≤ 1.0 µS/cm	≤ 1.0 µS/cm
Water conductivity	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	3,000 m	3,000 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) 18-30°C if altitude >2'000m above sea level	18-32°C (during operation) 18-30°C if altitude >2'000m above sea level
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 volumes	15 µl (Default)
Reagent volumes per sample	DIL: 450 µl IS: Total 720 µl REF: 130 µl



cobas c 503 analytical unit

Excellent performance, simple to use and beautifully designed. The **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	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. *Atellica Solution Specsheets | 2017, Alinity ci-series Operations Manual, Architect i2000SR Operator manual (PN 201837-104) Extract page 4-4.*
2. *Roche cobas e 801 Immunoassay Method Sheets, data on file.*
3. *Method sheets cobas c 503, cobas e 801, Beckman AU 680, Beckman Unicel DxI, Abbott Alinity c/i, Siemens Atellica CH/IM.*
4. *Based on R&D report. Data on file.*

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