



cobas® pure integrated solutions
Simplicity meets Excellence



For the use only of registered medical practitioners or a hospital or a laboratory

cobas®



01 cobas e 402 analytical unit¹

Up to **120 Immunochemistry** tests per hour
28 reagent positions

02 Sample Supply unit¹

Up to **50** samples direct loading
Up to **50** samples direct unloading
STAT port

03 cobas c 303 analytical unit¹

Up to **450 photometric** tests per hour
Up to **450 ISE** tests per hour
Up to **750 tests** per hour
(mixed mode photometric and ISE)
42 reagent positions

Get answers fast with short and predictable turnaround times

cobas® pure integrated solutions is designed to support fast and predictable turnaround times across all assays.

93% of Roche immunoassays have reaction time of 18 minutes or less, with STAT assays having just 9 min reactiontime.²

To offer full transparency, **cobas® pure integrated solutions** allows the operator to see the time to result per sample and per test as well as the time to last result on all ordered tests.

Roche reaction times²



9 minutes



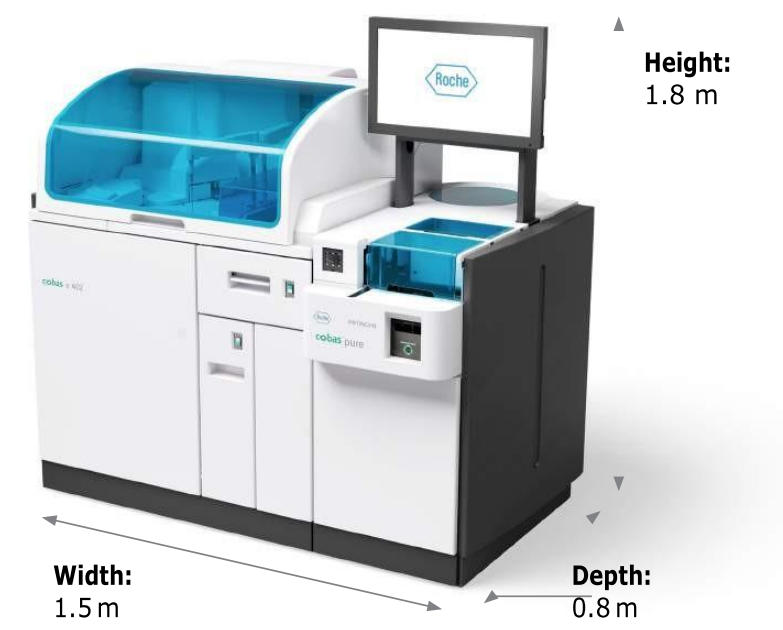
18 minutes



27 minutes



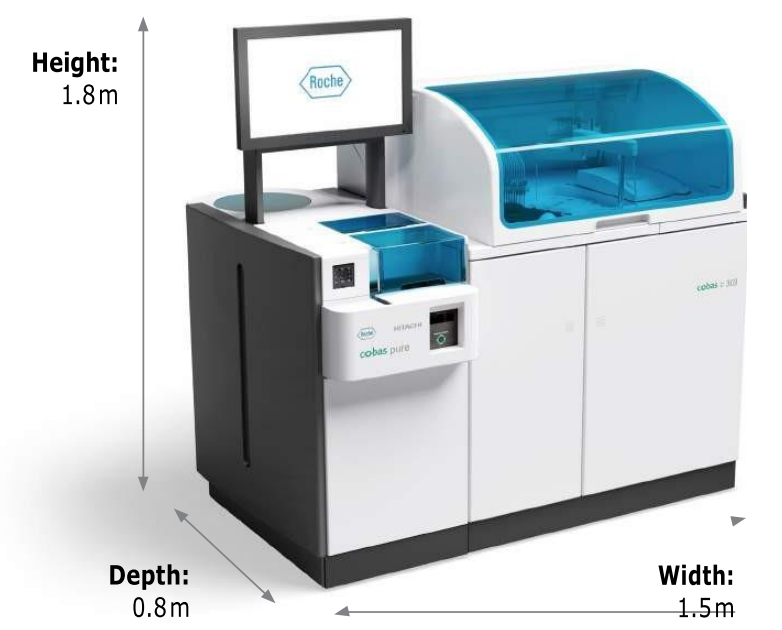
*Three compact configurations**



Immunochemistry Configuration
Footprint $\approx 1.2 \text{ m}^2$



Serum Work Area Configuration
Footprint $\approx 2.0 \text{ m}^2$



Clinical Chemistry Configuration
Footprint $\approx 1.2 \text{ m}^2$

*The width and depth dimensions shown here are the floor(footprint) dimensions⁴



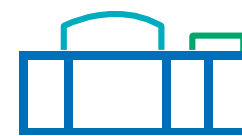
Consolidate clinical chemistry & immunochemistry on a single platform



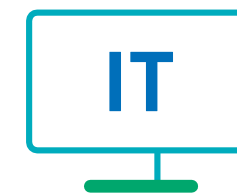
One
sample tube for all CC &
IM tests to handle



One
set of results
to track



One
platform to manage
and to be trained on



One
user interface to
interact with

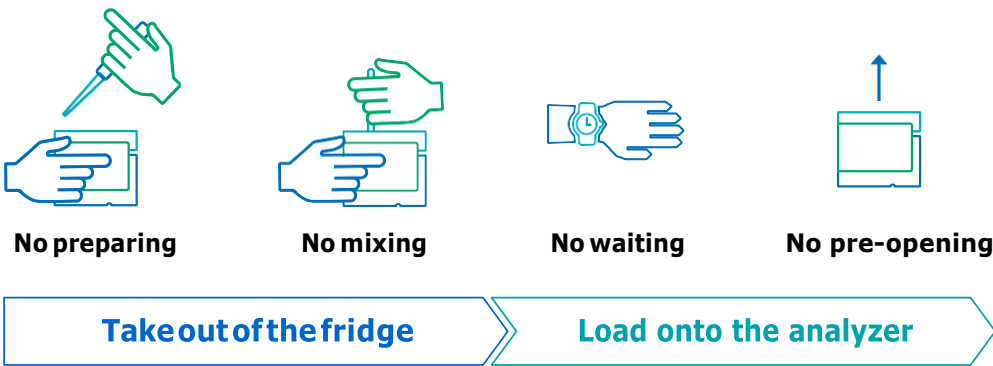


One
manufacturer to
partner with



Ready to use reagents

cobas® pure uses the latest reagent generation from Roche – **cobas e** pack green and **cobas c** pack green. These reagents do not require any preparation, mixing, waiting or pre-opening. The operator can simply take them out of the fridge and load them directly onto the analyzer.



Industry’s leading onboard stability

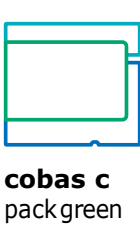
Using space intelligently is about achieving the highest output within the existing space. The average onboard stability for the immunochemistry reagents is 110 days, with 98% of the assays having an onboard stability of 4 months. The average on board stability for clinical chemistry is 137 days, with 57% of the reagents having an onboard stability of 6 months.^{5,6}

Immunochemistry⁵



- Up to 4 months onboard stability
- ≈ 3 times longer average onboard stability compared to previous generation systems

Clinical chemistry⁶



- Up to 6 months onboard stability
- ≈ 2 times longer average onboard stability compared to previous generation systems



Safety of results¹

Disposable AssayTips/AssayCups

cobas pure immunochemistry analytical unit utilizes single-use disposable AssayTips and AssayCups to completely eliminate the risk of sample carry over.

Carryover evasion program

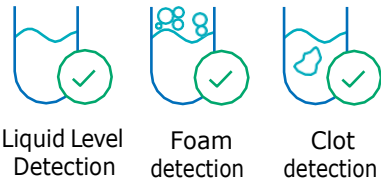
The sample probes on the **cobas pure** clinical chemistry analytical unit are rinsed

inside and outside with deionized water each time after dispensing a sample. Additionally, for applications that are sensitive to sample carryover, special wash can be programmed for an extra wash of reagent probes, sample probes and reaction cells with basic and acidic wash solutions.

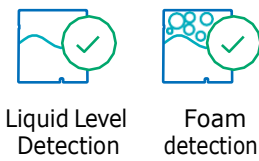
Ultrasonic Mixing

The **cobas pure** clinical chemistry analytical unit features ultrasonic mixing for non-contact mixing of sample and reagent to eliminate the risk of carryover during this event.

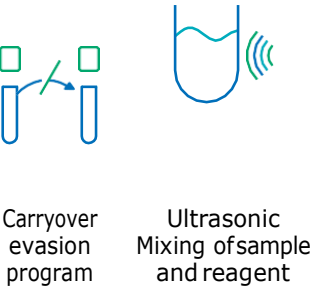
Sample



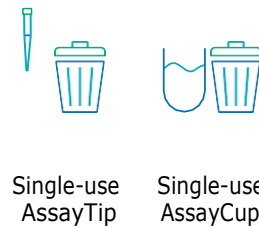
Reagent



Clinical Chemistry



Immunochemistry



Reliability

cobas® pure integrated solutions is designed to deliver the reliability that Roche is known for. With more than 75,000 analytical units globally, the **cobas** family of solutions demonstrates a distinctive uptime* of more than 99%.⁷ Having a reliable analyzer means less interruption of services and less time spent on troubleshooting, thus higher productivity with more predictable turnaround times.

*Uptime: Percentage of the time when system is up and running vs. the time the system is not running due to unplanned incidents.
Calculation: (365 days/Mean time between repair visit) × (Mean time for repair visit + Travel Time)⁷



99 % uptime⁷



cobas[®] pure integrated solutions

General technical specifications

Dimensions and Weights	Width	Depth	Height	Weight
Sample Supply Unit (SSU), (excl. STAT port and incl. touch screen monitor)	450	800	1,750 mm	200 kg
	17.7	31.5	70.0 inch	441 lb
cobas c 303 (incl. ISE) analytical unit	1,000	800	1,375 mm	400 kg
	39.4	31.5	54.1 inch	882 lb
cobas e 402 analytical unit	1,000	800	1,375 mm	400 kg
	39.4	31.5	54.1 inch	882 lb
SWA System Configuration <c 303 SSU e402>	2,450	800	1,750 mm	1,000 kg
	96.5	31.5	70.0 inch	1,764 lb

Specifications of the electrical power supply

Distance to system
Electrical supply
Max. power fluctuation
Power consumption

cobas[®] pure integrated solutions

≤ 5 m (16 feet)
Single Phase AC
200 / 208 / 220 / 230 / 240 V
50 / 60 Hz
≤ 10%
≤ 4.0 kVA
Whole System: <4.0 kVA
SSU: < 0.5 kVA
cobas c 303 AU: <1.5 kVA
cobas e 402 AU: <2.0 kVA

cobas[®] pure integrated solutions

General technical specifications continued

	cobas c 303 (incl. ISE)	cobas e 402
Deionized water supply and consumption		
Distance to instrument	≤ 5 m	≤ 5 m
	≤ 16 feet	≤ 16 feet
Conductivity	≤ 1.0 μS/cm	≤ 1.0 μS/cm
Water pressure	50 to 340 kPa	50 to 340 kPa
	0.5 to 3.4 bar	0.5 to 3.4 bar
Water temperature	> 12 °C	≥ 12 °C
	> 53.6 °F	≥ 53.6 °F
Approx. deionized waterconsumption	max. 16 L/h	max. 12 L/h
Maximum liquid waste volumes		
Highly concentrated liquid waste flow rate	< 1.2 L/h	≤ 3 L/h
Diluted liquid waste flowrate	< 14.8 L/h	≤ 10 L/h
Environmental conditions during operation		
Maximum altitude above sea level	3,000 m	3,000 m
Floor conditions	≤ 1/200 or ≤ 0.5% inclination	≤ 1/200 or ≤ 0.5% inclination
	Bearing load ≥ 5 kN/m²	Bearing load ≥ 5 kN/m²
Ambient temperature	0 – 2,000 m above sea level 18 – 32 °C (64.4 – 89.6 °F)	0 – 2,000 m above sea level 18 – 32 °C (64.4 – 89.6 °F)
	> 2,000 m above sea level 18 – 30 °C (64.4 – 86 °F)	> 2,000 m above sea level 18 – 30 °C (64.4 – 86 °F)
Ambient temperature fluctuation	≤ 2 °C/hour (≤ 3.6 °F/h)	≤ 2 °C/hour (≤ 3.6 °F/h)
Ambient humidity	30 – 85%	30 – 85%

cobas e 402 analytical unit

Specifications

Specifications of the reagentsystem

Reagent pack types	cobas e pack green
Reagent loading/ unloading	Manual
Reagent Identification	RFID
Capacity of reagent disk	28 reagent packs
Reagent storage temperature	5 – 10 °C (41 – 50 °F)

Specifications of the samplingsystem

Sampling cycle time	30 seconds
Sample pipetting volume	4 – 60 µL (1 µL steps)
Sample Liquid level detection	Available
Sample clot detection	Available
Sample air aspiration detection	Available

Specifications of the reactionsystem

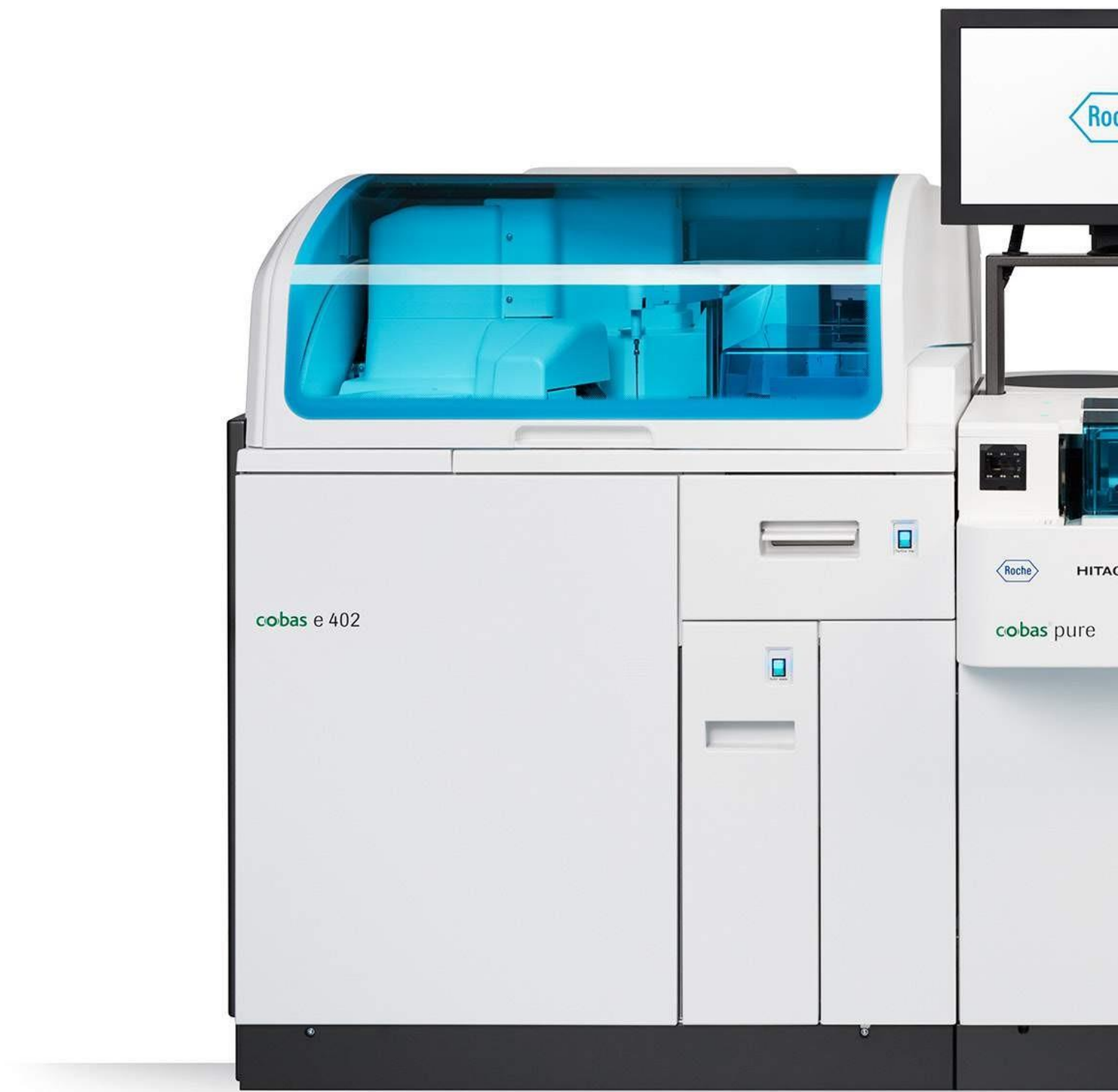
Number of incubator disk positions	38
Reaction volume	120 µL
Incubator temperature	37 °C ± 0.3 °C (98.6 °F ± 0.5 °F)
Reaction times for tests	9/18/27 min
Mixer	Vortex

Specifications of the ECL measuring system

Measuring Cell	ECL measuring cell
Number of measuring cells	1
Maximum throughput*	120 tests/hour

*Throughput may differ based on the mix of test orders per sample

*Excellent performance, simple to use and beautifully designed. The new Immunochemistry analyzer – **cobas e 402** analytical unit.*





References

1 *cobas® pure integrated solutions User Guide – Publication Ver 1.0 · Draft Ver 3.*

2 *Elecsys assay menu cobas pure – Analysis (source method sheets cobas e pack green).*

3 *cobas pure – AutoCal Estimated Time Savings – Internal Calculation.*

4 *cobas pure – footprint dimensions – Internal Document.*

5 *Elecsys assay menu cobas pure – Analysis (source method sheets cobas e pack green, CMP Database).*

6 *Clinical Chemistry assay menu cobas pure – Analysis (source method sheets cobas c pack green).*

7 *Roche Diagnostics Internal Reporting Data On File – GCS reporting / Product reports Q1/2020, CPSFinance Report from Tableau, ICB Q1 2020.*

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