



*Life needs answers*

# cobas c 311 analyzer

Experience the benefits of standardizing  
with **cobas**® solutions

**Introducing the latest addition to the cobas® family of analyzers**

## **Comprehensive** features in a compact footprint

- Full menu including general chemistries, TDM's, DAT's, and serum proteins
- On-board capacity of 42 channels and 3 ISE's
- 300 tests per hour

## **Convenience** through standardization

- Common ready-to-use reagent packs and user interface across **cobas**® platforms means less training and enhanced productivity
- Online updates and remote services via **cobas**® e-services

## **Control** laboratory operations

- Automatic data flag processing of requesting repeats, dilutions without operator intervention
- With Middleware Solutions, functions include archiving, autoverification, reflex testing, and delta checking



**cobas c 311 analyzer**

## **Confidence** in results

- Clot detection and test specific serum indices ensure reliable results
- Non-contact ultra-sonic mixing results in homogeneous distribution of reactants
- Common analytics yield comparable patient results across **cobas**® platforms
- Proven Hitachi instrument reliability



Diagnostics



System	Automated, discrete clinical chemistry analyzer intended for the in vitro quantitative/qualitative determination of analytes in body fluids		
System Components	Self contained floor model analyzer comprised of the analytical unit and control unit		
Sample Throughput	300 photometric tests per hour		
Number of Channels	42 channels and 3 ISE's		
Programmable Parameters	Maximum: 117 photometric, 3 ISE tests, 8 formulas, 3 serum indices		
Sample Material	Serum/plasma, urine, CSF		
Sample Input/Output	Sample disk with 108 sample positions plus: W1 position for ISE cleaning solution, W2 position for ISE activator, Real STAT interrupt		
Sample Cups and Tubes	Sample container	Diameter x length	
	Primary sample tube	16mm x 100mm	
	Primary sample tube	16mm x 75mm	
	Primary sample tube	13mm x 100mm	
	Primary sample tube	13mm x 75mm	
	Hitachi standard cup	17mm x 38mm, 2.5ml	
	Hitachi micro cup	8mm x 37mm, 1.5ml	
	False bottom tube	13mm x 75mm, one type definable	
Sample Clot Detection	Available (pressure sensitive clot detection system)		
Liquid Level Sensor	Capacitance sensing technology		
Sample Barcode Types	NW7 (Codabar); Code 39; ITF; Code 128		
Control Unit	Microsoft Windows XP, Pentium IV processor		
System Interface	RS-232C serial interface		
Sample Database	10,000 samples (routine, STAT, and QC samples)		
Calibration Methods	Start-up, re-calibration. For photometric assays: Linear, non-linear multi points, 2 point calibration, K-factor. Up to 100 calibrators pre-programmable. Storage of up to 180 curves. Preventative calibration of stand-by cassettes. Two k-factor can be defined for different sample types.		
QC Methods	Real-time QC, individual QC, cumulative QC. Up to 100 different controls pre-programmable. Preventative QC after calibration of stand-by cassettes. Auto QC (without operator intervention).		
Electrical Requirements	Power rating Power supply fluctuation  Overvoltage category Pollution degree Power consumption Electrical installation	AC 208 V AC/60 Hz (US/Canada) No significant power supply fluctuation (operating on 208/230 V AC, max. power supply change: ± 10 %)  II 2 1.5 kVA for analytical unit; 0.5 kVA for control unit Technical standard class C, Required earthing < 10 Ω, Bonding impedance < 0.1 Ω at 30 A Insulation resistance >10 MΩ at 500 V	
Water/Waste Requirements	Bacteria-free, deionized water Conductivity Water pressure Water supply volume	< 10 cfu/mL > 10 MΩ resistance 5015 to 25 psi (1.054 – 1.76 g/cm2) 40 L/h	
Operating Conditions	Ambient temperature Ambient humidity Noise output	18 to 32 C 45-85% (non-condensing) <70 dB(A) for surrounding	
Physical Dimensions	Depth Height Height Level of Monitor Width Weight	859 mm 1260 mm 1380-1570 mm 1325 mm 270 kg	34 in 50 in 54.3- 61.8 in 52 in 595 lb
Sampling System	Sample pipetting volume Detection of sample clogging Liquid level sensor	1.5-35 µL, in 0.1 µL increments Pressure sensitive clot detection system Capacitance sensing technology	