

cobas[®] 6000 analyzer series

Technical specifications

System	2nd Generation SWA: modular, analytical system platform, consolidated work area for Clinical Chemistry and Immunology, expandable and re-configurable on site	
System components	Control Unit:	PC, monitor, keyboard, printer, etc. on an ergonomic stand
	Core Unit:	Sample input/output, sample transport by Intelligent Process Management
	Analytical modules:	2 analytical modules
Type of modules	cobas c 501 module:	Photometric measuring unit (incl. ISE)
	cobas e 601 module:	ECL technology measuring unit
Number of module combinations	7 module combinations Up to 3 modules in one core unit cobas c 501 modules: 1 to 2 modules cobas e 601 modules: 1 to 2 modules cobas c 501 e 601 modules: 2 to 3 modules (only 2 units of one module type for SWA combinations possible)	
Sample throughput	Up to 120 racks/hr or 600 samples/hr	
Test throughput (theoretical max)	170 up to 2,170 tests/hr	- overall
	1,000 up to 2,000 tests/hr	- with cobas c 501 modules
	170 up to 340 tests/hr	- with cobas e 601 modules
	1,170 up to 2,170 tests/hr	- with cobas c 501 and cobas e 601 modules
Number of channels (reagent slots)	Up to 151 channels, in total 63 channels (including ISE, automatic setting) on cobas c 501 module 25 channels on cobas e 601 module	
Programmable parameters	191 parameters with photometric and HetIA modules 117 photometric tests, 3 ISE tests, 8 formulas, 3 serum indices with photometric modules 60 heterogeneous tests with cobas e 601 modules	
Sample material	Serum, Plasma, Urine, CSF	
Core unit analytics	Rack:	5 position rack, RD standard rack
	Rack types:	Routine, STAT, Control, Calibrator, Rerun (manual), Wash
	Tray:	Tray with 15 racks/75 samples, RD standard tray
	STAT port:	STAT samples are processed with priority
Sample container types	Primary tubes:	5 to 10 mL; 16 x 100, 16 x 75, 13 x 100, 13 x 75 mm
	Sample cup:	2.5 mL
	Micro cup:	1.5 mL, (exception: cobas e 601 module)
	Cups on tube:	Cup on top of a 16 x 75/100 mm tube; Cup on top of one non standard tube
	False bottom tube (FBT):	one type is definable
Sample volume	1 - 35 µL	
Sample dilution	3 - 121 times, diluent > 100 µL	
Sample clot detection	Available for cobas c 501 and cobas e 601 module	
Minimum sample volume	Primary tubes:	700 µL
	Sample cup:	100 µL
	Micro cup (FBT):	50 µL
Sample barcode types	Code 128; Codabar (NW 7); Interleaved 2 of 5; Code 39	



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Common specifications

Control unit	PC: Windows XP, Pentium IV processor, DVD-RAM Monitor: 17" TFT touch screen colour monitor Keyboard 101 – key enhanced, country-specific Printer: optional PC stand: optional, ergonomic (UL, CE, GS, TÜV) cobas[®] link data station
System interfaces	RS 232 serial interface, bi-directional Interface to cobas link data station for cobas teleservice functionalities and automatic download
Sample data base	10.000 routine/STAT samples
Test methods	For photometric modules: 1 point, 1 point + prozone check, 2 point, 2 point kinetic, 2 point + prozone check, 3 point, 1 point + kinetics Rate A, Rate A + serum index, Rate A with blank, Rate B
Calibrator/QC input	Via specified racks through the input buffer or STAT port
Calibration methods	Start-up, Re-calibration For photometric modules: Linear, non-linear multi-points, 2 point calibration, K-factor up to 100 different calibrators pre programmable Storage of up to 180 curves Preventive calibration of the stand-by cobas c and cobas e packs on cobas c 501: Two k-factor can be defined for different sample types
QC methods	For e- and photometric modules: Real-time QC, individual QC, cumulative QC Up to 100 controls pre programmable Preventive QC after calibration of the stand-by cassettes/rack packs Auto QC: QC without operator intervention (timer triggered)
Rerun/reflex function	Automatic rerun and manual rerun Automatic reflex is supported by the system, reflex request to be provided by PSM or LIS
Electrical requirements	Power requirements: 230 Volts AC; 110 Volts AC 2.4 kVA (for cobas c 501 e 601) Frequency: 50 Hz or 60 Hz +/- 0.5 %
Water/waste requirements	Water: Bacteria free, deionised water supply: resistance of < 1,0 µS/cm Water consumption: Under routine conditions in average 15 L/hr, max. 30 L/hr (per module) Water pressure: 0.5 – 3.5 kg/cm ² , (49 - 343 Kpa) Biohazards waste: Separate container behind the system L. concentrated Central drain port, diameter: ≥ 50 mm / 2 inches Wall drain < waste: 100 mm above the floor / 4 inches
Regulatory requirements	GS, CE, UL, C-UL
Operating conditions	Ambient temperature: 15 to 32 °C / 59 to 90 °F Ambient humidity: 45 to 85 % (RH, without condensation) Heat Output: 1.5 kW (5400 kJ/hr for cobas c 501, 4320 kJ/hr for cobas e 601) Noise Output: < 68 dB
Physical dimensions	Width: 188 to 498 cm / 74 to 196 inches Core Unit: 69 cm / 27.2 inches cobas c or cobas e module: 120 cm / 47.2 inches Depth: cobas c or cobas e module: 98 cm / 38.6 inches Core unit: 104 cm / 41 inches Height: 130 cm / 51 inches Control unit: Width: 80 cm / 31.5 inches, depth: 80 cm / 31.5 inches
Weight	510 to 1230 kg / 1124 to 2711 lb cobas c 501 module: 330 kg / 730 lb cobas e 601 module: 360 kg / 795 lb Core unit (sample loader, control unit, rack rotor): 180 kg / 400 lb

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