

respons[®] 920

Bench top random access clinical chemistry analyzer



Economical. Efficient. Precise.
Trusted performance.

DiaSys

Diagnostic Systems

CHOOSING QUALITY.

Reliable Results, Optimized Workflow And High Efficiency

respons[®]920 is the evidence of our ambition to develop and produce outstanding system solutions for the diagnostic laboratory. Bearing in mind the specific demands on throughput and flexibility, this automated random access clinical chemistry system has been designed as a real all-rounder. Due to its concept the respons[®]920 can easily be integrated in all types of laboratories for routine-, emergency- as well as speciality analysis. respons[®]920 stands for reliable results, optimized workflow and high efficiency. Achieved by the perfect match of analyzer, system reagents, applications and our service.

Guaranteed throughput of 200 tests/hour

- 200 tests/hour with a cycle time of 18 seconds for mono- and 2-component tests
- 360 tests/hour with optional ISE unit

The answer to your needs

- High on board reagent capacity of 30 different methods in bar coded mono- and twin-containers
- Long term reagent and calibration stabilities
- Large panel of high-quality clinical chemistry and immunoturbidimetric tests manufactured by DiaSys
- Unique and convenient respons[®] system container concept
- 30 positions for bar coded patient and STAT samples
- Flexible sample matrix
- Low sample volume
- Customer oriented menu extension for specific system adaption
- Wide measuring ranges

Inter-assay precision & recovery

Parameter	Target TLN* value	Mean TLN* value	Recovery [%]	Target TLP** value	Mean TLP** value	Recovery [%]	CV [%] TLN*	CV [%] TLP**	Patient Conc./[CV%]
AP [U/L]	74.2	72.5	97.7	244	230	94.3	0.64	0.64	54.8/0.5
AST-P5P [U/L]	37.2	38.2	103	200	186	93.2	1.00	0.38	29.7/1.1
AMY [U/L]	72.0	72.2	100	273	265	97.2	0.55	0.36	39.4/0.7
Ca-P [mg/dL]	9.54	9.24	96.9	12.2	11.9	97.5	0.51	1.46	9.40/1.5
CK [U/L]	133	134	100	543	520	95.8	0.73	0.47	144/0.6
CREA-J [mg/dL]	1.13	1.11	98.2	7.73	7.20	93.1	0.57	0.97	0.91/1.8
DBIL [mg/dL]	0.53	0.55	104	2.24	2.43	109	0.81	0.61	0.08/8.3
TBIL [mg/dL]	1.00	0.96	96.0	5.45	5.56	102	1.57	1.35	0.08/5.7
LDH [U/L]	144	138	95.6	394	374	94.9	0.64	0.49	141/0.8
Lipase [U/L]	42.1	45.2	107	80.9	80.5	99.5	0.88	0.61	43.2/1.6
PO4 [mg/dL]	3.39	3.28	96.8	7.09	6.83	96.3	3.45	0.51	4.53/2.1
TP [g/dL]	5.32	5.03	94.5	6.39	5.95	93.1	1.02	0.63	6.84/0.7
UA [mg/dL]	6.33	6.23	98.4	9.44	9.18	97.2	0.37	0.41	4.30/0.5

* TruLab N »Normal« control

** TruLab P »Pathological« control

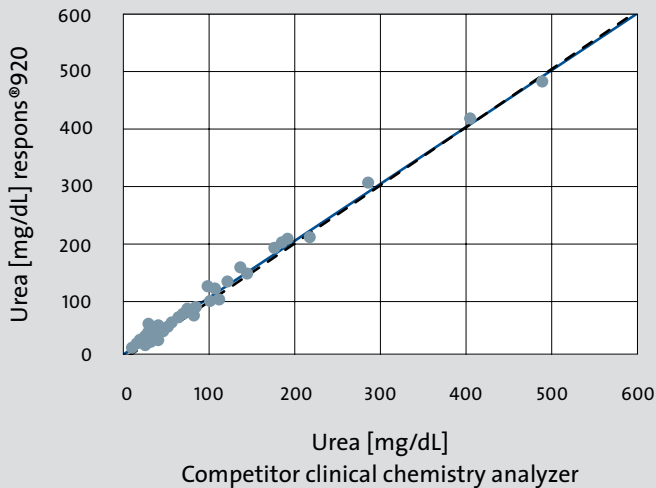
Pleasing to your budget

- Minimized running costs
- Low-maintenance system
- High on-board and shelf life stabilities of DiaSys reagents

Easy to use

- Automatic bar code scan for samples and reagents
- Ready to use liquid-stable reagents
- Adapter free one-grip loading of reagent containers
- Versatile software: set-up in eight languages
- Easy to learn

Method comparison Urea



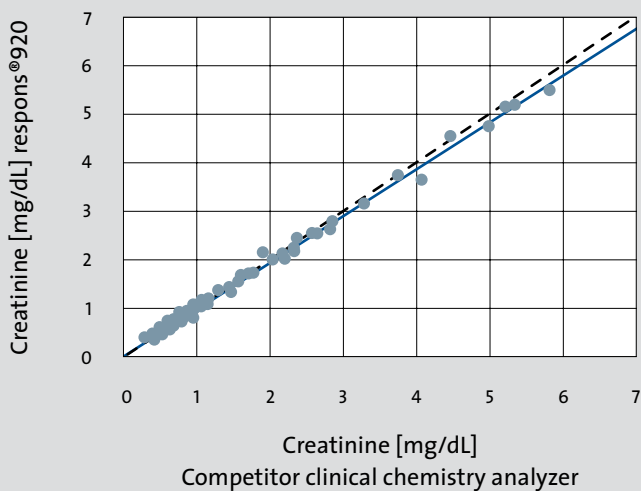
respons®920 vs. competitor clinical chemistry analyzer

n = 89

Passing/Bablok Regression:
 $y = 0.999x - 0.622$ [mg/dL]

r = 0.9981

Method comparison Creatinine



respons®920 vs. competitor clinical chemistry analyzer

n = 100

Passing/Bablok Regression:
 $y = 0.961x + 0.018$ [mg/dL]

r = 0.9949

respons[®] 920

Technical specifications	
System type	Automated bench top random access clinical chemistry analyzer
Throughput	200 tests/hour with a cycle time of 18 seconds for mono- and 2-component tests 360 tests/hour with ISE
Sample types	Serum, plasma, urine, CSF, whole blood
Sample volume	2 – 70 µL
Reagent pipetting	Reagent 1: 50 – 300 µL Reagent 2: 10 – 200 µL
STAT-analytics	Several sample positions available
Ion Measurement	Direct potentiometry: Na, K, Cl, Li (optional)
Bar code identification	Automatic bar code scan for reagents and samples
Measuring principle	Colorimetry (Rate/End Point); Immunospectrometric Assay
Calibration	Linear, non-linear, multi point
Sample tray	30 positions for bar coded patient samples including STAT positions, 9 positions for blanks, calibrators, controls or samples without bar code and ISE solutions
Sample tubes/cups	Most commonly used primary blood collection tubes and sample cups
Sample dilution	Dilution ratio: 2- to 150-fold
Reagent on board capacity	30 different methods in bar coded mono- or twin-containers for adapter-free one-grip loading, refrigerated
Reaction temperature	37 ± 0.2 °C
Reaction unit	Temperature-controlled heated rotor with 45 reusable quartz glass cuvettes (37 ± 0.2°C)
Photometry	8 wavelengths: 340, 405, 450, 505, 546, 578, 660 and 700 nm (mono- and bichromatic)
Photometric linearity and resolution	Linearity: 0 – 2.5 OD; resolution: 0.0001 OD
Water consumption	Up to 7.5 liters per hour
System interface	Analyzer-PC: USB connectivity bi-directional; CPU: Pentium IV or higher
Lis connectivity	Yes
Power source/power consumption	AC 220 V ± 10 %, 50 ± 1 Hz or AC 110 V ± 10 %, 60 ± 1 Hz ; 600 VA (excluding PC/printer/monitor)
Dimensions	81 cm (W) x 70 cm (D) x 60 cm (H)
Weight	Approximately 110 kg

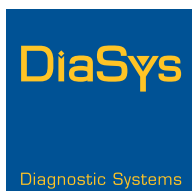
These specifications are subject to change without notice

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