

# respons<sup>®</sup>910

## Discover Your Potential



reddot design award  
winner 2009

**Efficiency. Power. Flexibility.**  
**Small In Size – Big In Performance.**

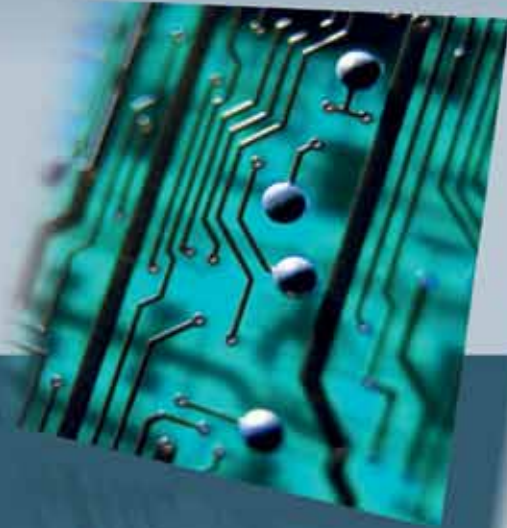
**DiaSys**

DiaSys  
Diagnostic Systems

**CHOOSING QUALITY.**

# **respons<sup>®</sup>910**

## **A Leap Forward For Your Laboratory.**



- System solution consisting of respons<sup>®</sup>910 analyzer, intuitive software, dedicated system reagents and perfect service
- High-performance technology in its most compact form: The perfect fit for laboratories with small to mid-range throughput
- Integrated system components for highest result security and precision
- Ideal as dedicated analyzer or backup instrument
- A great leap in performance for your laboratory



# Every Detail Makes Your Laboratory More Efficient. Automatically.

Laboratories performing up to 800 analyses per day can noticeably improve their performance – immediately. The fully automated respons<sup>®</sup>910 system makes routine operations more efficient while simplifying workflows. Versatile, robust, compact – an instrument whose superior performance exceeds even highest expectations.



## **Just a push of a button: Easy to use**

Laboratories need to be both highly efficient and economical in order to succeed in today's competitive world. Their workflow has to be optimized and run

without interruption, and for this instruments must be easy to use. The respons<sup>®</sup>910 is the ideal solution: It can be put to work right away by experienced employees. And it requires minimal maintenance and service.





#### Intelligent features for maximum efficiency

DiaSys has designed all respons<sup>®</sup>910 components with a view to the perfect integration of all components. Features like clot detection and crash sensor (patent pending) are major advantages in a system that is also easy to use, guarantees consistently high result security, and is uniquely flexible. respons<sup>®</sup>910 can process up



to 30 samples in one run, and methods can be chosen out of a portfolio of over 60 different parameters. And if you need to do emergency tests, such samples can be introduced effortlessly into the test run through the STAT drawer. respons<sup>®</sup>910 can handle between 100 and 150 tests per hour – automatically, which means that laboratory personnel are freed for other duties.



#### Unique container system for liquid-stable reagents

This concept was designed especially for the respons<sup>®</sup> family of instruments. Both the containers for mono and 2-component tests have the same shape. The container for mono reagents has one chamber, whereas reagent 1 and reagent 2 are stored in two chambers in the twin container. The decisive advantage here is the one-grip loading that eliminates the need to deal with multiple containers. The result: Rapid, easy loading, which, combined with DiaSys' liquid-stable reagents, has elevated the respons<sup>®</sup>910 to a new level of performance in its class.

# Reduced To The Max: Rethinking Technology.

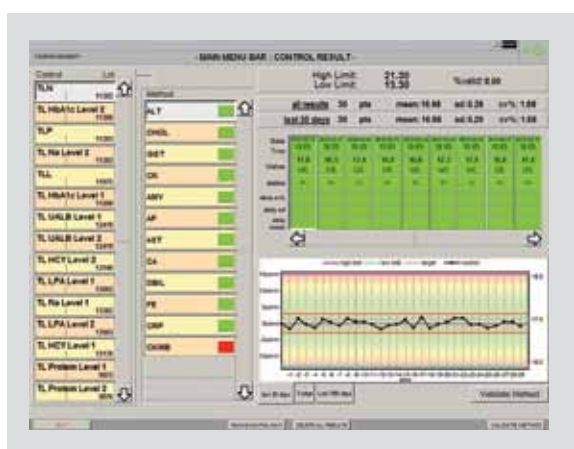
respons<sup>®</sup>910 sets new standards for maximum efficiency, uncommon robustness, and minimal wear. The system software is both user-friendly and self-explanatory: It guides users intuitively and quickly through the entire testing process. Easy handling based on progressive technology, designed to meet highest requirements.

## Superior performance for quality results

Highly secure results, outstanding user-friendliness, easy-to-learn operation – these are important characteristics of respons<sup>®</sup>910, which have been documented in a comparative study from a major laboratory diagnostic center\*. Its performance and quality were compared with those of large laboratory analyzers. The result: With its high level of reliability and precision, respons<sup>®</sup>910 is the ideal solution for small to mid-sized laboratories. And in big laboratories, it is the perfect analyzer for specialized tests or backup instrument.

\* Evaluation of the DiaSys respons<sup>®</sup>910, Center for Laboratory Diagnostics, St. Francis Hospital, Linz (Rhine), November 2010

## Clear QC documentation



## Intra-assay precision and recovery

Parameter	Target TLN* value	Mean TLN* value	Recovery %	Target TLP** value	Mean TLP** value	Recovery %	CV % TLN*	CV % TLP**
ALT (U/L)	31.8	34.7	109	105	114	109	1.80	0.69
CHOL (mg/dL)	136	133	98.1	204	201	98.4	1.79	1.99
CREA-PAP (mg/dL)	1.02	1.08	106	7.43	7.77	104	1.95	1.30
CRP (mg/dL)	19.8	18.7	94.5	59.8	55.8	93.3	2.09	1.86
DBIL (mg/dL)	0.53	0.56	106	2.24	2.46	110	1.94	1.32
IRON (µg/dL)	88.4	88.8	101	284	271	95.4	1.74	1.03
GGT (U/L)	27.0	27.8	103	83.0	80.4	96.9	1.55	2.05
Lipase (U/L)	42.1	43.8	104	80.9	78.5	97.0	2.99	2.49
TP (g/dL)	5.32	5.29	99.5	6.39	6.39	100	1.79	1.83
TRIG (mg/dL)	116	112	96.3	172	160	93.3	1.82	2.10
UREA (mg/dL)	40.1	40.9	102	152	150	99.1	2.29	2.06

n = 20; Preliminary data; \* TruLab N = Normal control; \*\* TruLab P = Pathological control



### Smart technology means reduced costs

The respons®910 principle – integration to the highest level – makes for a highly independent system. Operation is simplified for the user without sacrificing precision. The reagent tray, for example, is a DiaSys innovation that integrates reagent and sample into a single module. Sensor technology in the respons®910

analyzer is as well a good example for efficient, highly developed design. The respons®910 is the only analyzer in its class with a multifunctional arm that integrates clot detection and crash sensor, liquid-level detection and pipetting of sample and reagent. The instrument is user-friendly as well since all components are almost maintenance-free.



### High quality for low maintenance

respons®910 is designed to be low-maintenance by reducing the number of moving parts to a minimum, while providing maximum efficiency and value. This is why the respons®910 does not include a refrigeration unit: The liquid-stable reagents from DiaSys provide superb on-board stability, so that cooling is optional. On the other hand, the rotor may simply be removed. The reagents can thus be stored in the refrigerator when they are not being used.

# respons<sup>®</sup>910 From DiaSys

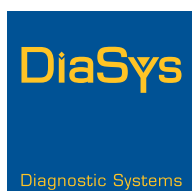
## Technical specifications

System type	Bench top clinical chemistry analyzer
Throughput	150 tests/hour with a cycle time of 12 seconds for mono and 100 tests/hour for 2-component tests
Combined reagent/ sample tray	30 reagent positions plus 30 sample positions; easy removable tray for storage in refrigerator
Sample types	Serum, plasma, whole blood, CSF, urine
Sample volume	2-30 µL
Reagent pipetting volume	Reagent 1: 120-250 µL Reagent 2: 10-130 µL
Sensors	Liquid-level sensor, clot sensor and crash sensor
STAT-analytics	Two sample positions for loading of emergency samples at any time
Ion measurement	Photometric tests for Na, K, Cl
Bar code identification	Automated bar code reader for reagent and sample
Measuring principle	Colorimetry (rate; end point); immunoturbidimetric assay
Calibration	Linear, non-linear, multi-point
Sample tubes/cups	Primary tubes of 5, 7, and 10 mL and sample cups (1.5 and 2.5 mL)
Reagent on board capacity	30 different methods in bar coded mono or twin-containers for adapter-free one-grip loading
Reaction temperature	37 ± 0.2 °C
Reaction unit	Temperature-controlled heated rotor with 105 disposable plastic cuvettes (37 ± 0.2 °C); maintenance-free heater elements
Photometry	12 wavelengths: 340, 380, 405, 450, 480, 508, 546, 570, 600, 660, 700 and 800 nm (mono and bichromatic)
Photometric linearity and resolution	Linearity: 0-3.0 OD Resolution: 0.0001 OD
Water consumption	<1 liter per hour
System interface	Analyzer to PC: USB 2.0 connectivity bi-directional; PC: Pentium IV or higher
LIS connectivity	Yes
Remote control	Yes
Power source	AC 110/220 V, 60/50 Hz; 300 VA excluding PC/printer/monitor
Dimensions	60 cm (W) x 67 cm (D) x 60 cm (H)
Weight	Approximately 60 kg



Climate-neutral print  
(Carbon neutral)  
ID: DE-626-169 902

Printed on FSC-certified paper



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820094 | July 2014