

# eon<sup>TM</sup> 100

CHEMISTRY SYSTEM



Providing Vital Solutions for Your Laboratory<sup>TM</sup>

# TECHNICAL SPECIFICATIONS + TEST MENU

## General

Ion-selective electrodes	Na+, K+, Cl-
Throughput per hour	180 with ISE
Number of sampling arms	1
Methodologies on line	Up to 60
Dimensions	74.93cm(L) x 63.5cm(W) x 63.5(D)

## Sample System

Sample positions	9
Stat sample	Yes
Pediatric sample	Programmable
STAT sample	Yes
Calibrators	Programmable
Controls	Programmable (Levy-Jennings Graph / 3-levels)
Positive sample identification	Yes - with integrated bar-code reader
Sample primary tube types	12-13 mm diam / 75-85 mm height
Dead Volume	100µl - 12-13 mm primary tube 50µl - 3mL sample cup
Sample size	2-100 µl - minimum maximum
Sample dilution	Pre-dilution Post-dilution / rerun
Automatic std. curve dilution	Yes - up to 8 points
Diluter	Micro-metering pump
Liquid level sensor	Yes - capacitive
Crash detection	Yes
Pre-heating	Yes
Sample type	Plasma, serum

## Cuvette System

Cuvettes on board	80 (re-washable)
Cuvettes type	Optical plastic
Incubation heater	37°C ± 0.1°C controlled
Cuvette washing station	Yes

## Reagent System

Reagent positions	28
Positive reagent identification	Yes—with integrated barcode reader
Reagent bottles	25ml and 14ml
Reagent Volume (µl)	180 / 300 µl - minimum maximum in µl
Diluter	Micro-metering pump
Liquid level sensor	Yes - capacitive
Shock sensor	Yes
Maximum N° of reagents/test	3
Reagent cooling	Yes
Multiple rgnt. position (same lot)	Yes
Analytical methods	End-point, bi-chromatic end-point, fixed-time, kinetic, differential sample blank, differential 2-reagents

## Measurement System

Photometer type: light source	Halogen lamp (2,000 hours)
Type of measurement	Mono or bichromatic
Wavelengths	340-700nm
Photometric linearity	0-3 O.D.

## Wash System

Wash consumption	Up to 2 liters/hour
Sytem solutions	Systemic solution & cleaner solution
De-ionization water supply	No

## Software

Operating system	Windows XP®
L connection	Yes
Patient archive	Yes - up to 15,000 patients
Q.C. archive	Yes - up to 5,000 tests

## Test Menu

### General Chemistry

Albumin
Bilirubin, Direct
Bilirubin, Total
Calcium
Carbon Dioxide
Creatinine
Glucose
Iron, Total
Magnesium
Phosphorus
Protein, Total
Urea Nitrogen (BUN)
Uric Acid

### Enzymes

Alanine AminoTransferase (ALT)
Alkaline Phosphatase
Amylase
Aspartate Transaminase (AST)
Creatine Phosphokinase (CPK)
Gamma Glutamyl Transferase (GGT)
Lactate Dehydrogenase (LDH)

### Lipids

Direct LDL
Triglycerides
Direct HDL
Cholesterol

### Electrolytes

Chloride
Potassium
Sodium

### In Development

CRP Wide Range
CRP High Sensitivity
Digoxin
Ferritin
Fructosamine
Hemoglobin A1c
Lipase
Microalbumin
Phenobarbital
Phenytoin
Theophylline
UIBC

## WHY CHOOSE THE EON 100

**The Eon 100 is a fully automated bench-top chemistry system, which combines a small footprint, cost efficient operation and the latest features to meet the needs of the small to medium sized laboratory.**

### Cost Efficient

The Eon 100 was specifically designed to deliver a true cost effective chemistry solution for the cost conscience laboratory. Small reagent bottles, optimization mapping and low reagent consumption per test are just the beginning. The system utilizes an on-board cuvette washing system that eliminates a disposable from the laboratory and environment.

### Time Efficient

The unique Eon 100 home screen provides visual and audible status indicators that maximize hands off operation. The software is intuitive, easy to learn and the system requires minimal routine maintenance.

### Flexible

The Eon 100 operating system offers the flexibility and menu addressing a wide range of testing. Features such as three part reagent utilization may allow for the addition of new cutting edge biomarkers and make the Eon 100 a viable instrument for years to come.

### Reliable

Most laboratories do not have the luxury of a back-up chemistry system so it is important to have a robust instrument that maximizes operating time. The Eon 100 is designed from a collection of proven state-of-the-art components from around the world to address that need. The Eon reagents are fully validated and optimized on the system to consistently yield quality results.

### Dependable Support

The Eon 100 support team knows a busy lab does not have the time for extensive system troubleshooting. The team is committed to maximizing system uptime through extensive training, system tools such as remote diagnostics, and quick mobilization.



## REAGENT HANDLING



### Cooled Reagent Tray

Onboard cooling and storage ensures reagent stability, which increases reliability of results and saves time by allowing the reagents to be stored on-board.

### Positive Reagent Identification

The reagent chamber contains an infrared barcode scanner capable of scanning Eon 100 barcoded reagents, automatically recognizing reagent position.

### Reagent Inventory Monitoring

Enables the operator to track the volume of reagent on-board.

### Tray Capacity

*The reagent tray has 28 positions, providing the ability to run multiple test panels simultaneously.*

## SAMPLE HANDLING



### Sample Tray

The Eon 100 sample tray has 9 positions available for patient samples, calibrators, and controls. The software is optimized to allow for continuous loading of samples.

### Liquid Level Detection

Liquid sensor detection prevents reporting of invalid results from insufficient samples.

### Positive Sample Identification

*Infrared barcode scanner eliminates the need to manually enter patient information and reduces the risk of sample errors that can cost you time and money.*

## ISE SYSTEM\*



### Integrated ISE

The Eon 100 utilizes a proven ISE (Ion Selective Electrode) for Na<sup>+</sup>, K<sup>+</sup>, Cl<sup>-</sup>, providing fast, reliable results and eliminating the need to split samples.

### Automatic Calibration

The ISE automatically calibrates every 8 hours, without operator involvement.

### Easy Access Electrodes

Electrodes are accessed directly through the large front door of the analyzer. The electrodes are uniquely keyed to ensure proper placement.

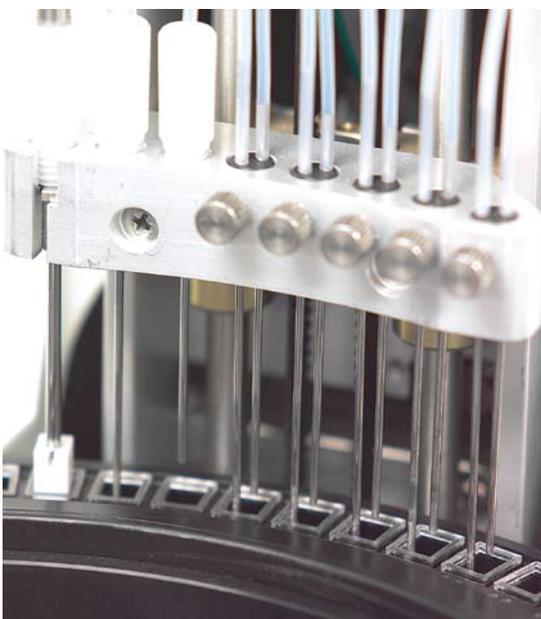
\*Optional extra



### Reagent Pack

The ISE reagent pack is self-contained and features a chip that automatically transmits the lot number and expiration date, eliminating manual entry and ensuring quality product.

## WASH SYSTEM + CUVETTES



### Reusable Cuvettes

The Eon 100 contains 80 reusable cuvettes that are constructed of durable optical plastic that are washed on-board the system.

### Automatic Optics Check

After every washing cycle, the Eon 100 automatically performs an optics check to ensure reading integrity.

### Robust Washing System

Automatically washes cuvettes onboard and eliminates the need for expensive disposable cuvettes.

# MEET THE EON 100

## Sample/Reagent Arm

An intelligent, self washing probe with liquid level sensors and crash detection.

## Washing Station

Efficient onboard cuvette washing station with optics validation.

## Horizontal Cover Arm

Automatically pauses the system without an interruption to work in progress for continuous loading and unloading of samples and reagents.

## Access Door

Allows easy access to integrated ISE module and reagent pack.

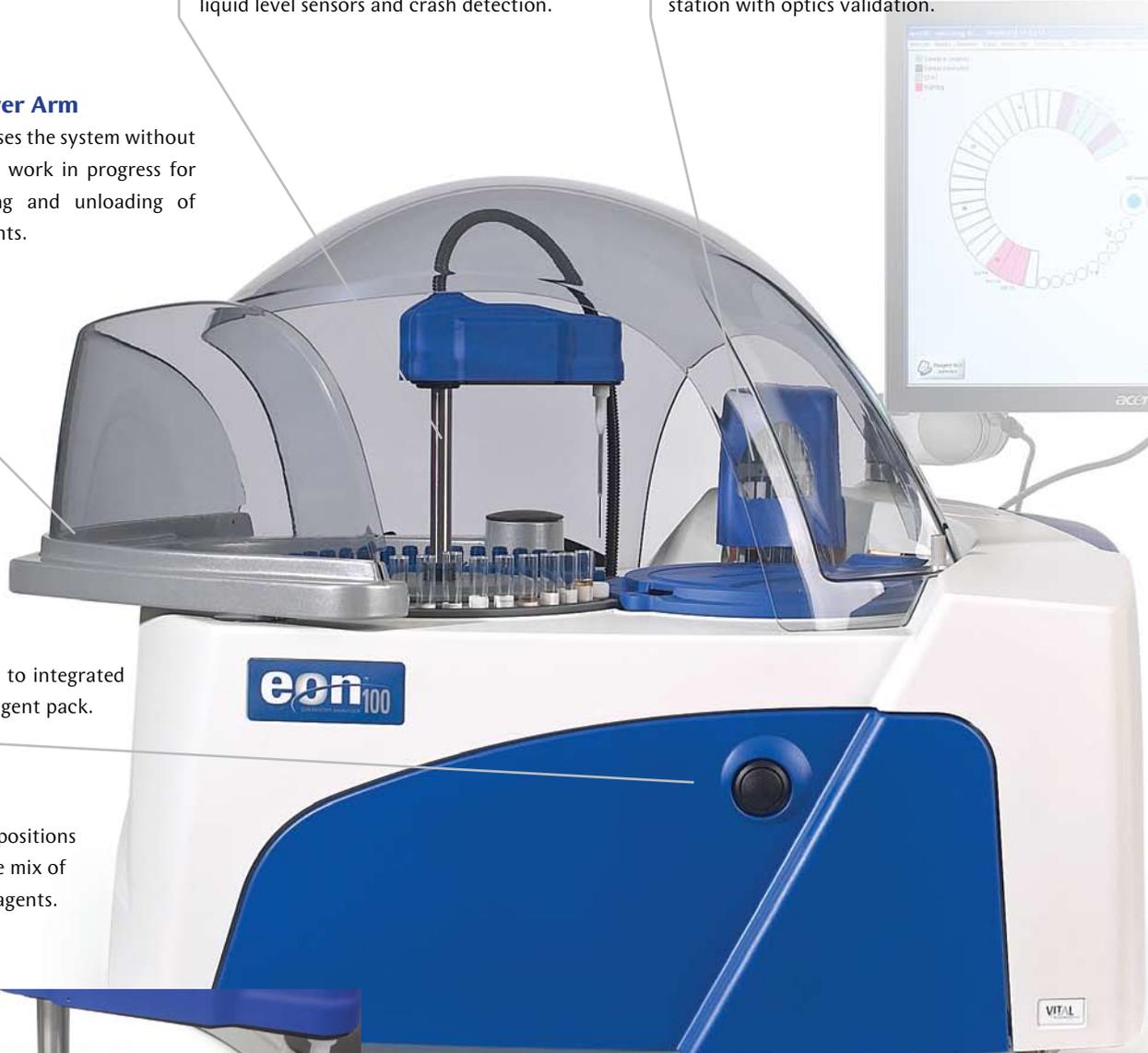
## Reagent Tray

28 cooled reagent positions allows for a flexible mix of stable on board reagents.



## Sample Tray

9 sample positions located in the front of the instrument for easy and continuous loading.

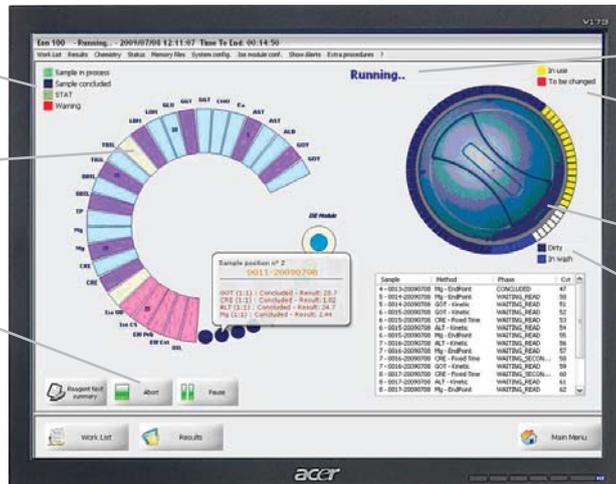


# SOFTWARE

Sample Status  
Color Key

Reagent  
Status

Navigation  
Icons



System Status

Cuvette Status  
Color Key

Cuvette Wheel

Sample Status

## Automatic Start-up and Shutdown

The system can be scheduled to automatically “wake-up” or “shut down”. Routine washing and cycling can be done with operator interface.

## Optimization mapping

Software is pre-programmed with an optimal test map maximizing operational efficiency and virtually eliminating the potential for cross contamination.

## STAT Testing

You can order a STAT test or panel at any time. Once a STAT is ordered the analyzer will pause current work without interruption. A prompt for the STAT sample will appear in less than 1 minute.

## Navigation

Intelligently designed software and big navigation icons allow for easy streamlined operation.

## Quality Control

QC results are stored in memory and easily displayed on the screen. QC results are displayed with a Levey-Jennings plot.

## Remote Access

With your permission, a technical support representative can access your system remotely for advanced troubleshooting.



## Order Entry Screen

One screen order entry. Simply click to add a test panel or scan barcodes.



## Pre-Programmed methods

Reagent application methods are preloaded in the software saving time and eliminating the possibility of data entry errors.

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