Clinical Data®

CHEMISTRY WORKSTATION

VITALAB®

selectra® E

Economical. Reliable.

overview & assay menu

Why choose the Selectra E?

The Selectra E delivers what your laboratory needs - an economical solution for your chemistry testing that doesn't sacrifice performance and reliability. The Selectra E is a proven platform with over 5000 installations worldwide, giving your lab proven reliability and peace of mind. In addition, with a throughput up to 300 tests per hour, random access with STAT capability, and a comprehensive test menu, the Selectra E provides the performance and flexibility you require.

Features that save time and money.

- Comprehensive test menu
- Vitalab Dry Electrode
- Reusable cuvettes
- Self-contained water supply
- On board reagent cooling
- Easy-to-use operating software
- Random access
- Continuous loading
- Pre-dilution and automatic rerun
- Interactive maintenance procedures
- Primary tubes
- STAT handling
- Reagent level sensing
- Test incompatibility
- Low reagent usage

Testing capability you need.

The Selectra E has a comprehensive test menu, providing your laboratory with the testing options you need. Vitalab brand reagents, the highest quality reagents available, will ensure the accuracy and reliability of your results. In addition, because of the highly precise measurement system, on board mixing and open channels, the Selectra E gives you the ability to add specialty assays.

Test menu.

General Chemistry Assays
Albumin
Bilirubin, Direct
Bilirubin, Total
Calcium
Creatinine
Glucose
HbA1c
Iron, Total
Magnesium
Phosphorus
Protein, Total
Urea Nitrogen (BUN)
Uric Acid

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

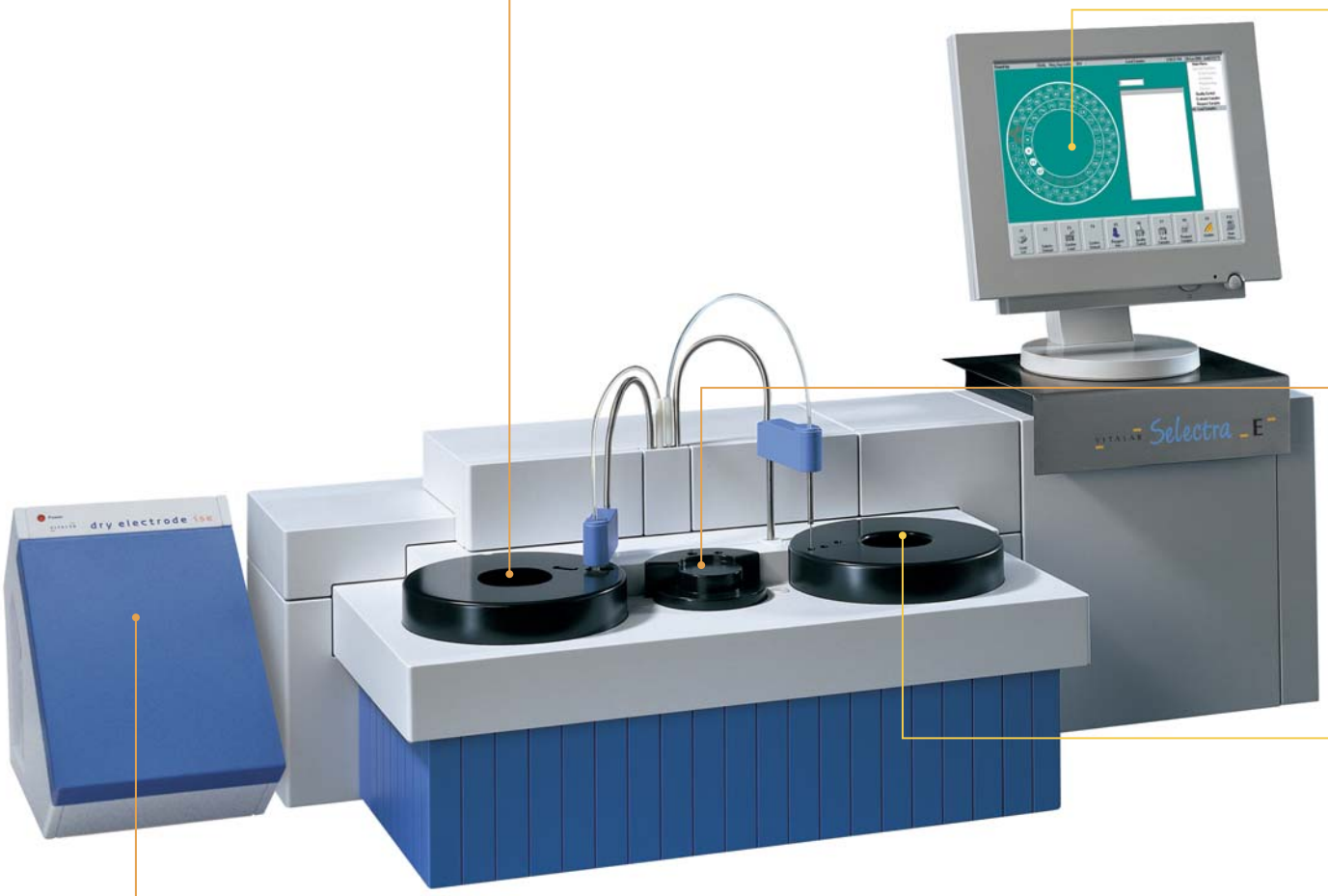
Lipids Assays
Direct LDL
Triglycerides
Direct HDL
Cholesterol

Electrolyte Assays
Carbon Dioxide
Chloride
Potassium
Sodium

Theraputic Drug Assays
Digoxin
Phenobarbital
Phenytoin
Theophylline

In Development
hsCRP; Apolipoprotein A1; Apolipoprotein B; Iron, TIBC

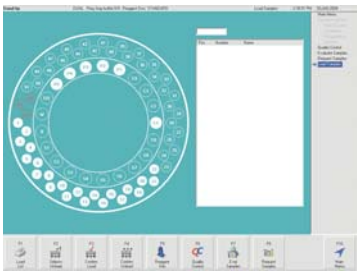
VITALAB® selectra® E



features & benefits

Reagent Rotor

The Selectra E holds 32 individual Vitalab reagents, providing hours of walk-away operation. On-board cooling of the reagent chamber assures reagent stability, providing reliable results while lowering cost. Continuous inventory monitoring enables the operator to know the number of tests remaining for each reagent, minimizing waste and lowering laboratory cost.



Easy-To-Use Software

Selectra E software is Windows® based, simple and straightforward, providing uncomplicated operation of the instrument. Quality Control results are stored in memory and easily displayed on the screen. Results are validated using Westgard rules and displayed with a Levey-Jenning Plot.

Open Channels

The Selectra E provides user-definable open channels, allowing for the addition of specialty assays.

Reusable Cuvette Rotor

The Selectra E has a 48 position semi-disposable cuvette rotor, needing only to be replaced after 10,000 tests, which is automatically washed on-board, creating significant cost savings by eliminating need for expensive disposable cuvettes.

On Board Wash System

The automated, on board cuvette wash, eliminates the need for an external water system, reduces contamination, and provides a cost-effective, high-quality result.

High Capacity Sample Rotor

The Selectra E has 51 positions which are available for primary draw tubes or disposable sample cups, as well as 5 dedicated Pediatric positions and 3 dedicated STAT positions..

Low Sample Volume

The Selectra E requires a low sample volume of 1-30 µl per test. Some competitive systems require as much as 200 µl per test. This means less blood needs to be drawn, which is especially beneficial for pediatric or oncology patients.

Vitalab Dry Electrode ™

The Vitalab Dry Electrode is a proven, dry, solid-state ISE (Ion Selective Electrode) for Na^+, K^+, Cl^- and CO_2, providing a complete test panel without adding an enzymatic procedure or using a traditional 'wet' electrode, which significantly reduces cost and maintenance time, while increasing reliability of results.

technical specifications

Throughput
- Up to 300 tests per hour

Reagent system
- Rotor with 24 positions for 25 ml bottles and 8 positions for 5 ml bottles. All positions can be assigned as R1 and R2. Adapters for 5 ml bottles in 25 ml positions.
- 5 pairs of 25 ml positions can be used for 50 ml bottles.
- Reagent 1 volume 110 - 400 µl
- Reagent 2 volume 0 - 180 µl
- Reagent disk compartment is cooled to approx. 12°C below ambient temperature.
- Preheated reagent needle with level detection and integrated mixer.
- Typical reagent consumption 250 µl per test.

Sample system
- Sample rotor containing an outer segment for 51 samples and/or calibrators and an inner segment for:
  . 3 stats;
  . 1 blank;
  . 9 calibrators;
  . 5 pediatric samples;
  . 4 controls;
  . 1 wash solution;
  . 1 ISE activator.
- Continuous loading.
- All positions can contain 5 ml primary tubes or sample cups.
- Optional rotor for KABE and SARSTEDT sample tubes.
- Sample volume 1 - 30 µl per test, programmable in steps of 0.1 µl.
- Sample probe with level detection and integrated mixer.

Sample predilution
(Dual mode only)
- Programmable ratios 1:5, 1:10, 1:20, 1:30, 1:40, 1:50, 1:100 with 3 possible diluents.

Pipetting system
- Hamilton syringes and valve block.
- Reagent syringe 1000 µl.
- Sample syringe 100 µl.

Reaction disk
- Semi-disposable rotor with 48 cuvettes. Path length 7 mm.
- Minimum measuring volume 220 µl.
- Measuring temperature 37°C, controlled by Peltier elements

Washing unit
- Cuvette-washing with 4 x 500 µl of water. The unit is equipped with liquid sensors. Cuvettes are dried before use.

Light source
- Quartz-iodine lamp 12V-20W.

Wavelength range
- Automatic wavelength selection by 8-position filterwheel (340, 376, 405, 505, 546, 578, 640 and 700 nm). Half bandwidth 8 to 12 nm.

Photometric range
- -0.1 to 3.0 Absorbance

Analytical modes
- Kinetic measurement with linearity check.
- Bichromatic end point measurement with or without bichromatic reagent blank and/or sample blank correction.
- Two point measurement.
- Graphic plot of all measuring points.
- Automatic rerun with sample reduction.
- Non-linear calibration curves

Ambient temperature
- 15 - 32°C.
- Maximum humidity 80%.

Measurement capabilities
(Single reagent mode)
- Reagent Absorbance before sample addition.
- Kinetic during 7 minutes after sample addition.
- End Point (Bichromatic) 11.5 minutes after sample addition.
- Kinetic can contain two points for two-point measurements

Measurement capabilities
(Dual reagent mode)
- Reagent Absorbance (bichromatic) before sample addition.
- Kinetic 1 for 4.5 minutes after sample addition (can be used as sample blank for Kinetic 2).
- Kinetic 2 for 4 minutes after reagent 2 addition.
- Kinetic 1+2 for 8.5 minutes after sample addition.
- Sample blank (bichromatic) before reagent 2
- Endpoint (bichromatic) 4.5 minutes after sample addition or 11.5 minutes after sample addition
- Kinetic 1, Kinetic 2 or Kinetic 1 + 2 can contain a minimum measuring time or two points for two-point measurements.

Calculation modes
- Prozone check for immunology tests.
- Cut-off declaration.

Quality control
- Up to 15 different controls can be defined, 3 per test.
- Westgard rules.
- Levey-Jennings plots.

Standards
- CE
- CB certificate

Languages
- English, Spanish, French.

Dimensions
- 45 x 19 x 22 inches
  (W x H x D excl. Monitor)

ISE Specification

Power Requirement
- 100 W.

Ambient Temperature
- 10 - 32°C.
- Maximum humidity 85%.

Dimensions and Weight
- 9 x 12 x 11.5 inches (W x H x D).
- 14 lbs.

Parameters
- K, Na, Cl, CO_2
- Sample Type: Serum or Plasma.
- Sample Volume: 25 µl.
- Diluent Volume: 325 µl.
- Measurement cycle time: 40-50 secs.
- Calibration cycle time: 300-450 secs.
- Wash cycle time: 2000 secs.

Options

Bar code reader
- Hand held CCD bar code reader (can read all common bar codes) used for test requisition and sample identification.

contact us

Headquartered in Smithfield, Rhode Island, Clinical Data provides a complete range of products and services for the physician and hospital laboratory market in the United States. The Company is supported by a reagent manufacturing operation located in Brea, California, and by instrument manufacturing by our Dutch sister company Vital Scientific N.V. The Company also designs, implements and manages doctor's office laboratories to enhance the quality of patient care and revenue opportunities within the practice.

Clinical Data Family of Products

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ESR Analyzers
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Laboratory Consulting

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