

Clinical Data®

CHEMISTRY WORKSTATION



VITALAB®

selectra® XL

Performance. Value.

overview & assay menu

Why choose the Selectra XL?

The Selectra XL delivers what your laboratory needs - an economical solution for your chemistry testing that doesn't sacrifice performance and reliability. The Selectra XL is built on the proven Selectra platform which has resulted in over 5000 installations worldwide, giving your lab proven reliability and peace of mind. In addition, with a throughput up to 480 tests per hour, random access with STAT capability, and a comprehensive test menu, the Selectra XL provides the performance and flexibility you require.

Features that save time and money.

High throughput
Comprehensive test menu
Dry Electrode
Reusable cuvettes
Self-contained water supply
On board reagent cooling
Low reagent usage

Internal barcode reader
Easy-to-use operating software
Random access
Continuous loading
Pre-dilution and automatic rerun
Interactive maintenance procedures
4 hours walk-away operation

Positive patient identification
Reagent barcode scanning
Primary tubes
STAT handling
Reagent level sensing
Test incompatibility

Testing capability you need.

The Selectra XL 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 XL gives you the ability to add specialty assays.

Available reagents.

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

Therapeutic Drug Assays

Digoxin
Phenobarbital
Phenytoin
Theophylline

In Development

hsCRP; Apolipoprotein A1; Apolipoprotein B; Iron, TIBC

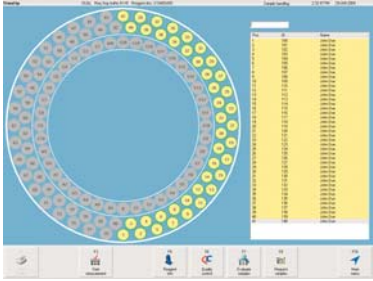
VITALAB®

selectra®

XL



features & benefits



Easy-To-Use Software

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



Reagent Rotors

The Selectra XL, with two 32 position reagent rotors, holds 64 individual Vitalab reagents, providing up to 4 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.



Reusable Cuvette Rotors

The Selectra XL has two 48 position semi-disposable cuvette rotors, which only need to be replaced after 10,000 tests. The cuvette rotors are 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 XL sample wheel contains 80 barcode read sample positions, which are available for primary draw tubes or disposable sample cups, and 30 positions for calibrators and controls.

Internal Barcode Reader

The Selectra XL features an internal barcode reader, eliminating manually entry of samples, saving your laboratory significant time.



Vitalab Dry Electrode™

The Vitalab Dry Electrode is a proven, dry, solid-state ISE (Ion Selective Electrode) for Na⁺, K⁺, Cl⁻ and CO₂, 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 480 tests per hour.

Reagent system

- Two Rotors with each 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.
- 10 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 :
 - 80 barcode read samples positions
 - inner ring for . 20 calibrators;
 - 10 controls;
- Stat and pediatric functionality
- Continuous loading
- Internal barcode reading
- Primary tubes (13 or 16 mm OD)
- All positions can contain 5 ml or 10 ml primary tubes or sample cups.
- 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 (2)

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

Reaction disks (2)

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

Washing units (2)

- 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

- 2 optical units each with a 8 position filter wheel
- Automatic wavelength selection by 8-position filterwheel (340, 376, 405, 505, 546, 578, 640 and 700 nm). Half bandwidth 8 to 12 nm.
- Other wavelengths on request

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 (Bichromatic) 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.

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 45 x 30 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, CO₂
- 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.

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

Chemistry Analyzers
Reagents & Controls
ESR Analyzers
Laboratory Start-Up & Management
Laboratory Consulting

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