

VITALAB

selectra

XL

CHEMISTRY WORKSTATION



The
power
of
proven
quality

 **vital scientific**

GIVING YOU PEACE OF MIND

The new Vitalab Selectra XL extends the excellent reputation of the Selectra family. With over five thousand Selectra installations all over the world, Vital Scientific has created a proven platform to run your tests in a convenient and cost effective way. The Selectra XL is a true open system that, among others, runs all chemistries that have been adapted for the Vitalab Selectra. Clinical Chemistry, Special Proteins, Drugs of Abuse, Therapeutic Drugs, Electrolytes: You name it, the Vitalab Selectra XL does the job without compromising quality. Having a throughput in the range of 400 tests per hour, the Vitalab Selectra XL is the ideal workstation as main system, back-up system or for specialties.

VITALAB **selectra** XL

Key features and benefits:

- Use of Selectra optical system: accurate, proven and reliable;
- No consumables and low reagent volume: low cost per test;
- Limited water consumption and use of normal distilled water: low running costs;
- Use of various primary sample tubes: flexible integration in sample handling process;
- Positive patient identification: full integration into lab management systems;
- Dual optical design: internal back-up.

System Intelligence

- Random access;
- Continuous loading;
- Pre-dilution and automatic rerun;
- Interactive maintenance procedures;
- Positive patient identification;
- Reagent barcode scanning;
- Operator safety measures;
- Primary tubes;
- STAT handling;
- Level sensing;
- Test incompatibility;
- Host connection.

Convenience, speed,
data management & safety:
the Selectra XL fits in every
laboratory setting.





WORKING TABLE

- | | |
|------------------------------|------------------------------|
| A left reagent rotor | D left cuvette rotor |
| B sample rotor | E right cuvette rotor |
| C right reagent rotor | |

You name it, the Selectra XL does it

- Clinical chemistry;
- Special proteins;
- Drugs of abuse;
- Therapeutic drugs;
- Electrolytes.

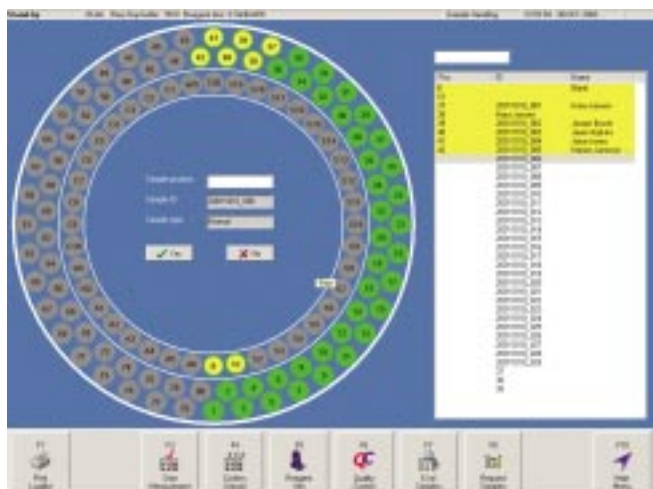
Without any doubt, the Selectra XL shows excellent performance for almost every application. Low volumes, low concentrations, turbidimetrics...the superior optical design of the Selectra XL offers you the accuracy you need.

Throughput & True Walk Away Capacity

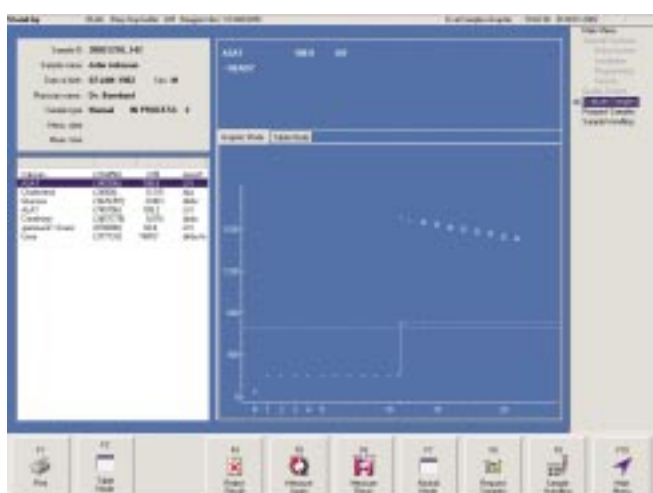
The Selectra XL combines throughput (360 tests per hour; 450 tests per hour with ISE) with true Walk Away Capacity (up to 4.5 hours), bringing a much higher real throughput than systems requiring continuous attention even with higher theoretical throughput.



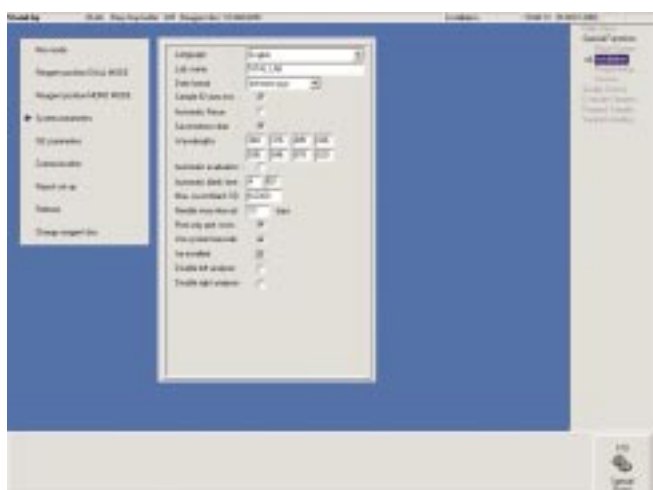
CUVETTE ROTOR AND WASHING STATION



LOAD SAMPLE MENU



EVALUATE SAMPLE MENU



SYSTEM PARAMETER MENU

Simplicity

The simplicity of the software allows a skilled technician to operate the Selectra XL within an hour. Interactive and intuitive routines lead the operator to the results quickly. The system maintenance instructions are integrated in the software.

On-Board Quality Control

QC results are stored in memory and are easily displayed on the screen. The software calculates the mean, standard deviation and coefficient of variance. Validation using Westgard rules and a display of the Levey Jenning plot are also included.

Connectivity

Bi-directional Host Connection allows the system to receive instructions/requests and to transmit data to the data management system. In combination with Positive Patient Identification the operator will be able to load and run the Selectra XL in a finger-click.

Three Reagent System

The software supports a "three reagent system". This feature makes the Selectra XL the ideal platform for special applications, which require long incubation times.

Remote & Service Access

The use of a standard computer allows full integration of the Selectra XL in local networks. Further, with dedicated remote control software the Selectra XL can be fully operated and data can be examined from any location.

S P E C I F I C A T I O N S

THROUGHPUT

- Up to 360 tests per hour;
- Up to 450 tests per hour with ISE unit.

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, R2 and R3. 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 3 volume 0 - 180 µl;
- Reagent disk compartment is cooled to approx. 12°C below ambient temperature;
- Preheated reagent needles 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 and 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 (MULTIPLE REAGENT MODE ONLY)

- Pre-programmed ratios selectable from 1:2 to 1:100 with 3 diluents;
- Automatic parent calibrator dilution.

PIPETTING SYSTEM (2)

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

CUVETTE ROTORS (2)

- Semi-disposable rotor with 48 cuvettes. Path length 7 mm;
- > 10.000 tests per rotor;
- Min. 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. Waste is separated into diluted and concentrated (sample/reagent mixture and optional ISE-unit) waste. Cuvettes are dried before use.

LIGHT SOURCE (2)

- Quartz-iodine lamp 12V-20W.

OPTICS & WAVELENGTH RANGE

- 2 optical units with each a 8 position filter wheel;
- Automatic wavelength selection by 8-position filterwheel (340, 376, 405, 436, 505, 546, 578 and 620 nm);
- Other wavelengths available on request;
- 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 (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;
- 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.

MEASUREMENT CAPABILITIES (TRIPLE REAGENT MODE)

- Additional timings available for three reagent system.

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.

CERTIFICATES

- CE;
- CB;
- UL.

LANGUAGES

- English, German, Spanish, French, Italian, Chinese and Dutch;
- Other languages on request.

WEIGHT

- 190 kg.

DIMENSIONS (FLOORSTANDING)

- 117 x 115 x 77 cm (W x H excl. Monitor x D)

OPTIONS

BAR CODE READER

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

CONCENTRATED WASTE

- Separate waste container for concentrated waste.

COMPUTER

- Minimum requirements:
 - Pentium based: 800 MHz;
 - RAM 128 MB;
 - Monitor VGA 1024 x 768 pixels;
 - Hard Disk: 2 GB;
 - Floppy: 3,5" (1.44 MB);
 - CD ROM drive;
 - Windows 2000;
 - 1 USB for analyser; 1 serial port for host; 1 or 2 printer port(s).

PRINTER

- The application supports two printers simultaneously; one for patient reports and one for calibration and system data;
- Most printers supported by Windows can be connected.

ISE UNIT

- Na, K and Cl measurements.

With over 40 years experience in the design and manufacture of award winning scientific and laboratory instrumentation, Vital Scientific has the proven expertise and know-how to respond to your needs. Skilled employees, powerful design tools, precision engineering and a policy for top quality components lie at the very heart of our good manufacturing practices. By accepting nothing but the very best, Vital Scientific - an ISO 9000 compliant and FDA registered company - is well equipped to meet the highest standards.

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