

The VITROS® 5,1 FS Chemistry System

The menu you need, without the compromises. It's that simple.



The VITROS 5,1 FS Chemistry System features a newly expanded, wide accessible test menu on board that provides better workflow and testing consolidation than ever before. It's a simple way to take your productivity to the next level—and take care of your physicians' and patients' needs.

- No water, drains, fixed probes or mixing assemblies required
- Calibration stability up to lot change
- Wide accessible menu with 125 reagent positions on board
- Eliminates the additional cost, maintenance, carry-over, and contamination risks associated with traditional water-based systems
- Intelligent Parallel Processing integrating MicroSlide™ and MicroTip™ Technologies
- Automated capping/decapping of MicroTip reagents
- User-defined assay capability

TEST MENU

Current Menu

Acetaminophen
Acid Phosphatase
Albumin
Alcohol
Alkaline Phosphatase
ALT
Ammonia
Amylase
AST
BuBc Bilirubin
BUN/Urea
Calcium
Carbamazepine
Carbon Dioxide
Chloride
Cholesterol
Cholinesterase
CK
CK-MB
CRP
Creatinine (Enzymatic)
CSF Protein
Digoxin
GGT
Glucose
Iron
Lactate
LDH
Lipase
Lithium
Magnesium
Phenobarbital
Phenytoin
Phosphorus
Potassium
Salicylate
Sodium
Theophylline
Total Bilirubin
Total Protein
Triglycerides
TIBC
Uric Acid
Urine Protein

Expanded Menu

AAT
Amphetamines^u
Apo A1
Apo B
ASO
Barbiturates^u
Benzodiazepines^u
C3
C4
Caffeine
Cannabinoids^u
Cocaine Metabolites^u
d%A1c
dHDL (MicroSlide format)
dLDL
dTIBC
Gentamicin
Haptoglobin
Homocysteine
hsCRP
IgA
IgG
IgM
Methadone^u
Microalbumin
Opiates^u
Phencyclidine^u
Prealbumin
Rheumatoid Factor
Tobramycin
Transferrin
Valproic Acid
Vancomycin
10 user-defined channels

^uUrine



MicroSlide Center with 89 cartridge positions



MicroSlides



Simple reagent loading



Integrated MicroTip Reagents



MicroTip Chemistry Center with 36 dual reagent pack positions

VITROS® 5,1 FS Chemistry System Specifications

Reagents: No preparation required (except caffeine)

MicroSensor™: Scan for sample interferences (hemolysis, icterus, turbidity) over 400-800nm wavelengths

- No additional reagents, sample, or consumables required
- Results available in less than 1 second
- Automatic flagging of impacted test results

On-Board Test Capacity:

- 89 MicroSlide™ and 36 MicroTip™ dual reagent pack positions

Measurement Principles: Potentiometric (direct ISE), Colorimetric/Rate, Immuno-rate, Turbidimetric

- MicroSlide wavelengths: 340, 400, 460, 540, 600, 630, 670, & 680nm
- MicroTip wavelengths: 340, 380, 405, 450, 510, 540, 575, 600, 620, 660, 700 & 800nm

Calibration: Unlimited number of lots may be pre-calibrated

- **Stability:** Up to lot change
- **Process:** Random access; 25 calibrations per assay body fluid combination
- **Types:** Linear, Logit 4, Logit 5 and cubic spline algorithms

Instrument Startup: No priming; no washes; no daily calibration

Time for Single Result:

Potentiometric: ~2.5 minutes
Colorimetric: ~7 minutes
Immuno-Rate: ~9 minutes
MicroTip: ~8-14 minutes

Real-time results data stream to LIS

Sample Types: Serum, Plasma, Urine, CSE, Whole Blood (for d%A1c only)

Sample Volume: 2-16.7µL; Dead volume: minimum 35µL

Sample Capacity: 160 samples in Universal Sample Trays (150 routine samples plus 10 in dedicated STAT lane)

Sample & Reagent Management: Intellicheck® Technology includes clot and bubble detection, high sample viscosity detection, Save-the-Sample Clot/Bubble Management, liquid level sensing and reagent delivery detection and management

Universal Sample Tray: Holds samples in 1.5mL, 5mL, 7mL and 10 mL collection tubes, Microsample cup and 0.5 & 2mL cups, and the following Micro-containers:

- **Becton-Dickinson (BD) MICROTAINER®** (with or without optional extender)
- **Terumo Capiject®** Capillary Blood Collection Tubes
- **Greiner MiniCollect®** Capillary Blood Tubes (0.5mL and 1.0mL)
- **RAM Scientific Safe-T-Fill®** Capillary Blood Collection Tubes (125uL, 150uL, 200uL, and 300uL, all without optional Tube Extender)
- **Sarstedt Microvette®** 200uL and 500uL with round inner vessel
- **TEKLAB** 2mL
- **10.25 mm** diameter evacuated glass tubes (maximum 67mm length)
- **Eppendorf® Micro-centrifuge tube** (1.5mL or equivalent diameter and length)

Barcode Types: Autodiscriminates among all standard symbologies, including Code 128, Code 39, Codabar, Interleaved 2 of 5

Barcode Placement: 3D barcode reader allows deviation by +/- 15° from vertical

Operator Interface: Graphical user interface, Ergonomic Touchscreen Monitor with on-board documentation and animated HELP (V-DOCS); 32 programmable panels

User-Defined Channels: 10 on board at one time with the capability to program 20 assays

Data Storage: 25,000 samples; ability to archive and retrieve through CD-ROM

Instrument Dimensions:

Length: 92.2in/2.34m
Width: 33.4in/0.84m
Height: 52.5in/1.33m
Weight: ~1,400lbs/~640kg

Automation Capability: With the addition of the AT accessory to the VITROS 5,1 FS Chemistry System, the "Point-in-Space" interface allows for sampling directly from automation track systems

ELECTRICAL

Line Voltage: Dedicated 20 amperes, nominal 200-240V

Line Frequency: 47-63Hz

ENVIRONMENT

Average Heat Output: 4,187BTU

Operating Temperature Range: 59-86°F/15-30°C

Ambient Humidity: 15-75% RH

Altitude Limit: Up to 2,438m/8,000ft

Plumbing: No water or drain required

COMMUNICATIONS

LIS Interface Capability:

NCCLS/CLSI
LIS1-A; LIS2-A

LIS Download Process: Dynamic Download and Host Query

Ports: 1 RS 232 serial port; 2 USB ports; 2 Ethernet ports

e-Connectivity®

- Using internet connection and secure VPN technology
- Includes online secure remote diagnostics, bi-directional communication and software download capability



VITROS. The answer is **simple**

For more information, contact your Ortho-Clinical Diagnostics representative or visit our website at www.orthoclinical.com.