

# VITROS® 5600 Integrated System<sup>1</sup> Specifications Sheet



“Results matter.”

## Measurement Principle:

- + Colorimetric/Rate
- + Potentiometric (direct ISEs)
- + Immuno-rate
- + Turbidimetric
- + Enhanced Chemiluminescence

## Reagents:

- + No preparation\*, no mixing or reconstitution required for Integrated Reagent Packs, Signal Reagent, Universal Wash Reagent, Electrolyte Reference Fluid (ERF), or Immuno-Wash Fluid (IWF)
- + Onboard stability up to 84 days
- + Shelf life stability up to 18 months from date of manufacture\*\*
- + Onboard test capacity:
  - Up to 11,440 assays
  - 150 reagent positions:
    - 89 MicroSlide Cartridges (18, 50, or 60 tests/cart)
    - 31 MicroWell Packs (50 or 100 tests/pack)
    - 30 MicroTip Packs (50 or 100 tests/pack)

## User-Defined Channels:

- + 10 available (MicroTip)

## Consumables:

- + VersaTips, MicroTips, Cuvettes, Signal Reagent and Universal Wash Reagent can be replenished without interrupting system operation. Reagents replenished without interrupting incubation. ERF and IWF can be replenished when all MicroSlides have completed
- + Onboard capacity:

• VersaTips:	2000
• MicroTips:	384
• Cuvettes:	348
• Signal Reagent:	3 packs
• Universal Wash Reagent:	5 liters
• ERF:	800 drops
• IWF:	300 drops

## Calibration:

- + Up to 25 lots per assay with automatic lot switching
- + MicroSlide and MicroTip assays stable up to lot change
- + MicroWell stable for up to 28 days
- + Random-access calibration
- + Bar-coded calibrators for MicroSlide and MicroWell assays

## System Startup:

- + 24-hour ready mode
- + No manual primes, purges, washes or tubing maintenance
- + No daily calibrations or calibration checks
- + Automatic integrated prime/purge for MicroWell assays

## Time for Single Result:

- + Potentiometric: ~ 2.5 minutes
- + Colorimetric: ~ 6 minutes
- + Immuno-rate: ~ 8 minutes
- + MicroTip: ~ 8-16 minutes
- + MicroWell: ~ 16-73 minutes
- + Real-time results data stream to LIS available

## Throughput:

- + Maximum theoretical throughput is up to 945 tests per hour
- + Actual throughput will vary by test mix and sample workflow

## Sample Types:

- + Serum, Plasma, Urine, CSF, Whole Blood,\*\*\*  
Amniotic Fluid\*\*\*\*

## Sample Volume:

- + Per assay: 2-80µL
- + Dead volume: minimum 35µL

## Sample Capacity:

- + Continuous load and unload
- + 80 samples in Universal Sample Trays
- + 10 samples in dedicated STAT lane

## Sample and Reagent Management Incorporating

### Intellicheck® Technology:

- + Single-use Tip Metering verifies sample aspiration and dispense, eliminates carryover and addresses cross-contamination concerns
- + Clot, bubble, low and high viscosity, thin layer fluid and short sample detection
- + Save-the-Sample Clot/Bubble Management
- + Liquid level sensing
- + MicroSlide, MicroWell and Cuvette Dispense Verification
- + Reagent aspiration and dispense verifications
- + Onboard IntelliReport provides complete traceability and documentation of result quality

### Sample Containers:

- + Universal Sample Trays accommodate:
  - 5mL, 7mL, 10mL collection tubes
  - 1.5mL micro-collection containers
  - VITROS® microsample cups and 0.5mL and 2.0mL cups

### Sample Bar Code Identification:

- + Autodiscriminates by simultaneously recognizing all standard symbologies:
  - Code 128
  - ISBT 128
  - Code 39
  - Codabar
  - Interleaved 2 of 5

### Dilution Capabilities:

- + Auto reflex dilution
- + Operator requested dilution
- + Off-board dilution calculation

### Automatic Reflex Testing (based on user-configuration):

- + Reflex to different assays
- + Reflex to the same assay

### Operator Interface:

- + Color-coded graphical user interface
- + Ergonomic flat, low-glare, LCD, 17-inch touchscreen monitor
- + Numeric keypad on monitor
- + Detached keyboard for maximum flexibility
- + Onboard documentation and animated Help (V-Docs)
- + Onboard maintenance documentation

### Data Storage:

- + Read/write disk drive for data input and archiving
- + USB flash drive (memory stick) capabilities
- + 5,000 sample programs
- + 25,000 samples with ability to archive and retrieve through CD-ROM or USB flash drive

### System Dimensions:

- + Width: 2.79 m/110 inches
- + Depth: 0.89 m/34.9 inches
- + Height: 1.73 m/68 inches
- + Weight: 1070.5 kg/2360 pounds

### Power:

- + Line Voltage: 2 dedicated 20 amp power lines or 1 dedicated 30 amp power line with UPS, nominal 200-240V AC
- + Line Frequency: 47-63 Hz

### Environment:

- + Operating temperature: 15°-30°C/59°-86°F
- + Ambient relative humidity: 15%-75% RH
- + Altitude: up to 2,439 m/8,000 feet
- + Plumbing: No water or drain required; self-contained onboard waste management eliminates special requirements for off-board plumbing

### Communications:

- + Laboratory Information System (LIS):
  - Bidirectional interface for ASTM and HL7 protocols
  - Broadcast download and Host Query
  - Results can be uploaded individually or as an entire sample
- + Laboratory Automation System (LAS):
  - AT ready at launch
  - 2 LAS interfaces, point-in-space
- + Ports:
  - RS 232 serial ports (for LIS and LAS)
  - USB ports (for printers)
  - Ethernet ports (for e-Connectivity,™ LIS)

### e-Connectivity™ Interactive System Management:

- + Using the facility's Internet connection or DSL, VPN establishes a secure connection between system and Ortho Clinical Diagnostics Technical Support to enhance troubleshooting and increase uptime
- + Automatic two-way data exchange to automatically send and retrieve data
- + Automatic download of system software updates
- + Remote connectivity provides the ability to enable remote diagnostics and remote control operation
- + Enhance uptime with predictive alerts

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1 Availability is subject to local regulatory requirements

\* Except Caffeine

\*\* Gentamicin: 24 months; Caffeine: 36 months

\*\*\* For %Hemoglobin A1c and Red Cell Folate

\*\*\*\* Not commercially available in the United States