

# VITROS® 5600 Integrated System

Quality design from start to finish for high to mid-volume laboratories



# Your lab is under increasing pressure to do more — it's time to power up your lab

We understand that you are under unprecedented pressure related to increasing test volumes, costs and staffing challenges. You can count on the VITROS 5600 system to be ready when you are, with the reliability and quality that only VITROS provides so you can deliver the timely results that physicians and patients depend on.

## Power up your lab with VITROS Portfolio of Solutions



Ensure high-quality results



Drive operational efficiency



Count on reliable performance



Flex to enable what's next



Expect partnership for life

## Intelligent technologies power up performance

The VITROS 5600 integrated system features five proprietary technologies in a single system that is self-monitoring, highly efficient and easy to use. The system is designed to automatically perform pre-analytical and analytical tasks to help ensure quality results.



**MicroSlide** — Our dry-slide format MicroSlide enables robust performance, filters out common interferences and provides industry-leading calibration stability of up to six months.\*



**MicroTip** — Provides special chemistry menu offerings and user-defined assays without the cost, maintenance, carryover, and contamination risks of traditional water-based systems.



**MicroWell** — Our proprietary, enhanced chemiluminescence detection technology provides exceptional immunoassay precision for wide dynamic ranges across a broad test menu and disease states.



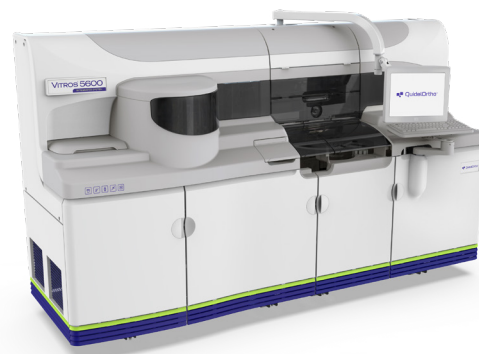
**MicroSensor** — Our MicroSensor technology automates detection of HIT interferences on every sample in less than one second, without the use of any additional sample or reagent.



**Intellicheck® Technology** — VITROS Intellicheck technology with Smart Metering uses a highly advanced algorithm that delivers real-time monitoring, checks for clots and bubbles, and fully documents sample traceability to protect result integrity and minimize workflow disruptions.

\*Stability claim based on publicly available data for select competitive systems. Data on file.

# VITROS 5600 integrated system boosts productivity



## Ensure high-quality results

- Quality assay design and proprietary technologies enable high precision and are robust to common interferences
- VITROS systems perform ongoing automated sample quality checks (HIT) and processing steps without impacting turnaround time
- Our single-use VersaTip eliminates risk of sample and reagent carryover

# 85%

of VITROS assays are designated **World Class or Excellent** as defined by Six Sigma — the most in the industry.\*

## Drive operational efficiency

- Improve labor effectiveness and reduce costs with integrated technologies that complete the analytical process the first time without intervention or repeat testing
- Eliminate risk of contamination, minimize costs and simplify your labs operations with our waterless technology

# 96.5%

of tests on VITROS systems provide results the first time without intervention or repeat testing — the highest in the industry†

## Count on reliable performance

- VITROS integrated systems deliver the industry's lowest overall maintenance 51% less than maintenance alone for our closest competitor‡
- The system is ready when you are with a 24-hour ready mode and industry-leading uptime§
- #1 in System Reliability since 2018#

# 98%

Industry-leading  
analyzer  
uptime§

# 91%

same-day  
fix rate\*\*

# 67%

of equipment  
issues resolved  
remotely without  
a site visit\*\*

\*Per published competitive Six Sigma data. Data on file PR-14234.

†Data on file. Compared to competitive systems assessed.

‡Maintenance and service claims based on publicly available data for select competitive systems. Data on file.

§Uptime claim based on publicly available data for select competitive systems. Data on file.

#ServiceTrak™ Executive Summary Report. Integrated Systems 2023.

\*\*Based on QuidelOrtho US Service KPI scorecard, Aug 2023. Data on file.

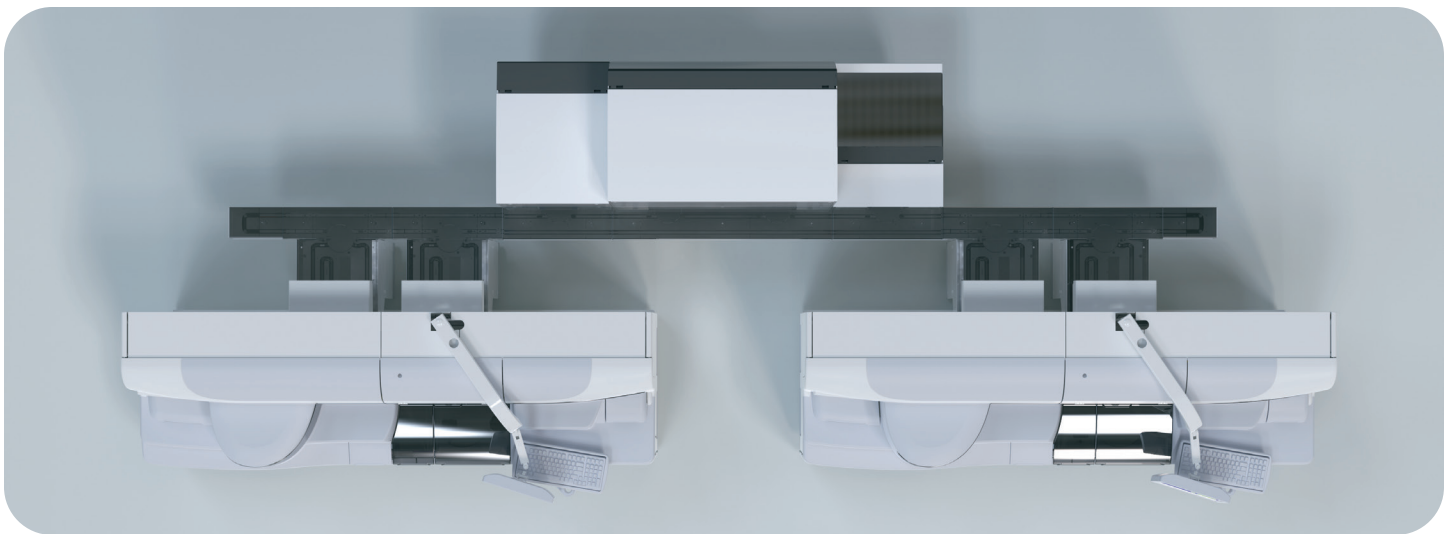
# Fast track your workflow with VITROS Duo

With preconfigured options and simplified implementation, you can maximize your lab space with automation that is ready when you are.

VITROS Duo solutions enhance efficiency with:

- Decreased manual steps of up to 90% when automation is added to lab workflow†
- Single-entry/exit point increases productivity
- Automatic load and menu balancing for less interruptions and more consistent turnaround times
- Automated sorting and decapping save time

**Smallest automated footprint with over 160 assays in 21 sq. meters\* — perfect for mid to low-volume labs**



## VITROS Automation Solutions are:



### Open

An open architecture platform lets you connect only the pre- and post-analytical modules and analytical systems you need, when you need them.



### Flexible

Configure hardware and software to align with how your lab actually works. We offer different automation solutions to fit your space and workflow.



### Scalable

Expand and adapt as your testing needs change or new technologies become available — all without expensive and time-consuming laboratory construction.

\*Data on file.

†Based on the workflow steps of a typical QuidelOrtho clinical laboratory customer. Actual steps may vary by laboratory. Data on file.

The Duo and Duo+ are the marketing names for specific VITROS Automation Solutions configurations which have previously obtained local registrations/clearances/approvals in the respective countries where they will be sold/distributed.

# True partnership enables progress

It takes more than the right technologies to power up your lab. It also takes the right people — expert staff, dedicated leadership and trusted partners. We work with you to inform operations, provide technical support and streamline processes to give you the freedom to focus in improving patient care.

## Insights delivered on a single workspace

- Improve lab operations with the ability to monitor testing trends and adjust staffing and workflow according to your testing volumes
- Determine testing efficiency by quantifying the number of samples processed the first time and spot negative trends right away
- Capture quality insights and have confidence in your results when you see the separation between positive and negative results with signal-to-cut off values

## Customized training

From start-up training to ongoing education, we provide proven knowledge transfer that is easy to access and gets your staff up to speed quickly and effectively. Our training programs have received outstanding satisfaction ratings and are available in different formats to meet your needs, including classroom, on-site and online training options.

## ValuMetrix® Consulting Services

We offer a dedicated ValuMetrix® consulting team that uses Six Sigma and Lean methodologies to provide recommendations and support throughout the sales continuum to optimize your operations and lower overall costs.



**QuidelOrtho is #1 in customer satisfaction since 2018\***

**Contact us to learn more about the VITROS 5600 integrated system**

\*ServiceTrak™ Executive Summary Report. Integrated Systems 2023.

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At QuidelOrtho, we transform diagnostic data into answers, understanding and action, illuminating the path forward for all. For more than 80 years, we've pursued the unknown with a passion and purpose to improve health. And we'll continue to transform the power of diagnostics into a healthier future for all.

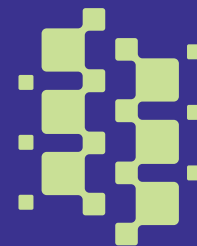
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# VITROS<sup>®</sup> 5600 Integrated System specifications



## Measurement principles:

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

## Throughput:

- Up to 755 Chemistry tests/hour
- Up to 190 Immunoassay tests/hour

## 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:

- 20 available (MicroTip)

## Calibration:

- 25 lots per assay may be calibrated with automatic lot switching
- MicroSlide calibration stability up to 6 months
- MicroTip calibration stability up to lot change
- MicroWell calibration stability up to 70 days
- Random-access calibration
- Bar-coded calibrators for MicroSlide and MicroWell assays

## Sample types and volume:

- Serum, plasma, urine, CSF, whole blood,‡ amniotic fluid§
- Per assay: 2-80 µL
- Dead volume: minimum 35 µL

## Sample containers:

- Universal sample trays accommodate:
  - 5 mL, 7 mL, 10 mL collection tubes
  - 1.5 mL micro-collection containers
  - Sample cups 0.5 mL, 1.0 mL, 2.0 mL

## 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

## System dimensions:

- Width: 279.4 cm/110.0 inches
- Depth: 91.4 cm/36.0 inches
- Height: 172.7 cm/68.0 inches
- Weight: 1062 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
  - 2 LAS interfaces, point-in-space
- Ports:
  - RS 232 serial ports (for LIS and LAS)
  - USB ports (for printers)
  - Ethernet ports (for E-Connectivity<sup>®</sup> Technology, LIS)

## E-Connectivity interactive system measurement:

- Using the facility's internet connection or DSL, VPN establishes a secure connection between system and QuidelOrtho 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

\*Except caffeine.

†Gentamicin: 24 months; caffeine: 36 months.

‡For % hemoglobin A1c and red cell folate.

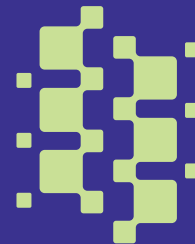
§Not commercially available in the United States.

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# VITROS® 5600 Integrated System

## Menu of assays



Provides your lab the most comprehensive offerings to give your patients the highest quality results as efficiently as possible.

### Anemia

dTIBC  
Ferritin  
Folate  
Haptoglobin  
Iron  
Transferrin  
Vitamin B12

### Bone Disease

Alkaline Phosphatase  
Calcium  
Intact PTH  
NTx  
Phosphorus  
Vitamin D

### Cardiac

Apolipoprotein A1  
Apolipoprotein B  
Cholesterol  
CK  
CKMB  
D-Dimer\*  
Direct HDL  
Direct LDL  
Homocysteine  
LDHi  
Lp(a)\*  
Myoglobin  
NT-proBNP  
Triglycerides  
Troponin I ES

### Coagulation

D-Dimer\*

### Diabetes

β-Hydroxybutyrate\*  
BUN/Urea  
C-Peptide  
Creatinine  
Glucose  
Glycated Serum Protein\*  
HbA1c  
Insulin  
Microalbumin

### Drug of Abuse (Urine)

Amphetamines  
Barbiturates  
Benzodiazepines  
Buprenorphine / Suboxone\*  
Cocaine Metabolites  
Ecstasy\*  
Ethyl Glucuronide (ETG)\*†  
Fentanyl\*  
Heroin Metabolite (6-AM)\*  
Hydrocodone\*  
Methadone  
Methadone Metabolite (EDDP)\*  
Opiates  
Oxycodone\*  
PCP  
Propoxyphene\*  
THC  
Tricyclic antidepressants\*

### General Chemistry

Amylase  
BUN/Urea  
Calcium  
CK  
Glucose  
Lactate  
LDHi  
Lipase  
Magnesium  
Phosphorus  
Uric Acid

### Hepatic

Albumin  
Alkaline Phosphatase  
Alpha-1-antitrypsin  
ALT  
Ammonia  
AST  
BuBc  
Cholinesterase  
GGT  
IgA  
IgG  
IgM  
Total Bilirubin  
Prealbumin

### Immunosuppressant Drugs

Cyclosporine\*  
Everolimus\*  
Mycophenolic Acid\*  
Tacrolimus\*

### Infectious Disease

Anti-HAV IgM  
Anti-HAV Total  
Anti-HBc  
Anti-HBc IgM  
Anti-HBe  
Anti-HBs  
Anti-HCV  
Anti-HIV 1+2  
Anti-SARS-CoV-2 IgG  
Anti-SARS-CoV-2 IgG Quantitative†  
Anti-SARS-CoV-2 Total  
Anti-SARS-CoV-2 Total Nucleocapsid†  
HBsAg  
HBsAg  
HIV Combo  
Rubella IgG  
SARS-CoV-2 Antigen†  
Syphilis

### Inflammatory

ASO  
C3  
C4  
CRP  
hsCRP  
IgA  
IgG  
IgM  
Procalcitonin  
RF  
Wide-Range CRP\*

### Lipids

Apolipoprotein A1  
Apolipoprotein B  
Cholesterol  
Direct HDL  
Direct LDL  
Triglycerides

### Nutritional Assessment

Albumin  
dTIBC  
Ferritin  
Folate  
Iron  
Prealbumin  
Total Protein  
Transferrin  
Vitamin B12

### Oncology

AFP  
CA 15-3  
CA 19-9  
CA 125 II  
CEA  
IgA  
IgG  
IgM  
Kappa Free Light Chain\*  
Lambda Free Light Chain\*  
PSA

### Pancreatic

Amylase  
Lipase

### Prenatal

Anti-HIV 1+2  
HBsAg  
HIV Combo  
Rubella IgG  
Syphilis  
Total β-hCG Generation II

### Renal

Albumin  
BUN/Urea  
Calcium  
Carbon Dioxide  
Chloride  
Creatinine  
Cystatin C\*  
Glucose  
Microalbumin  
Phosphorus  
Potassium  
Sodium  
Uric Acid  
Urine Protein

### Reproductive Endocrinology

Estradiol  
FSH  
LH  
Progesterone  
Prolactin  
Testosterone  
Total β-hCG Generation II

### Respiratory

Alpha 1-antitrypsin  
Caffeine  
Carbon Dioxide  
Chloride  
Potassium  
Sodium

### Sepsis

Lactate  
Procalcitonin

### Spinal

Glucose (csf)  
Total Protein (csf)

### Therapeutic Drug Monitoring

Amikacin\*  
Caffeine  
Carbamazepine  
Digoxin  
Gentamicin  
Lithium  
Methotrexate\*  
Phenobarbital  
Phenytoin  
Theophylline  
Tobramycin  
Valproic Acid  
Vancomycin

### Thyroid

Cortisol  
Free T3  
Free T4  
Lactate  
T3 Uptake  
Total T3  
Total T4  
TSH

### Toxicology

Acetaminophen  
Alcohol  
Cholinesterase  
Salicylate

### Urine

Amylase  
Calcium  
Chloride  
Creatinine  
Glucose  
Magnesium  
Microalbumin  
Phosphorus  
Potassium  
Protein  
Sodium  
BUN/Urea  
Uric Acid

\*MicroTip Partnership Assays (MPAs) may not be available in all countries.

†For criminal justice or forensic use only.

‡VITROS SARS-CoV-2 Antigen Assay, VITROS Anti-SARS-CoV-2 Total N and VITROS Anti-SARS-CoV-2 IgG Quant Antibody Tests have not been cleared or approved by the U.S. Food and Drug Administration (FDA). They have been authorized by the FDA under an Emergency Use Authorization (EUA) and testing is limited to laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. §263a, to perform moderate- or high-complexity tests. The VITROS antigen test has been authorized only for the detection of proteins from SARS-CoV-2, not for any other viruses or pathogens. The VITROS antibody tests have been authorized only for the detection of either total or IgG antibodies from SARS-CoV-2, not for any other viruses or pathogens, and results should not be used as the sole basis for diagnosis. These tests are only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of in vitro diagnostic tests for detection and/or diagnosis of COVID-19 under Section 564(b)(1) of the Act, 21 U.S.C. § 360bbb-3(b)(1), unless the authorization is terminated or revoked sooner.

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Products are subject to local regulatory requirements and may not be available in all regions.