

VITROS® XT 3400 Chemistry System

Meet routine testing needs with high-quality results and industry-leading uptime



Help your lab meet today's demands with tomorrow's technology

Powered by intelligent technologies, the small but powerful VITROS XT 3400 chemistry system helps labs meet routine testing needs with proven high-quality results¹ and system performance — all without the burden of water.



Ready when you are

The VITROS XT 3400 system delivers industry-leading uptime² to keep your lab powered up and ready when you are.



Fewer than **3** service calls per year³

The benefits of a waterless lab

- Design your lab layout with greater flexibility, as VITROS systems don't rely on plumbing
- Eliminate the risk of erroneous results from water contamination
- Reduce impact to the environment and ensure compliance



Built-in technologies ensure the right result the first time



MicroSensor — Our MicroSensor technology automates detection of hemolysis, icterus and turbidity (HIT) interferences on every sample in less than one second, without the use of any additional sample or reagent.



MicroSlide — Our dry-slide format MicroSlide enables robust performance and filters out common interferences.



Intellicheck® Technology — Intellicheck technology with Smart Metering uses an advanced algorithm that delivers real-time monitoring, checks for clots and bubbles, and fully documents sample traceability.

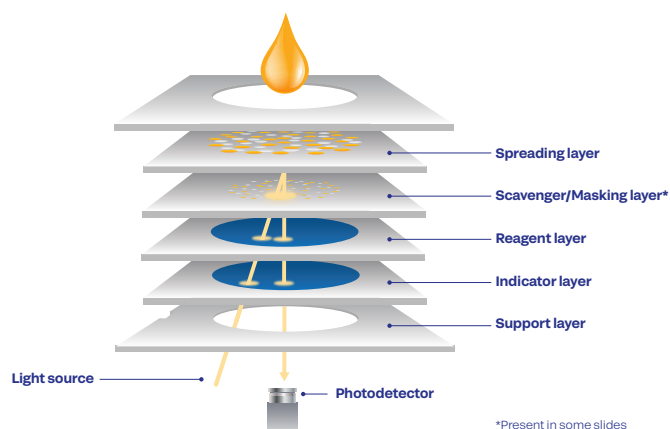
1. Miller JJ, Gammie AJ. A Novel Approach for Routinely Assessing Laboratory Sigma Metrics for a Broad Range of Automated Assays. *J Appl Lab Med*. 2024;9(3):477-492. doi:10.1093/jalm/jfad125

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

3. Data on file.

Our innovative assay design ensures high-quality results

Discrete layers of the MicroSlide optimize each processing step for excellent accuracy and precision



Improved sensitivity — The MicroSlide spreading layer filters out common endogenous interferences

Long reagent stability — Stability up to 24 months enables fewer lot changes

Long calibration stability — Industry-leading calibration stability of up to 6 months¹

Direct ISE capable (Na⁺, K⁺, Cl⁻) — Delivers more accurate physiological correct values^{2,3} for critically ill patients (high lipids and proteins)

Proven high-quality results. QuidelOrtho conducted a study using big data analytics to measure the Six Sigma metrics that Vitros customers experience. Peer-reviewed publication of the results can be found in *The Journal of Applied Laboratory Medicine*.



Scan here to review the original peer-reviewed publication

Drive efficiency with VITROS XT slides

By placing two tests on one slide, 12 of the most common tests can be carried out on just six VITROS XT slides, increasing productivity and fulfilling more requests from difficult draws.



Available XT reagents: VITROS ALTV-AST slides, VITROS ALB-TP slides, VITROS TBIL-ALKP slides, VITROS TRIG-CHOL slides, VITROS UREA-CREA slides, VITROS GLU-Ca slides

Improved patient experience

VITROS XT slides require the smallest sample volume (2.7-5 µL) to provide enhanced patient experience, especially for precious and hard-to-draw patient samples.



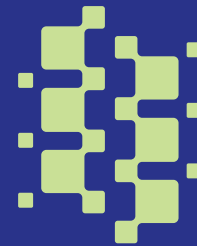
1. Stability claim based on publicly available data for select competitive systems. Data on file.

2. Sulaiman RA, Twomey PJ, Gama R. Mitigation and detection of spurious potassium and sodium results. *Clin Chim Acta*. 2011;412(1-2):1-6.

3. Tietz NW, eds. *Fundamentals of Clinical Chemistry*. 3rd ed. WB Saunders; 1996:620.

VITROS[®] XT 3400

assay menu



VITROS XT 3400 chemistry system provides your lab with the most comprehensive offerings to give your patients the highest-quality results as efficiently as possible.

Anemia

Iron
TIBC

Bone disease

Alkaline Phosphatase
Calcium
Phosphorus

Cardiac

Cholesterol
CK
CKMB
Direct HDL
LDHi
Triglycerides

Diabetes

BUN/Urea
Creatinine
Glucose
A1c (D)

General chemistry

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

Hepatic

Albumin
Alkaline Phosphatase
ALT
Ammonia
AST
BuBc
Cholinesterase
GGT
Total Bilirubin

Inflammatory

CRP

Lipids

Cholesterol
Direct HDL
Triglycerides

Nutritional assessment

Albumin
Iron
Total Protein

Pancreatic

Amylase
Lipase

Renal

Albumin
BUN/Urea
Calcium
Carbon Dioxide
Chloride
Creatinine
Glucose
Phosphorus
Potassium
Sodium
Uric Acid
Urine Protein

Respiratory

Carbon Dioxide
Chloride
Potassium
Sodium

Spinal

Glucose (csf)
Total Protein (csf)

Therapeutic drug monitoring

Carbamazepine
Digoxin
Lithium
Phenobarbital
Phenytoin
Theophylline

Thyroid/Metabolic

Lactate

Toxicology

Acetaminophen
Alcohol
Cholinesterase
Salicylate

Urine

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

VITROS XT MicroSlides

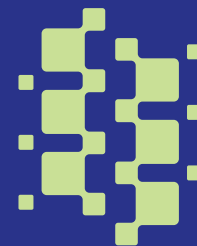
ALT/AST
Albumin/Total Protein
Glucose/Calcium
Total Bilirubin/Alkaline Phosphatase
Triglyceride/Cholesterol
Urea/Creatinine



(D) = In development.

New QuidelOrtho VITROS System branding may not be available in all markets, subject to country-specific regulatory approval. Please confirm with your local commercial team. Products are subject to local regulatory requirements and may not be available in all regions.

VITROS® XT 3400 chemistry system specifications



Measurement principles:

- Colorimetric/rate
- Potentiometric (direct ISEs)
- Immuno-rate
- Digital imaging measuring technology

Reagents:

- No preparation, no mixing or reconstitution required for Cartridges, Electrolyte Reference Fluid (ERF) or Immuno-Wash Fluid (IWF)
- Onboard stability up to 35 days
- Shelf life stability up to 18 months from date of manufacture
- **Onboard test capacity:**
 - Up to 5,340 tests (up to 10,680 with XT MicroSlides)
 - 97 reagent/diluent positions:
 - 89 MicroSlide cartridges (18, 50, 60, 100 or 120 tests/cartridge)
 - 8 Diluent bottle/cup positions

Calibration:

- Up to 25 lots per assay with automatic lot switching
- MicroSlide assays stable up to lot change
- Random-access calibration
- Bar-coded calibrators for MicroSlide assays

Time for single result:

- **Potentiometric:** ~2.5 minutes
- **Colorimetric:** ~6 minutes
- **Immuno-rate:** ~9 minutes
- Real-time results data stream to LIS available

Sample types:

- Serum, plasma, urine, CSF

Sample volume:

- **Per assay:** 2.5–11 µL
- **Dead Volume:** minimum 30 µL

Dilution capabilities:

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

Consumables:

- VersaTips and mixing cup arrays can be replenished without interrupting system operation. Reagents replenished without interrupting incubation
- **Onboard capacity:**
 - VersaTips: 315
 - Mixing cups: 30
 - ERF: 800 drops
 - IWF: 300 drops

System startup:

- 24-hour ready mode
- No manual primes, purges, washes or tubing maintenance
- No daily calibrations or calibration checks

Throughput*:

- **Maximum theoretical throughput without XT slides:** up to 755 tests per hour (TPH)
- **Maximum theoretical throughput with XT slides:** up to 1,130 TPH
- Actual throughput will vary by test mix and sample workflow

Sample capacity:

- Continuous load and unload
- 80 samples in universal sample trays
- Priority STAT tray processing capability

Sample containers:

- **Universal sample trays accommodate:**
 - 5 mL, 7 mL, 10 mL collection tubes
 - Micro-collection containers
 - VITROS micro-sample cups and 0.5 mL and 2.0 mL cups

Sample bar code identification:

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

Automatic reflex testing

(based on user-configuration):

- Reflex to different assays
- Reflex to the same assay

Data storage:

- Read/write SSD drive for data input and archiving
- USB flash drive (memory stick) capabilities
- 10,000 sample programs
- 25,000 samples with ability to archive and retrieve through CD-ROM or USB flash drive

System dimensions:

- **Width:** 1.47 m/58.0 in
- **Depth:** 0.87 m/34.2 in
- **Height:** 1.33 m/56.2 in
- **Weight:** 440 kg/970 lbs

Power:

- **Line voltage:** one dedicated 15 amp power line, nominal 100-240V 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 ft.
- **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, as a group or as an entire sample
- **Laboratory automation system (LAS):**
 - AT ready at launch
 - 1 LAS interface, point-in-space
- **Ports:**
 - RS 232 serial ports (for LIS and LAS)
 - USB ports (for printers)
 - Ethernet ports (for E-Connectivity® Technology, LIS)

Acoustic noise:

- **Idle:** 57.4 dBA
- **Operating:** 58.6 dBA

*Theoretical maximum. Individual results may vary.

Freedom to focus

QuidelOrthoCQ™ (Care Quotient) is the measure of our personal commitment to you and our approach to creating delightful customer experiences throughout your journey with us. We're always working to make our technologies easier to use, our equipment better maintained and every interaction more efficient. So, our customers always have the freedom to focus.

The CQ philosophy: It all starts with you

QuidelOrthoCQ delivers world-class customer experiences through exceptional care, empathy and compassion. From consulting to engineering, customer communications to ordering, to packing and shipping, everything we do starts with you and what you need to run a high-performing lab.

- **Education and training tools** that empower your staff to get up to speed quickly and shorten the learning curve with our systems using a wide range of easily accessible resources
- **Insights and efficiencies** that enable teams to efficiently manage operations with system dashboards, customer portals, inventory management and ordering tools
- **Expert service and support** you can rely on from our team of ValuMetrix® Services consultants, clinical specialists, service technicians, customer service and account representatives
- **System health solutions** with connected smart tools and AI technology that maximize instrument performance, plus proactive cybersecurity that maintains and protects critical data

Progress through partnership

With our expert teams, proven know-how and award-winning support, QuidelOrthoCQ gives you the freedom to focus with less time spent on tasks and troubleshooting, and more time for patient care. See how your business can run smarter, leaner and more efficiently with real-world product, service and customer experience solutions focused on you.

* ServiceTrak™ Executive Summary Report. Integrated Systems 2024.

QuidelOrthoCQ™ 

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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.



QuidelOrtho has been **#1** in customer satisfaction since 2018*

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