# Ortho Clinical Diagnostics

**VITROS** System 3600
Immunodiagnostic

# The VITROS® 3600 System
## Is Fast, Accurate, Comprehensive & Efficient

These outstanding capabilities and more were built into the VITROS® 3600 Immunoadiagnostic System after Ortho Clinical Diagnostics profiled dozens of laboratories around the world to determine the system  design best suited to industry needs.

We studied a variety of different workloads using actual sample arrival data that generated a design made to handle peak testing demands while maximizing throughput and system walk-away time.

## Here's what's built in:

- A world-class immunoassay menu on a high-productivity platform
- Up to 189 tests per hour
- Proven, easy-to-use, self-monitoring VITROS® technologies
- High-quality, high reportable result efficiency
- Single-use tips virtually eliminate carryover
- Standardization with other VITROS® Systems
- Ability to change reagents, consumables, and waste while operating
- More predictable turnaround times and uninterrupted work-flow
- A greener eco-footprint that uses no water and minimizes waste
- Autoverification enabled by MicroSensor automatic sample indice checks

## Broad Immunoassay Menu

The VITROS® 3600 System offers more than 40 world-class immunoassays across all the major disease states including Cardiology, Infectious Disease, Oncology, Thyroid, Metabolic, Reproductive Endocrinology, Anemia, and Bone Disease. We evaluate our assays constantly to ensure our menu meets your testing needs, with new ones continually in the pipeline. We use standardized reagents and results across all VITROS® Systems.

## Intelligent Sample Management

The VITROS® 3600 System also offers Intelligent Sample Management, with the ability to prioritize work-flow by "looking ahead" for up to 50 samples. It includes:

- Minimum sample volume requirements
- Single point of access for loading and unloading
- Dedicated STAT lane to ensure fast turnaround time for urgent and critical samples

# A Partnership that Endures Beyond the Sale

Ortho Clinical Diagnostics is fully invested in your success and we surround the purchase of the VITROS® 3600 System with expert field service engineers, laboratory specialists and world-class Valumetrix consultants along with our Global Ortho Care support, to ensure a perfect fit in your laboratory.

## In addition, VITROS® System customers can access:

### ORTHO PLUS℠ Inventory Management

Use the Cloud to optimize your supply chain for VITROS® System reagents and consumables.

### e-Connectivity®

Our technical team can monitor your system online through a secure, real-time, two-way connection. Our Predictive Technology identifies potential issues and dispatches engineers—often before you even know there's a problem. The result is timely resolution that minimizes unplanned downtime.

### Customizable Training

From start-up training to ongoing education, Ortho Clinical Diagnostics provides proven knowledge transfer that gets your staff up to speed quickly and effectively. Our training programs have received an outstanding satisfaction rating and feature classroom, onsite, and online options to suit your needs.

### Process Excellence (PEx®)

PEx® is a systematic approach to quality and operational improvement. We propose services around the globe leveraging the methods of PEx®—including Six Sigma and Lean Design—to help your lab consistently reduce costs, maximize resources, expand capacity and improve quality.

# Enabling Technologies

The VITROS® 3600 Immunodiagnostic System combines three high-quality proprietary technologies into a single system that is self-monitoring, highly efficient, and easy to use:

Together these produce quality results with minimal staff interventions and reduced error potential. In addition, our disposable, single-use tips virtually eliminate sample and reagent carryover or cross contamination.

## VITROS® MicroWell Technology

features enhanced Chemiluminescence detection which enables wide dynamic ranges with exceptional immunoassay accuracy and precision across multiple disease states. Minimizes unnecessary dilutions, repeats and redraws.

## VITROS® Intellicheck® Technology

delivers real-time process monitoring with fully documented traceability to minimize the risk of erroneous result reporting
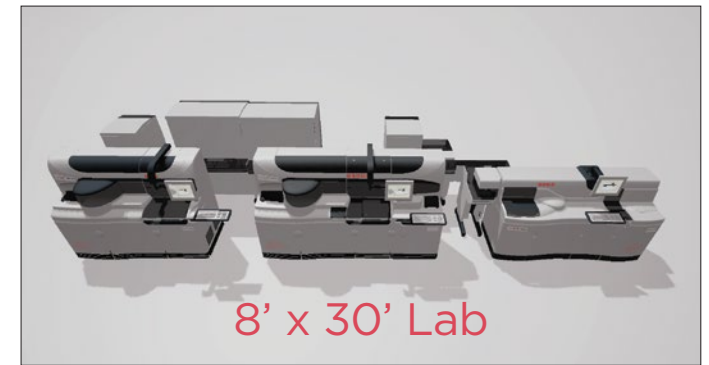
## VITROS® MicroSensor Technology

boosts efficiency and controls costs by automatically detecting and flagging endogenous interferences without compromising result turnaround or operator work-flow

# VITROS® Automation Solutions

## Made To Fit Your Lab

The power of VITROS® technology allows highly customizable configurations to meet your automation needs even when space is a challenge. Self-contained, waterless VITROS® Systems give you the ability to run a high volume lab in as little as a 8' x 30' space.

8' x 30' Lab

21' x 32' Lab

## Automation Ready

VITROS® Systems offer an open architecture, "point-in-space" sampling design that makes it easy to link with the automation system. Sampling directly from the automation track maximizes sample routing efficiencies.

VITROS® Systems offer the flexibility for operators to manually front-load specimens at any time, even when the System is processing specimens from the track.

## Run The Lab Your Way

### Open
Connect the systems you need to create an automated streamlined workflow. Accommodate systems from other specialties such as hematology or coagulation onto the track.

### Flexible
Configure hardware and software to align with how your lab actually works. Reconfigure as needed with changing demands or future growth.

### Scalable
Grow at your pace without having to completely redesign your lab. Automate what you want, when you want, by taking advantage of customer-selected pre and post analytical modules in a step-wise approach.

# The VITROS® 3600 System
## Specifications Sheet

- **Measurement Principal:**
  + Direct Enhanced Chemiluminescence using MicroWell technology

- **Reagents:**
  + No preparation, no mixing or reconstitution required for Integrated Reagent Packs, Signal Reagent and Universal Wash Reagent
  + Onboard stability up to 84 days
  + Shelf life stability up to 12 months from date of manufacture
  + Onboard test capacity:
    • Up to 3,100 assays
    • 31 Integrated reagent pack positions
    • 100* assays per pack

- **Consumables:**
  + VersaTips, Signal Reagent and Universal Wash Reagent can be replenished without interrupting system operation. Reagents replenished without interrupting incubation

- **Calibration:**
  + 25 lots per assay may be calibrated with automatic lot switching
  + Stable for up to 28 days
  + Random-access calibration
  + Bar-coded calibrators

- **System Startup:**
  + 24-hour ready mode
  + No manual primes, purges, washes or tubing maintenance
  + No daily calibrations or calibration checks
  + Automatic integrated prime/purge

- **Time for Single Result:**
  + MicroWell: ~16-73 minutes
  + Real-time results data stream to LIS available

- **Sample Types:**
  + Serum, Plasma, Urine (test dependent)

- **Sample Volume:**
  + Per assay: 10-80µL
  + 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
  + MicroWell 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
  + On-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 memory stick

- **System Dimensions:**
  + Width: 212 cm/83.5 inches
  + Depth: 88.7 cm/34.9 inches
  + Height: 163.8 cm/64.5 inches
  + Weight: 789.2 kg/1740 pounds

- **Power:**
  + Line Voltage: 1 dedicated 20 amp power line, 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 non-condensing
  + Altitude: up to 2,438 m/8,000 feet
  + Plumbing: No water or drain required; self-contained onboard waste management eliminates special requirements for off-board plumbing
  + 6130 BTU/hr
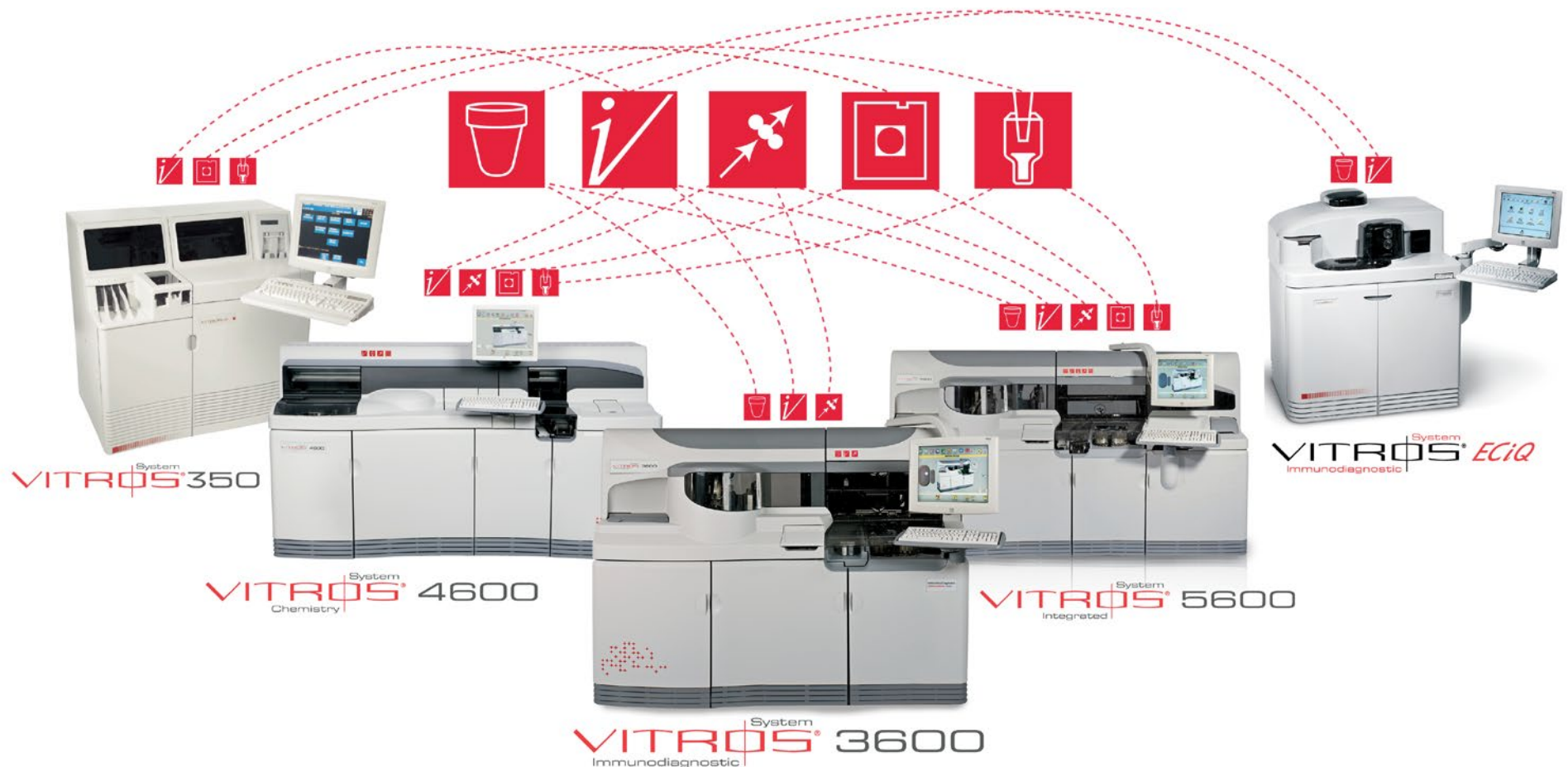  + Acoustic Noise Level
    • Idle: 60 dB
    • Operational: 65 dB

- **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):
    • Automation-ready
    • 1 LAS interface, point-in-space
  + Ports:
    • RS 232 serial ports (for LIS and LAS)
    • USB ports (for printers)
    • Ethernet ports (for e-Connectivity®) management

- **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

# Does your Immunodiagnostic Solution
## play nice with other systems?

VITROS® System 350

VITROS® System 4600 Chemistry

VITROS® System 3600 Immunodiagnostic

VITROS® System 5600 Integrated

VITROS® System ECiQ Immunodiagnostic

## Same Technology

When purchasing a VITROS® System, experience the highest possible quality with the highest possible integration.

## Same Inventory

Consistent inventory across all platforms simplifies management of your lab.

## Consistent Analytic Output

Using the same technology maximizes the portability of your results

# VITROS 3600
System Immunodiagnostic

Ortho Clinical Diagnostics