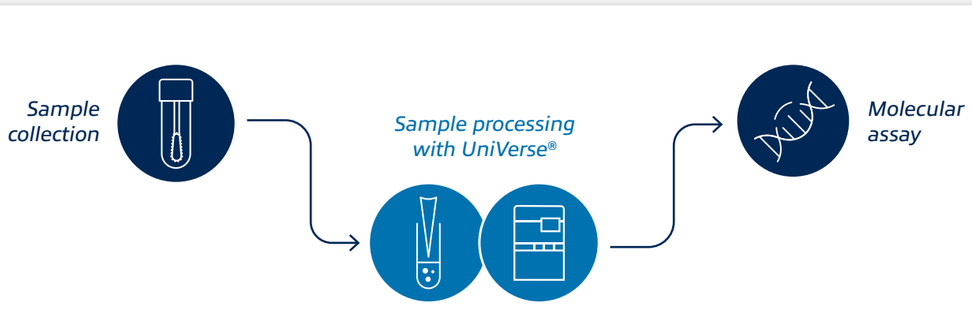
UniVerse®

Flexible Sample Preparation for Molecular, HPV, QuantiFERON®, and Other Assays

Copan
innovating together

UniVerse®

SIMPLIFY FRONT-END SAMPLE HANDLING.
UniVerse® automates key pre-analytical steps—accessioning, labeling, vortexing, and aliquoting into assay tubes or 96-deep-well plates. Fully integrated with LIS, it streamlines workflows by eliminating repetitive manual tasks.[1]



ID scan

UniVerse® recognizes inbound sample barcode and matches the sample to the LIS data.

Vortex

Select from various vortex or spin protocols based on sample or collection device type.

Decap

Two independent robots for the simultaneous decapping of primary or secondary tubes.

Aliquot

The third pipettor-equipped arm transfers sample aliquots to tubes or plates.

Recap

Robotic arms recap both primary and secondary tubes.

Label and Reconcile

UniVerse® applies a custom label to output tubes and synchronizes with LIS.

Input and Output Flexibility

UniVerse® processes multiple tube sizes without requiring the manual removal of the swab.

UniVerse® comes with a plate holder to fit a variety of different manufacturers of plate assays.

Continuous Loading and Unloading

Easy access for continuous specimen loading and unloading without pausing the instrument.

Efficiency

Laboratories maintain consistent and precise processing, that can help reduce hands-on time.[1, 2]

Keep the Sample in Sight

UniVerse® manages barcode reading, labeling, barcode printing, ID synchronization with LIS and output ID mapping.

Your Workflow, Improved

UniVerse® lowers the risk of cross-contamination and error by limiting manual touchpoints throughout the workflow.

Compatibility

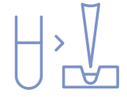
UniVerse® can be used to prepare specimens for multiple molecular assays and is compatible with various output tubes and plate formats.

Learn More

5 Protocols for Maximum Flexibility

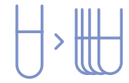
Tube to Tube

From 1 primary sample to 1 secondary tube



Tube to Plate

From 1 primary sample to 1 secondary well

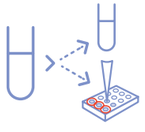


Tube to Tubes

From 1 primary sample to 2 or more secondary tubes (up to 12)

Tube to Plates

From 1 primary sample to more secondary wells/plates



Tube to Tube and Plate

From 1 primary tube to secondary tubes and wells/plates

HPV Sample Preparation

Universe® offers a fully automated solution for HPV sample preparation, compatible with both ThinPrep® and SurePath® specimens. Designed for efficiency and safety, it supports continuous workflow, custom processing settings, and handles everything from vortexing to tube labeling; streamlining HPV specimen processing and reducing manual steps.

Highlights

- Validated for ThinPrep® and SurePath® samples
- Turntable or rack configuration options based on lab volume or vial type
- No need to remove brush from SurePath® vials
- Customizable vortex settings
- Continuous primary sample loading/ unloading when using the turntable
- Automated decapping and recapping of all tubes
- Integrated barcode labeling for secondary tubes to ensure traceability

QuantiFERON® Tuberculosis Specimen Setup

Universe® transforms the traditionally manual and error-prone QuantiFERON® tuberculosis testing workflow into a streamlined, automated process. From clot detection to daughter tube labeling, Universe® minimizes hands-on-time for specimen preparation, reduces redraws and cancellations, and ensures consistent, high quality specimen processing—all while enabling cost-effective use of skilled laboratory resources.

Highlights

- Adjustable volume setting (900–920µL) for secondary tubes to meet assay-specific requirements
- Automated mixing ensures homogeneous primary specimens before aliquoting
- Minimizes reliance on skilled laboratory staff for repetitive tasks like clot detection and specimen transfer
- Enables automated filling of up to four daughter tubes from a single mother tube for optimal efficiency
- Prints daughter tube labels regardless of clot presence, keeping workflows uninterrupted
- Standardizes specimen preparation to improve indeterminate rates and overall consistency

Scientific References

1 Chan, M., Tran, A., et al. (2024). *Workflow comparison and evaluation of an automated instrument for handling sample preparation in clinical laboratory.* Poster presented at the Canadian Association for Clinical Microbiology and Infectious Diseases (CACMID) Annual Meeting, Vancouver, BC, Canada.

2 Chan, M., Tran, A., et al. (2024). *Validation of an automated instrument for handling specimen preparation.* Poster presented at the European Congress of Clinical Microbiology & Infectious Diseases (ECCMID), Barcelona, Spain.

UniVerse®

1. Three independent robotic arms manage primary and secondary tubes.
   - Decapping and recapping
   - Labeling
   - Pipetting and aliquoting
2. Class II biosafety laminar flow hood eliminates cross contamination risk and ensures the highest safety for laboratory staff
3. Double vortex station with protocols to manage various sample types
4. Integrated barcode readers scan incoming samples and match to LIS data
5. Label printer for secondary tubes applies a custom label to output tubes and synchronizes to LIS
6. Auto-ejects tip to waste bin
7. Touchscreen user interface monitor

UniVerse® Racking System

- a Input racks for primary containers
- b Plate holders and tips rack
- c Input racks for secondary containers
- d Output racks for secondary containers*

Optional Modules:

- Turntable for HPV Molecular Testing
- QuantiFERON® Sample Processing

* May be converted to input for primary tubes on assay plate protocols

Technical Information

Inoculation Volumes	*10µL to 1000µL**
Liquid Handling Accuracy	*1000µL: ≤ 1%100µL: ≤2%*
Filtration type	*HEPA*
Biosafety certification	*Field cert. NSF/ANSI 49 Class II*

Dimensions (inches)	*W 52 / D 39 / H 92*
Weight (lbs.)	*1,361*
Noise Emissions	*Max 55 Db*
Thermal Output	*2900 BTU*
Peak Power Consumption	*1100 W*

* Up to 5000µL can be achieved via multiple draws from the primary tube.

Copan
innovating together

CopanUSA.com **800.216.4016** **@CopanUSA** **communications@copanusa.net** **/Copan.USA**

COPAN Diagnostics, Inc.
26055 Jefferson Avenue | Murrieta, CA 92562 USA