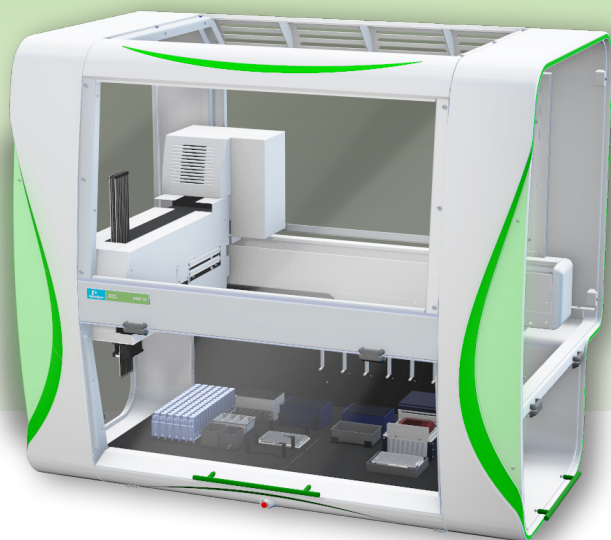


## Automated Liquid Handling



### Key Features:

- Choice of precision pipetting arm technologies
- VersaTip® technology offers both a fixed washable tip and disposable tip on the same sampling tip
- Varispan 4- or 8-tip arm provides independent tip motion and Accusense™ liquid level sensing capabilities
- Optional integrated enclosure for assay protection

## Applications-Friendly JANUS G3 Liquid Handling Workstations

JANUS® G3 Automation Workstations deliver application versatility with configuration flexibility in throughput, capacity, and dynamic volume range.

Choose from a portfolio of easy to use solutions, designed and supported by PerkinElmer's own expertise in genomics, biotherapeutics, high throughput screening, and high content analysis instrumentation. A wide choice of liquid handling deck designs, throughput and preprogrammed methods facilitate seamless integration into your workflow sample prep whether your research includes mass spec, HPLC, multimode plate readers, high content analysis, sequencing or more.

Applications support starts from the delivery of your instrument. Our goal is for you to be up and running samples quickly with the confidence that your research is supported by our team of field scientists, user groups and training opportunities.

The JANUS G3 family of liquid handling platforms (Figure 1) includes four different configurations to accommodate workflow and space requirements. Choose from the benchtop Mini (up to 12 microplate positions) Standard (up to 24 deck positions) Integrator and Expanded platforms (up to 32 microplate positions). For workflow-specific applications, the JANUS G3 NGS Express and JANUS G3 BioTx Workstations address genomics and small scale protein purification needs, respectively.

### Benchtop NGS Library Preparation

The JANUS G3 NGS Express workstation uses an intuitive library-prep interface for fragment library preparation, amplicon sequencing, target capture and sample normalization. Easy to read status lights monitor true walkaway sample prep.

### Automated Small Scale Protein Purification

The JANUS G3 BioTx Automated Workstation enables consistent small scale protein purification and sample prep for analytical protein characterization supporting quality by design experimentation in both upstream and downstream processes.

Automate three modes of small-scale protein purification on a single platform:

- PhyNexus PhyTips® Columns
- GE PreDicator™/Pall AcroPrep™ Filter Plates
- Atoll RoboColumns® Chromatography Columns

### Intuitive Graphical Interface Software

All JANUS G3 Automation platforms include WinPREP® software with JANUS Application Assistant (Figure 2), an intuitive user interface and simplified protocol setup to support users of all levels.

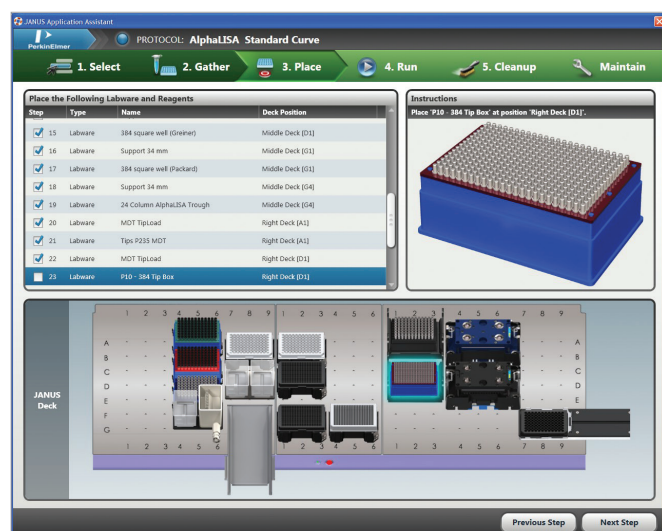


Figure 2. WinPREP software offers quick setup as well as advanced software features for a variety of needs.

- Ability to recall research protocols, track sample preparation processing and integrate ancillary devices for fully automated application solutions
- Pre-defined labware definitions simplify assay setup and enable labware libraries for independent use within protocols
- Maintenance and clean-up prompts minimize downtime
- Real-time status updates and error recovery options ensure sample preservation and data integrity
- 21 CFR Part 11 Software Compatible for data integrity

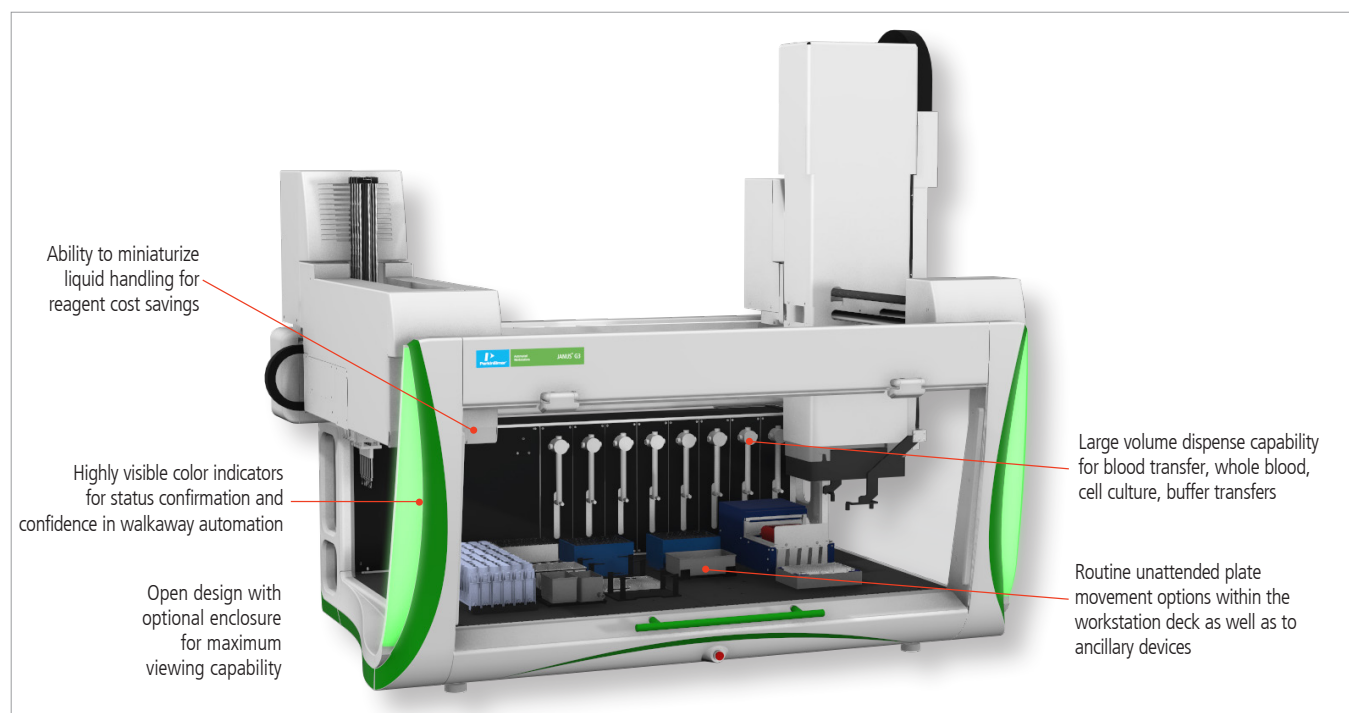


Figure 1. The JANUS G3 Automated Workstation shown with Varispan® Pipetting and Modular Dispense Technology.

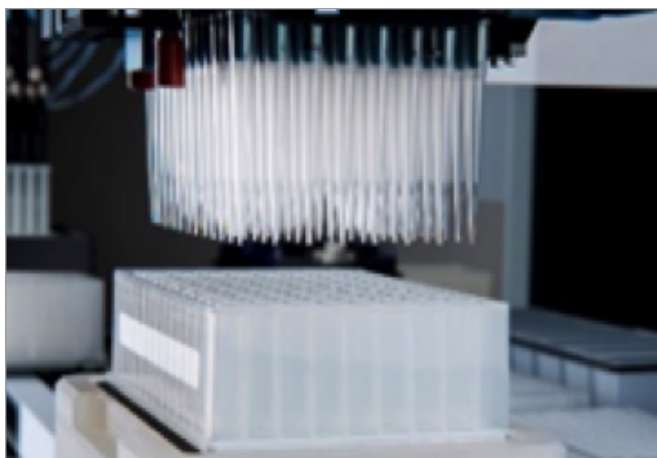


Figure 3. MDT Dispense Technology allows 96- or 384-well dispensing.

### Modular Dispense Technology (MDT) Pipetting Arm Technology

Unique to PerkinElmer, MDT pipetting enables a choice of 96- or 384-disposable tip dispense head technology with the ability to automatically switch between heads within the same protocol “on-the-fly” for optimal performance (Figure 3).

NanoHead™ dispense head offers assay miniaturization with 384-tip processing as low as 50 nL.

### Exclusive VersaTip® and Varispan™ Technologies

PerkinElmer VersaTip™ technology enables both washable and disposable tips to be used on the same tip adapter, without user intervention, providing needed flexibility and time savings in your workflow.

Varispan™ Pipetting Arm Technology (Figure 4) provides automatic variable sample spacing for multi-tipped processing of different methodologies allowing the automation of a variety of labware: test tubes, microplates, deep-well plates and vials.

Combined, these technologies accelerate workflow efficiency as the same arm can be used for multiple pipetting technologies.

Accusense™ liquid-level sensing of each independent Varispan tip allows for optimal precision and minimal sample carry-over. This is compatible with a wide array of ionic, and non-ionic liquids including organic solvents (e.g. DMSO and methanol).

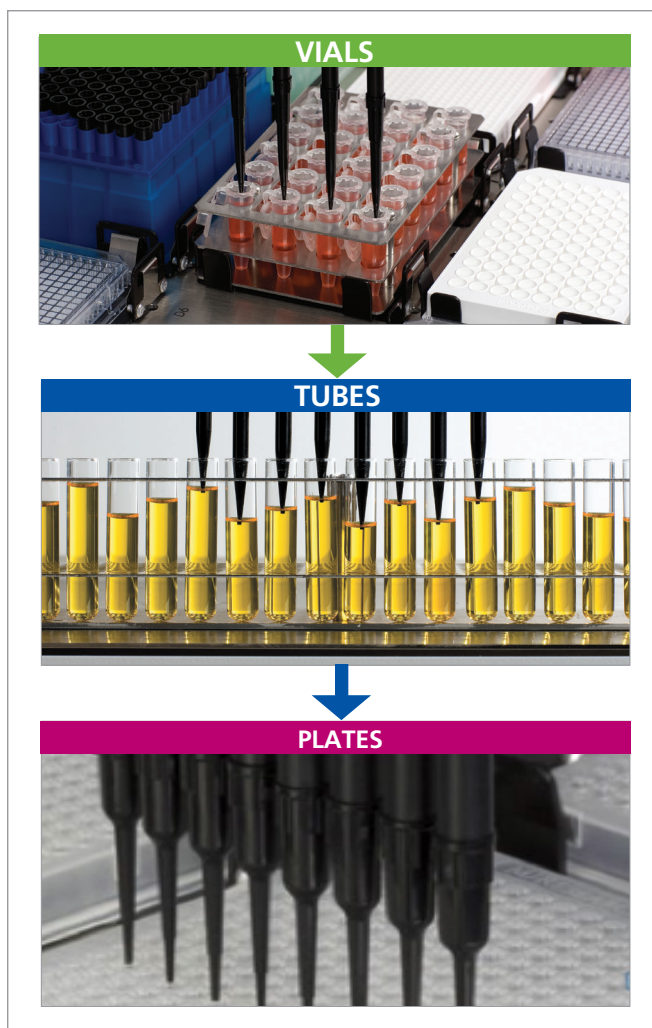


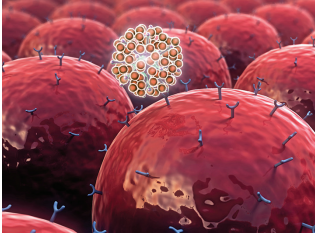
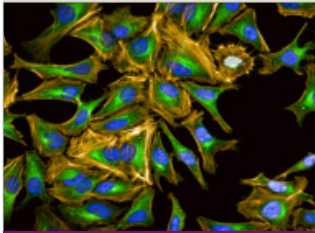


Figure 4. Varispan Pipetting technology allows multi-tipped processing of vials, tubes or plates .



Figure 5. Whether you choose benchtop, medium throughput or high throughput workstations, PerkinElmer offers true walkaway library prep with easy to use, proven methods for nearly all sequencing platforms. Shown is the JANUS Mini with Varispan 4-tip pipetting arm and optional enclosure.

## JANUS G3 Workstations Seamlessly Integrate Into Your Workflow - No Matter the Application

High-throughput Screening	Genomics	Biotherapeutics	High Content Analysis
			
<ul style="list-style-type: none"> <li>Plate Replication</li> <li>Reformatting</li> <li>AlphaLISA® Assays</li> <li>Multi-dispense</li> <li>Reagent Additions</li> <li>Immunoassays</li> </ul>	<ul style="list-style-type: none"> <li>NGS Library Preparation</li> <li>Sanger Sequencing</li> <li>PCR/qPCR Setup</li> <li>Genotyping</li> <li>Forensics</li> <li>Molecular Biology</li> </ul>	<ul style="list-style-type: none"> <li>Small Scale Protein Purification</li> <li>DoE and QbD Studies</li> <li>Analytical Studies</li> </ul>	<ul style="list-style-type: none"> <li>Drug Discovery</li> <li>Primary and Stem Cell Phenotypic</li> <li>Compound Screening</li> </ul>

From benchtop application-specific workstations to complex customized integrated solutions (Figure 6), the JANUS G3 portfolio addresses the workflow requirements of contemporary drug discovery and diagnostics research, including biotherapeutics, cellular screening and cellular imaging applications, genomics and DNA/RNA-based applications, and drugs of abuse detection.

Our solutions are designed to increase efficiency and throughput, while eliminating variability and tedious manual pipetting steps from the workflow.



Figure 6. The JANUS automated liquid handling platform easily integrates into ultra high throughput robotics like the cell:explorer dedicated to customized biological applications.

For research only. Not for use in diagnostic procedures.

For more information, visit [www.perkinelmer.com/AutomatedLiquidHandling](http://www.perkinelmer.com/AutomatedLiquidHandling)

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