



Fully Automated State-of-the-art Manufacturing Facility  
of 1,50,000 Sq.Ft. in Manesar, INDIA



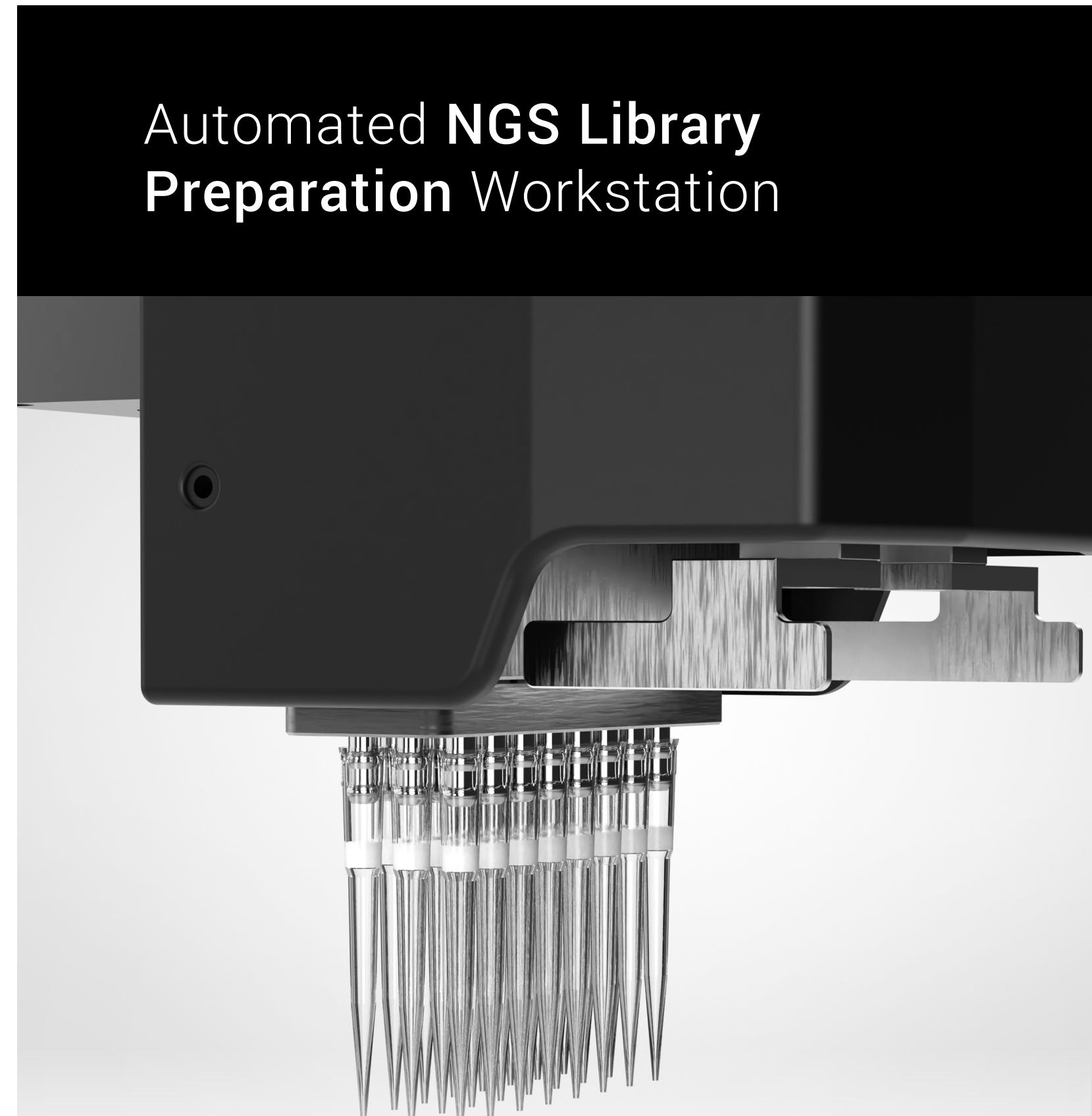
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**EZY AutoPrep**

Automated **NGS Library Preparation** Workstation



EZY AutoPrep-24



# EZY AutoPrep

## Automated NGS Library Preparation Workstation

The EZY AutoPrep-48/24 streamlines the entire NGS library construction process, automating every critical step — from DNA/RNA fragmentation and end-repair to adapter ligation, PCR amplification, hybridization, and quantification. Equipped with an integrated fluorometer and thermal cycler modules, these all-in-one platforms deliver end-to-end solution that minimizes hands-on time, reduces human error, and ensures consistent, high-quality library preparation.

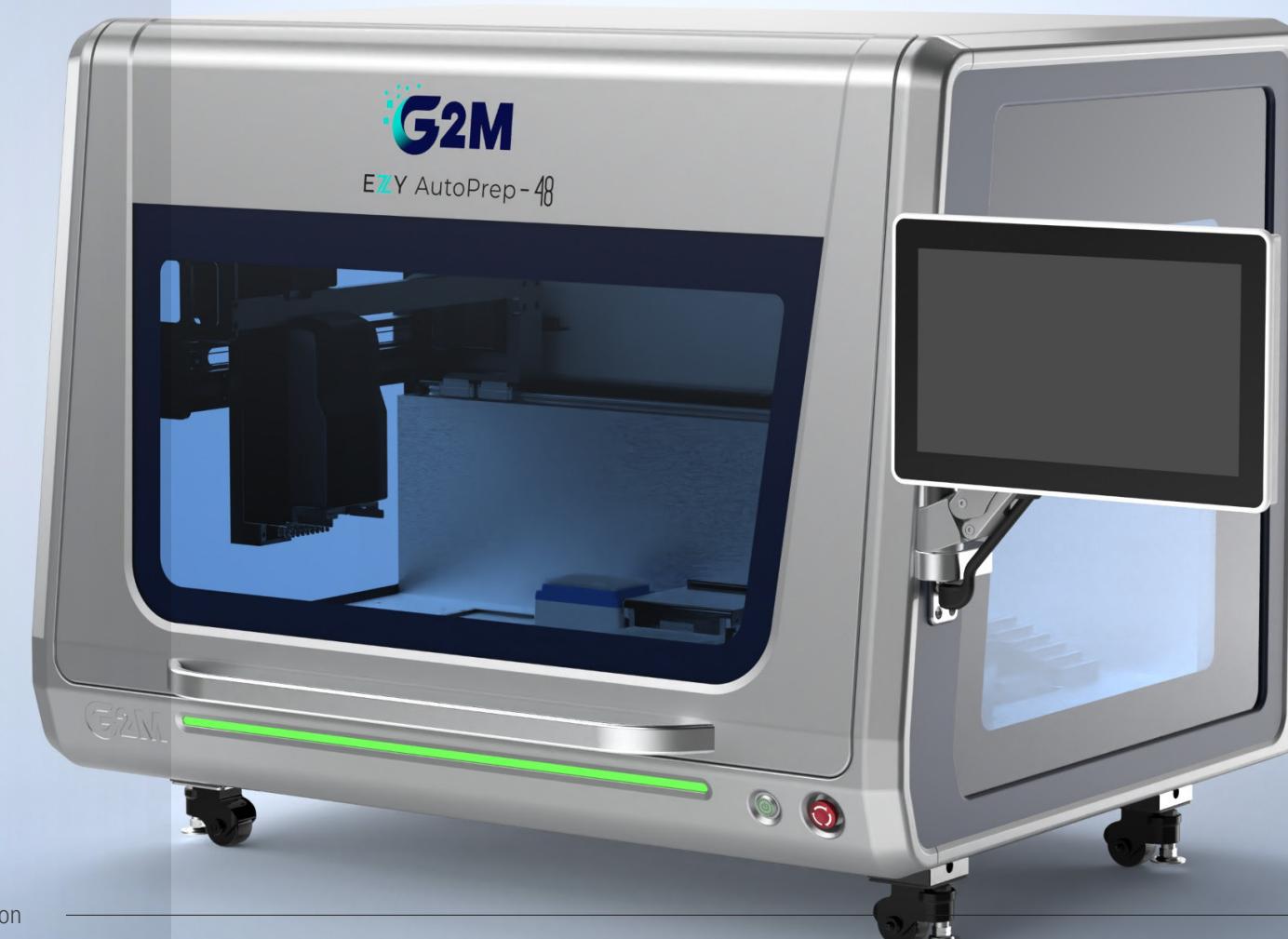
Designed for true walk-away automation, the EZY AutoPrep enables users to process up to 48 libraries in a single run, delivering unmatched throughput and reproducibility. With its intuitive software interface, contamination-controlled design, and flexible workflow compatibility, the system empowers researchers and clinicians to focus on what matters most — scientific discovery and data quality, not manual pipetting.

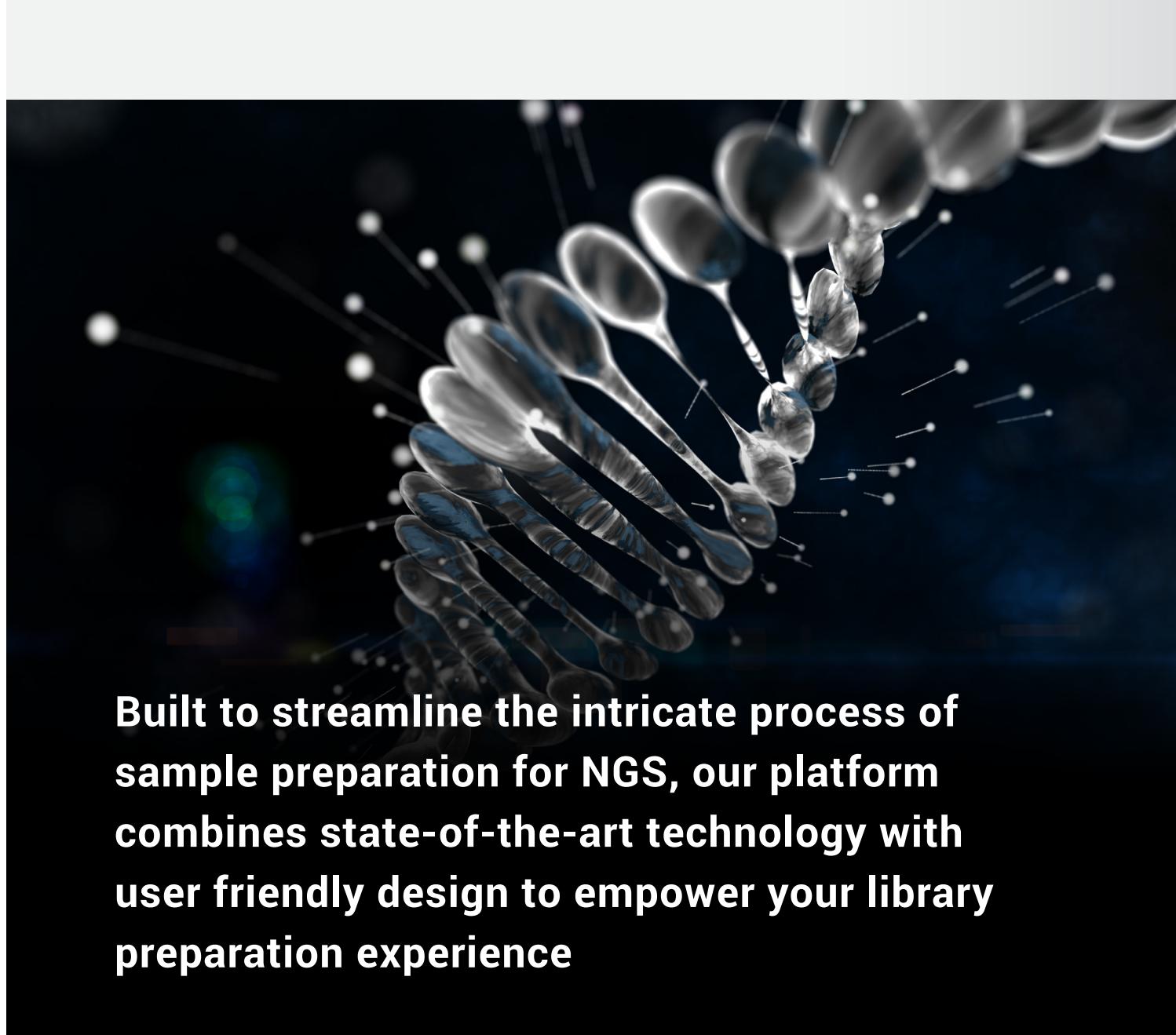
Automate with  
**Confidence**. Discover  
with **Precision**.

With the continuous advancements in Next-Generation Sequencing (NGS) technology and the steadily decreasing cost of sequencing, NGS has become the preferred method for genomic research and clinical applications worldwide.

As laboratories strive for greater efficiency, reproducibility, and scalability, Genes2Me introduces the EZY AutoPrep-48 and EZY AutoPrep-24, Next-Generation automated NGS library preparation workstations built for medium to high-throughput laboratories. Researchers and clinicians to focus on what matters most — scientific discovery and data quality, not manual pipetting.

EZY AutoPrep-48





**Built to streamline the intricate process of sample preparation for NGS, our platform combines state-of-the-art technology with user friendly design to empower your library preparation experience**

Building upon the robust capabilities of the AutoPrep-24, the EZY AutoPrep-48 offers higher throughput, automating the preparation of up to 48 libraries in a single run. This advanced workstation features an integrated thermal cycler, incubator, automated gripper system, along with onboard fluorometer for precise nucleic acid quantification and quality control.

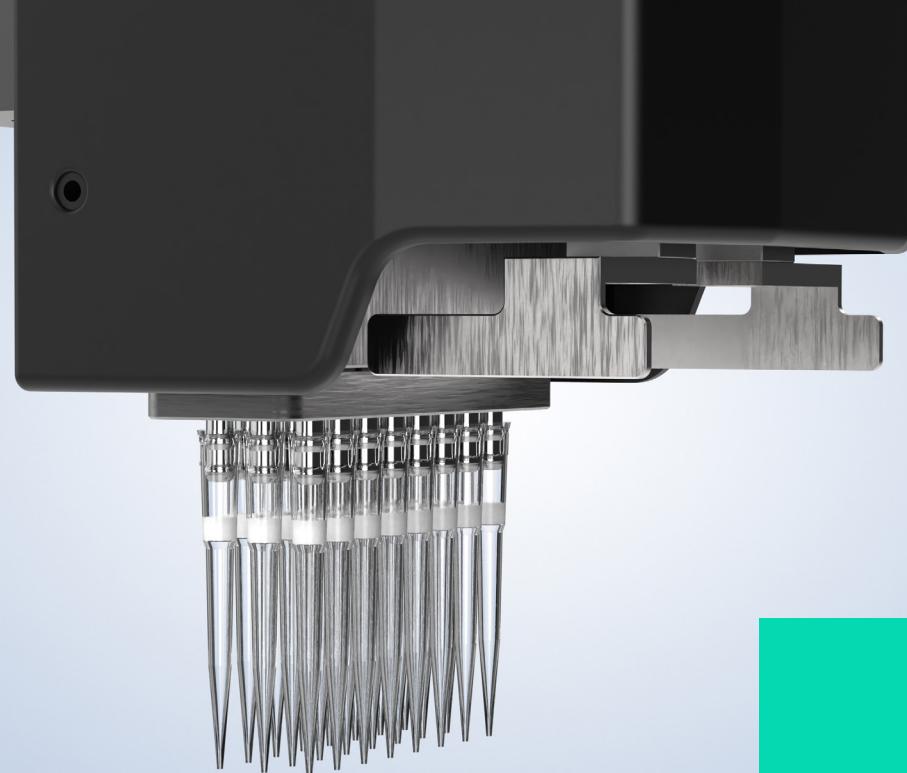
Delivering a complete end-to-end automation solution – from sample to sequencing-ready libraries – the EZY AutoPrep-48 ensures accuracy, reproducibility, and efficiency, perfectly suited for high-throughput research and clinical NGS workflows.

**Achieve Greater Productivity and Confidence with Every Run.**

**EZY AutoPrep-48**

**Up to 48 Libraries per Run**





Pipetting range	Pipetting precision (CV)	Pipetting accuracy (A)
2~200 $\mu$ L	2 $\mu$ L: $\leq$ 5% 100 $\mu$ L: $\leq$ 1% 200 $\mu$ L: $\leq$ 1 %	2 $\mu$ L: $\pm$ 10% 100 $\mu$ L: $\pm$ 2% 200 $\mu$ L: $\pm$ 1.5%

## 24-Channel Pipettor

High-precision pipettor for fast and accurate pipetting

Standard volume: 2 $\mu$ L			
Channel	Measured mean value ( $\mu$ L)	Accuracy	CV
1	1.99	-0.50%	2.28%
2	1.95	-2.30%	1.87%
3	1.93	-3.60%	4.16%
4	1.93	-3.50%	3.82%
5	1.98	-1.20%	3.08%
6	1.97	-1.60%	2.92%
7	1.98	-1.20%	5.03%
8	1.93	-3.60%	2.48%

Note: actual measured data of 24-channel pipettor. Due to space limitations, only 8-channel are displayed, each channel are repeated 10 times

Standard volume: 200 $\mu$ L			
Channel	Measured mean value ( $\mu$ L)	Accuracy	CV
1	200.25	0.13%	0.10%
2	200.44	0.22%	0.27%
3	199.69	-0.16%	0.10%
4	199.89	-0.06%	0.32%
5	200.03	0.02%	0.16%
6	200.04	0.02%	0.25%
7	199.93	-0.03%	0.24%
8	200.54	0.27%	0.33%

## Built-in Fluorometer

Quantitation is sensitive and highly accurate, making it a reliable dsDNA measurement method

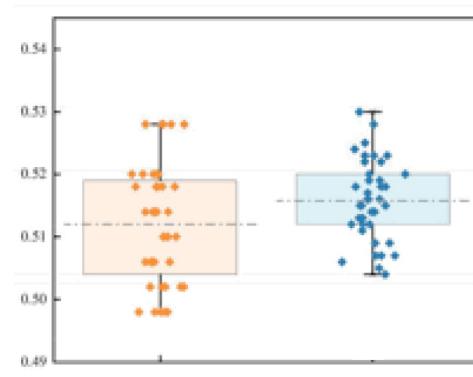


- Automation-specific block can test 8 samples simultaneously.
- Accurate quantitation and high accuracy with only 2-20  $\mu$ L of samples
- Lowest detection limit down to 0.4 ng (dsDNA).
- Cooperates well with the automatic calculation of the software & high-precision pipetting to quickly achieve accurate sampling.

Uses built-in fluorometer and Qubit Flex for concentration detection on 8 groups of 8 low concentration samples.

The results showed no significant difference between the two test results.

Repeatability	$CV \leq 1.5\%$
Linear	$R^2 \geq 0.995$
Linear range	4 orders of magnitude





## DECK LAYOUT



### (01) Tip Area

200  $\mu$ L / 50  $\mu$ L SBS standard filter tips are used in this machine to cater to various liquid handling requirements as per the protocols

### (02) PCR Block

Mainly used for the PCR amplification step during the library preparation process. Can accomodate 96X0.2 mL full-skirted PCR plates.

### (03) Temp. Control Block

Temp. control range: 4~75  $^{\circ}$ C, can store reagents with these refrigeration needs. Different adapters can be used at these locations to place different types of consumables

### (04) Reagent Area

Used for storage of room temperature bulk reagents/buffers in 7x25 mL reagent tanks or SBS standard 12 well reservoirs.

### (05) Thermo Shaker Incubator Block

Designed for 96-deepwell plates to achieve heating, incubation and mixing steps. With an amplitude of 2 mm and a max speed of 2000 rpm. Temperature range: RT. +5 $^{\circ}$ C~99 $^{\circ}$ C, and temperature uniformity of  $\leq 1.5^{\circ}$ C.

### (06) Magnetic Area

The bottom 96-well magnetic area can closely fit with the 2.0 mL / 1.0 mL 96-well plate.

### (07) Fluorometer

The quantitation block can simultaneously detect 8 samples, requiring 2 to 20  $\mu$ L of samples to obtain accurate sample concentrations, with a minimum detection limit of down to 0.4 ng (dsDNA) alongwith place to store fluorometer reagents.

### (08) Waste Area

Waste liquid container, TIP off box; both the waste liquid container and TIP off box are freely accessible.

### (09) Fluorometer Consumables

Equipped with stepped adaptor accomodating 6 strips of 8 well fluorometer consumables for sample quantitation.

### (10) Expandable Area

Can be used for any SBS consumable or tip boxes, PCR plates.



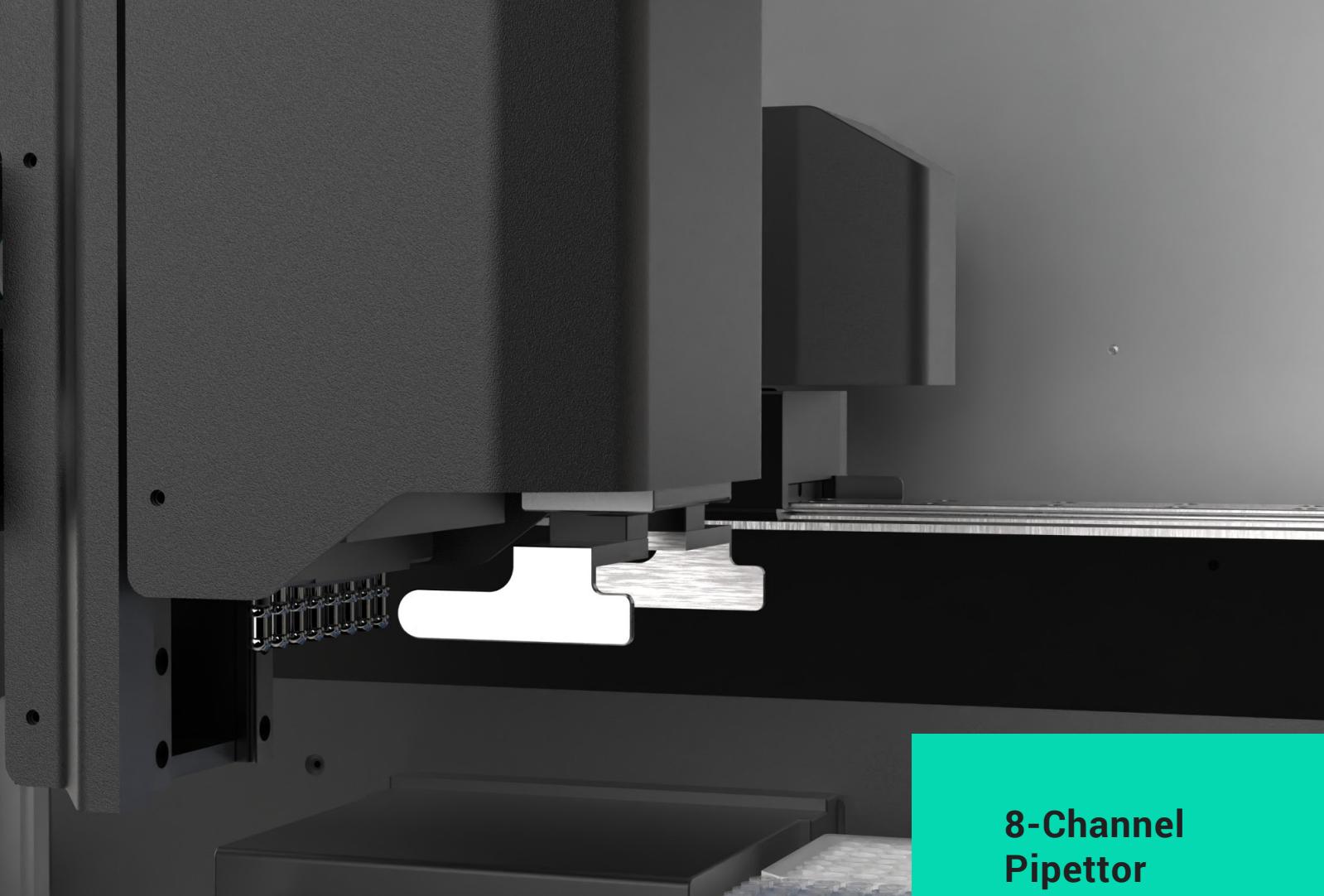
**Optimized for Performance  
Built for Confidence.**

## EZY AutoPrep-24

### Up to 16 Libraries per Run

**Designed to simplify and automate the NGS library preparation process, combining precision liquid handling, integrated thermal control, and an intuitive interface to deliver consistent, high-quality results while minimizing hands-on time and user variability.**

The EZY AutoPrep-24 is an advanced automated NGS library preparation workstation designed for precision, reliability, and ease of use. Capable of preparing up to 16 libraries in a single run, it integrates all critical modules – including a built-in thermal cycler, incubator, and gripper-based automation system – to seamlessly execute every step of the library preparation workflow. From end-repair and adapter ligation to PCR amplification and clean-up, the EZY AutoPrep-24 delivers consistent, high-quality results with minimal hands-on time, making it ideal for medium-throughput sequencing laboratories.



## 8-Channel Pipettor

High-precision pipettor for fast and accurate pipetting

Pipetting range	Pipetting precision (CV)	Pipetting accuracy (A)
2~200 $\mu$ L	2 $\mu$ L: $\leq$ 5% 100 $\mu$ L: $\leq$ 1% 200 $\mu$ L: $\leq$ 1 %	2 $\mu$ L: $\pm$ 10% 100 $\mu$ L: $\pm$ 2% 200 $\mu$ L: $\pm$ 1.5%

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## On-Deck Thermalcycler

The EZY AutoPrep features an automation-compatible PCR module designed for seamless integration, enabling precise thermal cycling directly within the automated workflow for unmatched efficiency and reproducibility.



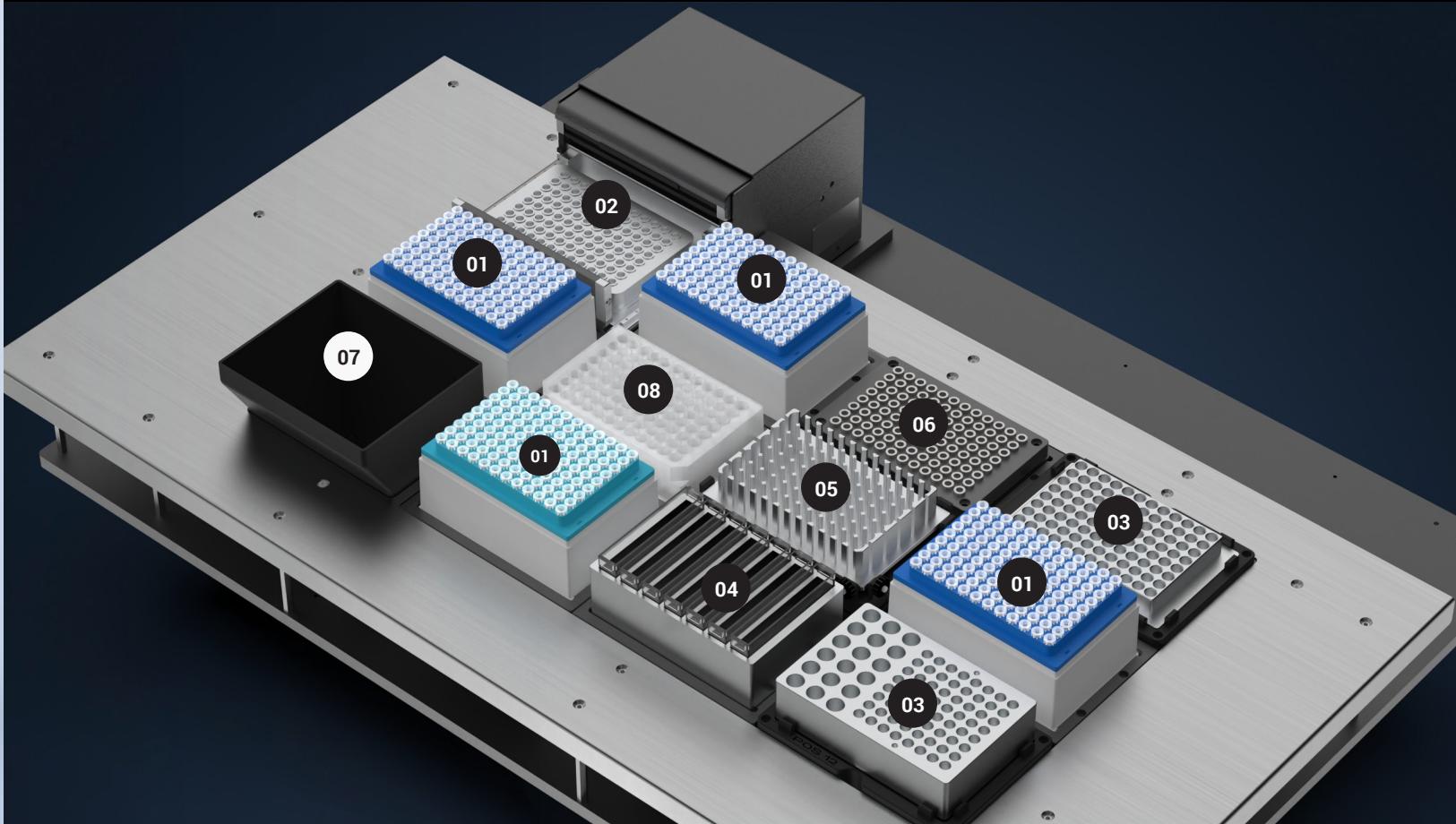
- **Exceptional Temperature Uniformity** – Ensures consistent heating and cooling across the entire block, delivering identical results for all samples, whether positioned at the center or edge.
- **High Temperature Accuracy** – Maintains precise and stable temperatures throughout each cycle, guaranteeing reproducible performance across all wells and runs.
- **Stable Operation During Access** – Provides uniform temperature control even during open-drawer or pause operations, enabling safe pipetting or reagent addition with negligible thermal deviation.
- **Enhanced Sample Integrity** – Enclosed and sealed design minimizes contamination risk and preserves sample quality during operation.
- **Compact Footprint** – Optimized design delivers high performance while occupying minimal deck space, maximizing workspace efficiency.
- **Flexible Integration** – Airflow and mechanical design allow versatile placement with no obstruction to robotic arms or deck components in automated systems.

## Technical Specifications

Module temperature control range	4°C~99°C
Max. temperature of thermo lid	105°C
Max. heating rate	4.0°C/s
Max. cooling rate	2.5°C/s
Temperature accuracy	$\pm$ 0.5°C @55°C
Temperature uniformity	$\pm$ 0.2°C @55°C



# DECK LAYOUT



## (01) Tip Area

200  $\mu$ L / 50  $\mu$ L SBS standard filter tips are used in this machine to cater to various liquid handling requirements as per the protocols

## (02) PCR Block

Mainly used for the PCR amplification step during the library preparation process. Can accomodate 96X0.2 mL full-skirted PCR plates.

## (03) Temp. Control Block

Temp. control range: 4~75  $^{\circ}$ C, can store reagents with these refrigeration needs. Different adapters can be used at these locations to place different types of consumables

## (04) Reagent Area

Used for storage of room temperature bulk reagents/buffers in 7x25 mL reagent tanks or SBS standard 12 well reservoirs.

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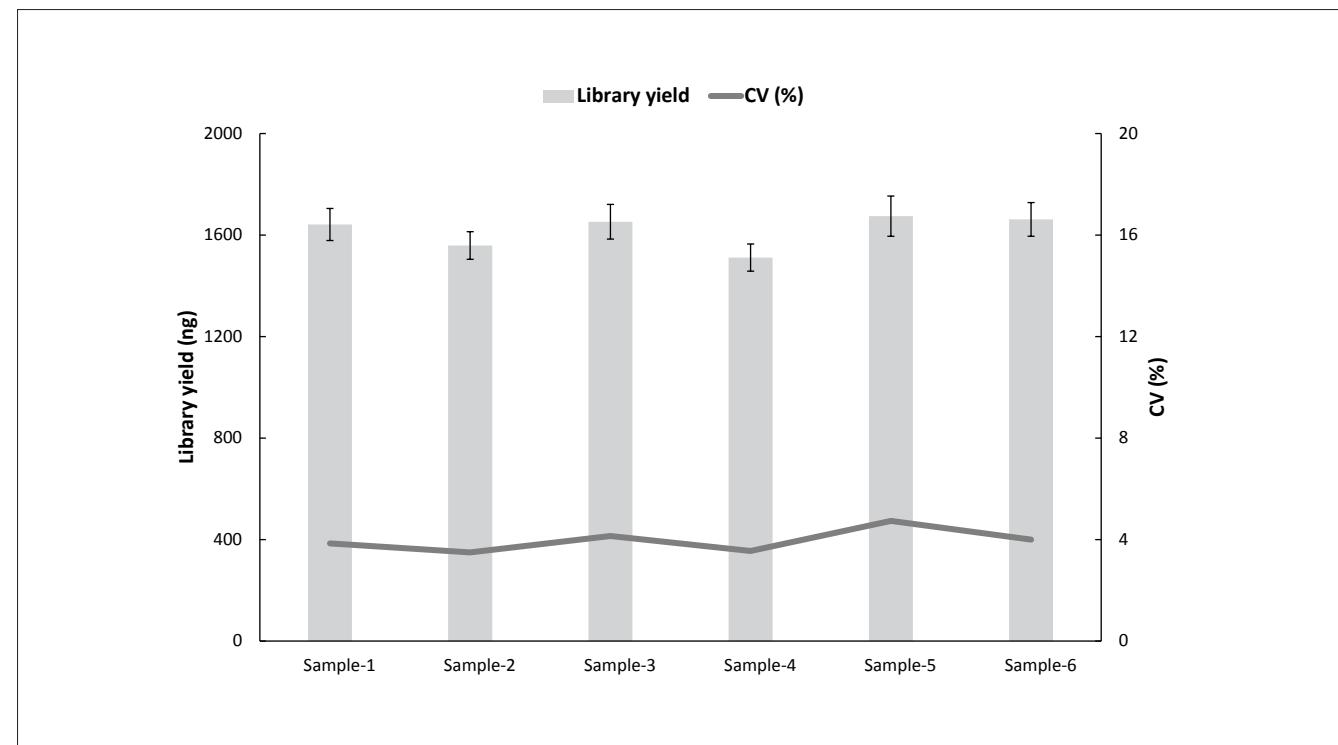
## (07) Waste Area

Waste liquid container, TIP off box; both the waste liquid container and TIP off box are freely accessible.

## (08) Expandable Area

Can be used for any SBS consumable or tip boxes, PCR plates.

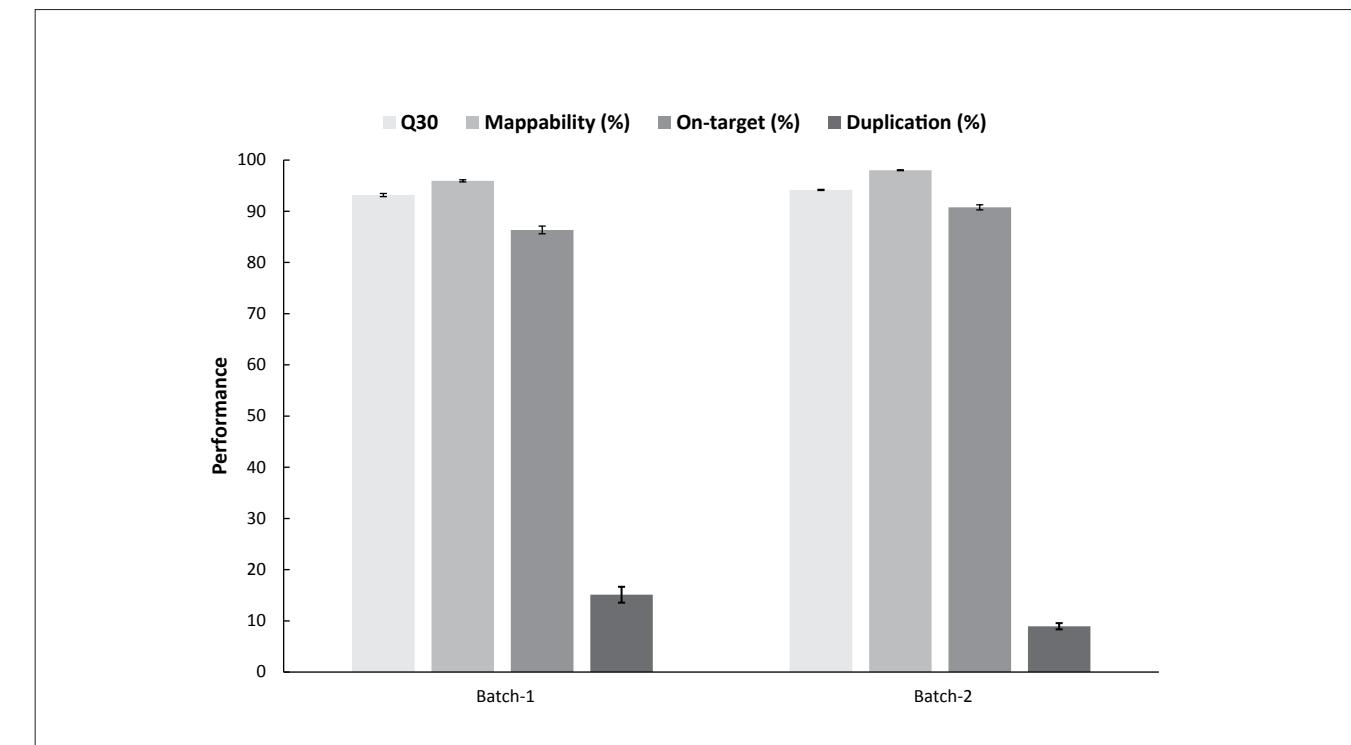
## Pre-library Preparation Stability



Multiple-batch Whole-Exome library yield using enzymatic fragmentation for library preparation on the EZYAutoPrep-24 fully automated NGS library preparation workstation. Pre-library were prepared using Whole-Exome Library Preparation kit, with the entire process automated using built-in scripts on the instrument.

Note: Samples are human genomic DNA(Promega,G1471).

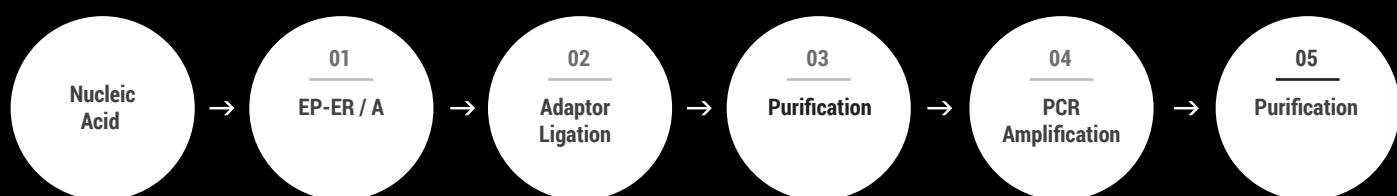
## Targeted Capture Stability



Capture performance of multiple-batch on EZYAutoPrep-24 Automated NGS Library Preparation Workstation. A.Q30, Mappability, On-target rate, and Duplication rate. Pre-libraries were prepared using Whole-Exome Library Preparation kit. 500ng of pre-library was used for hybrid capture using G2M Exome Panel (4hr for hybridization) . Each batch consists of 8 reactions. 8 Gb of data was selected for analysis.

Note: Samples are human genomic DNA(Promega,G1471).

## NGS LIBRARY



## CONSTRUCTION WORKFLOW



EZY AutoPrep - 48 is capable of performing the whole process of library construction except for "Library Pooling"

EZY AutoPrep - 24 is capable of performing the whole process of library construction except for "Library Pooling & Quantitation"

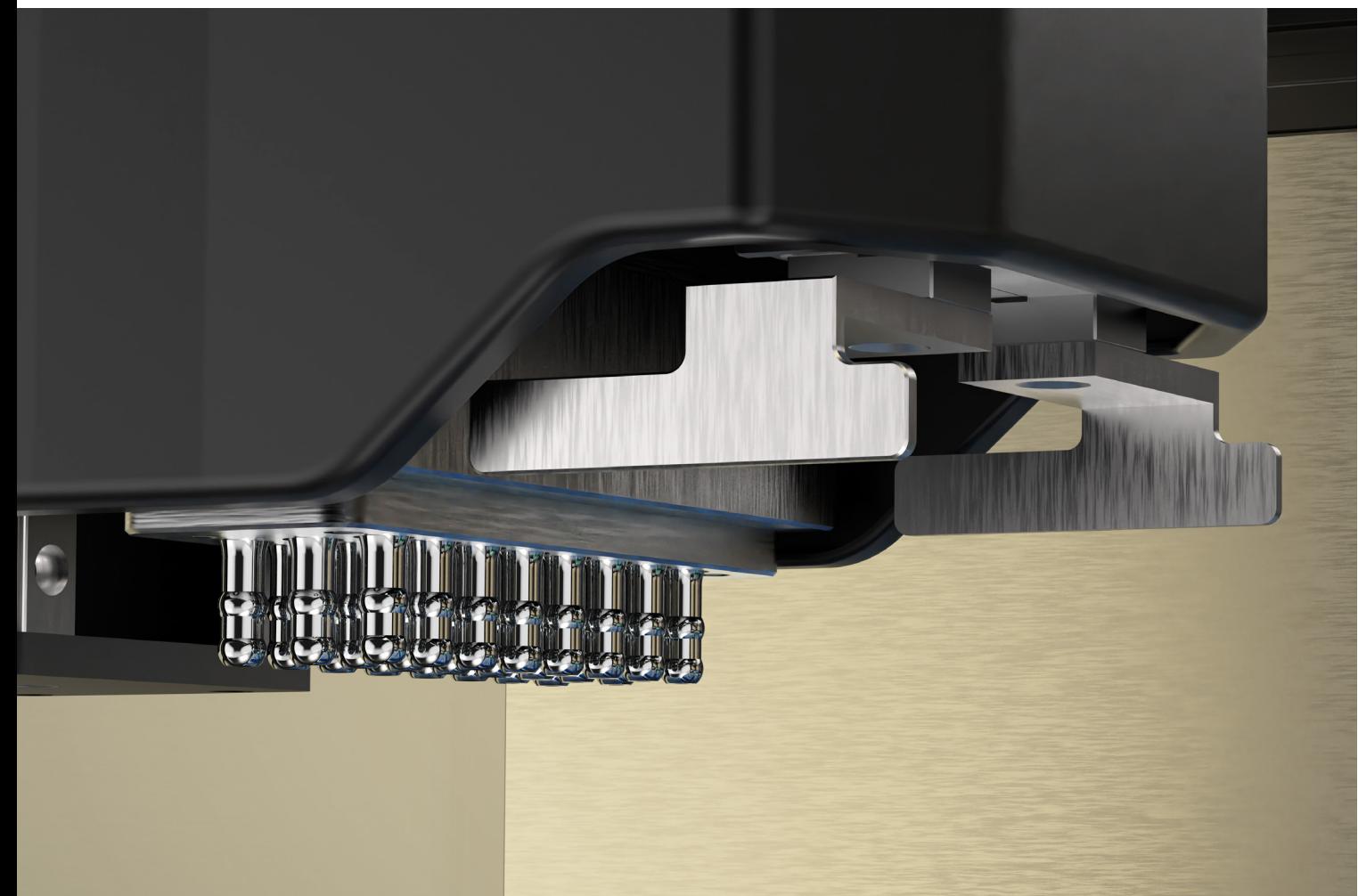
# PRODUCT FEATURES



## Gripper Arm

The gripper arm picks up and transfers sample plates between different locations moving along multiple axes to access different deck locations of the workstation.

This may include stacking plates or moving the plates to magnet location or orbital shaker or incubation deck location based on experimental needs. It is based on motorized clamping mechanism to securely hold onto sample plates while taking them from one deck location to another deck location.



## Intelligent & Visual

- Allows users to freely choose running part or all of the experimental processes.
- Program settings like error reporting and prompt functions ensure that users can quickly find programming errors.
- Graphical process editing, guided operation, drag-and-drop script elements, makes up for a user-friendly GUI.



## Flexible to Match Experimental Needs

- Equipped with multiple temperature control modules to meet the special temperature requirements such as - for reagent and sample storage.
- High efficiency magnetic module to avoid loss or residual of magnetic beads.
- The fully automatic thermal cycling module can effectively meet the nucleic acid amplification process in the process of library construction.



## Efficient Contamination Prevention

- Equipped with efficient purification and filter system (positive pressure HEPA system) and UV sterilization to prevent cross-contamination of the experimental cabin.
- The PCR module in EZY AutoPrep-48/24 can use disposable automatic cover or conventional sealing cover to avoid condensation on the top & reduce the risk of cross-infection.



## Simple Operation, Get Started Quickly

- Multi-level account management system supports the different needs of new users and advanced users.
- Drag-and-drop flows simplifies program setting.
- GUI is easy to understand & use.
- New users can also quickly master the operation methods of library construction.



## Multiple Functional Modules

- The 24/12 plate positions, together with the gripper, 24/8-channel pipettor, can help in the simple automated library preparation of 48/24 samples.
- The software program allows flexibility for sample processing by enabling the same program to quickly execute the same experimental process by simply adjusting the number of samples.



## Precise Pipetting

- The self-developed high-precision 24/8-channel pipettor can be used as a single channel.
- A variety of liquid parameters setting ensure accurate control of liquid aspirating & dispensing process.
- Based on Air Displacement pipetting principle, effectively removing chances of aerosol contamination.

# Temperature Control



## PCR Amplification Block

Designed specifically to integrate seamlessly with EZY AutoPrep systems, it supports automated workflows by featuring robotic-friendly heated lids, SBS standard 96 well plates, remote control capabilities with minimal to no manual intervention.

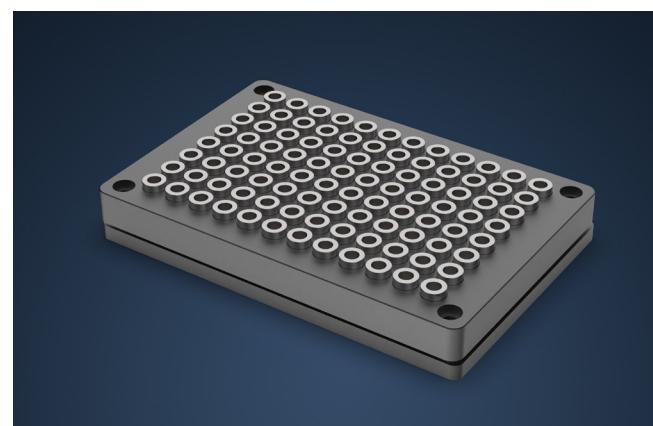
- (1) Block temperature control range: 4°C ~ 99 °C, the max temperature of the thermo lid is 105 °C
- (2) Temperature precision:  $\pm 0.5$  °C
- (3) Temperature uniformity:  $\pm 1$  °C



## Temperature Control Module

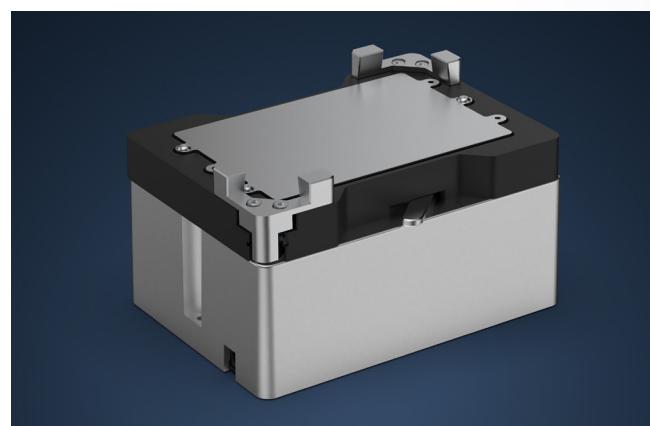
Can be freely set at 4~75°C. It's the standard temperature control block of NGS series. According to the usages, block adapters can be customized to meet different consumables requirements.

Temperature accuracy :	$\pm 1$ °C
Temperature uniformity :	$\pm 1$ °C



## Magnetic Plate Module

Movable 96-well magnetic module that can be handled by the gripper arm, this allows seamless integration into automated workflows, enabling efficient magnetic bead-based purification and processing without manual intervention.



## Thermo Shaker Incubator Block

A thermo shaker incubator has been provided in this automation workstation. The incubator can be used for heating, incubation and mixing of deepwell plates. The high-precision zero positioning function ensures the safe pipetting by the pipettor, with the anti-vibration technology and 2D motion control.

Temperature accuracy:	$\pm 2$ °C
Temperature uniformity:	$\pm 1.5$ °C
Oscillation speed:	200 - 2000 RPM

# On-Deck Carriers

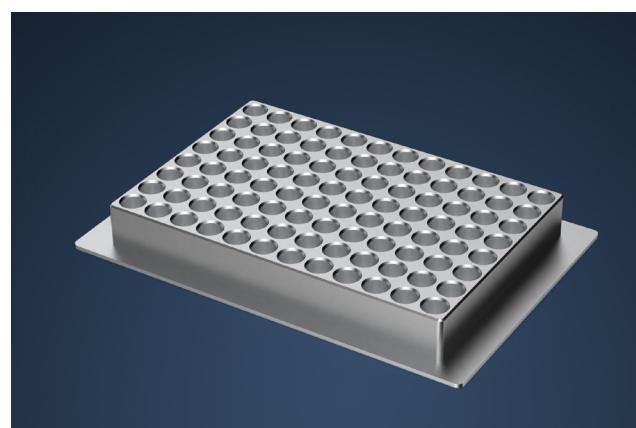
## Consumable Carriers & Plate Adapters

Our precision-engineered carriers and adapters are designed to seamlessly integrate with EZY AutoPrep System, ensuring high efficiency and reliability during NGS library preparation and other molecular biology workflows. Each adapter is manufactured with special materials for superior thermal conductivity ensuring desired temperatures reaches the samples/reagents with maximum efficiency ensuring consistent performance across runs.



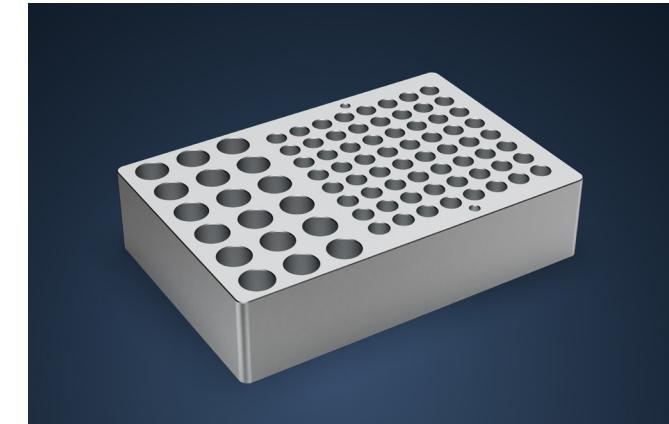
### 25ml Reagent Reservoir Carrier

- Acts as carrier for the 25ml reagent reservoirs providing flexibility to the workflow for using high volume buffers.
- Multiple reservoir position design allows for different buffers usage on a single deck position.
- Made from metal composite materials ensuring stability during use.



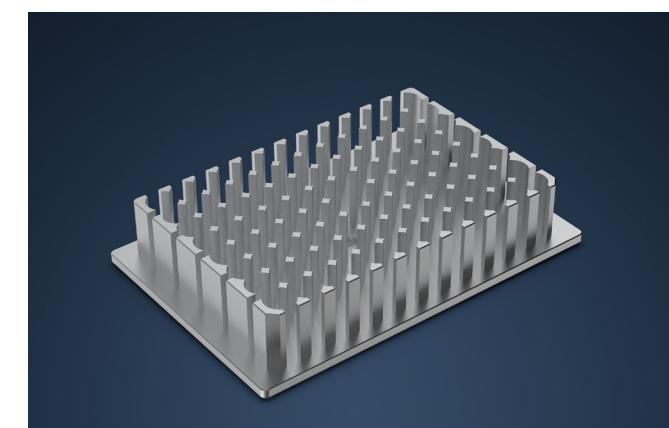
### PCR Plate Adapter

- Compatible with standard V bottom 96-well PCR plates.
- Ensures uniform heat transfer for precise performance.
- Ideal for library enrichment steps in NGS workflows.



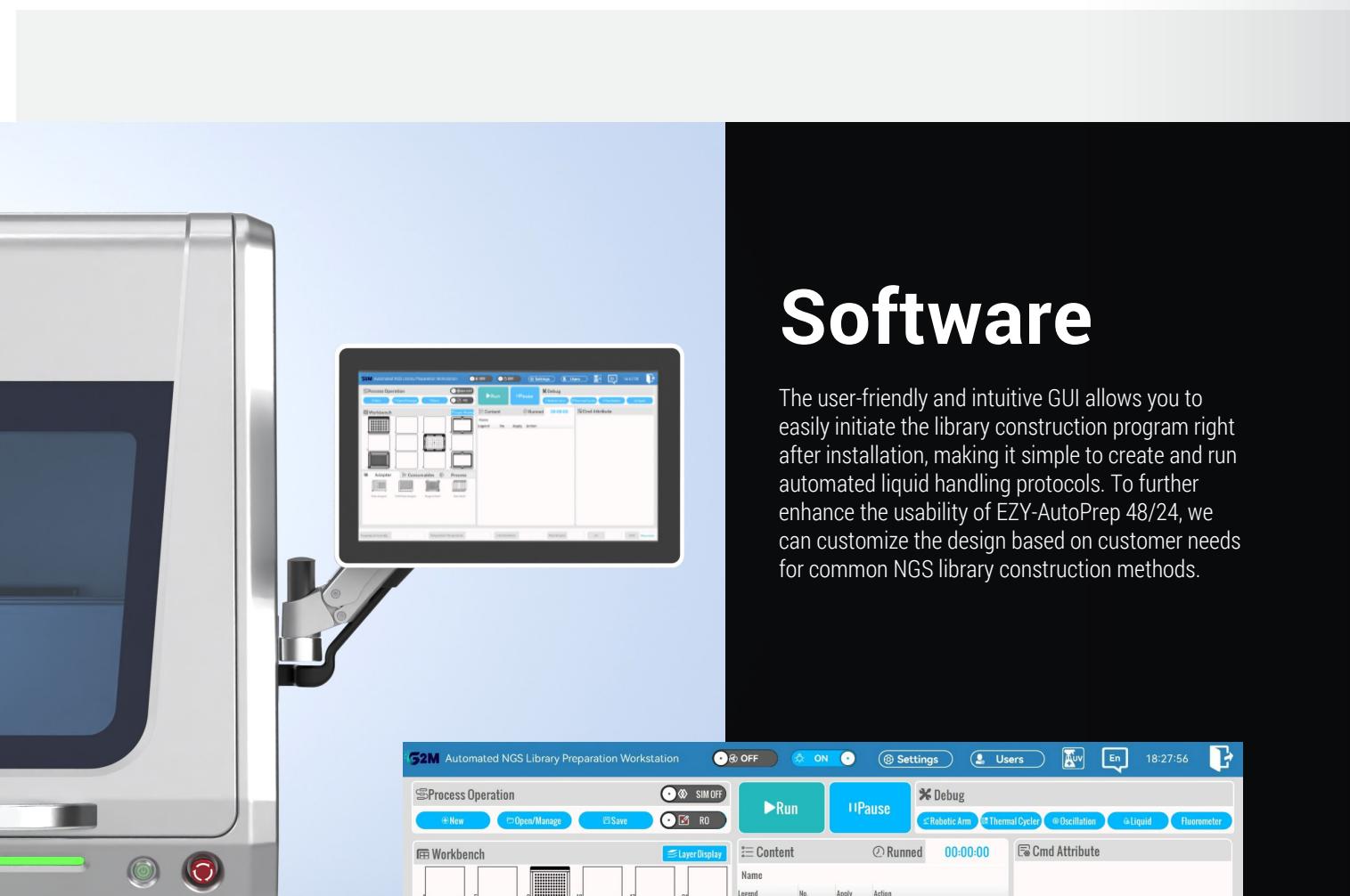
### Composite Plate Adapter

- Multi-format design supports different types of tubes from 0.5ml to 2ml screw cap tubes to 0.2ml 8-strip tubes.
- Increases flexibility for workflows requiring multiple tube formats in a single run.
- Enhances throughput while minimizing reagent losses or need for frequent hardware changes.

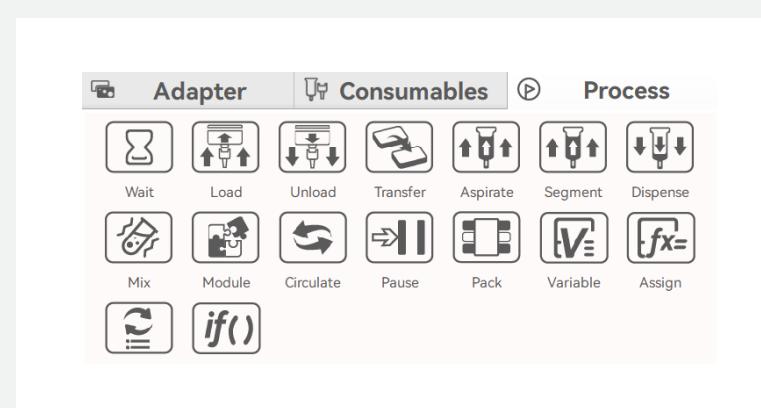


### Deep Well Plate Adapter

- Specifically designed for 1.3ml 96 deep well plates.
- Provides secure positioning and optimal contact with the consumable.
- Ensures stability during vigorous pipetting and orbital shaking steps.



**Main Page** The main page has a simple layout, which is convenient and easy to use



## Program Interface

The program settings are open and flexible. Different processes such as reagent transfer, sample transfer and PCR can be set up according to different kits to meet the needs of different experimental steps.

# Software

The user-friendly and intuitive GUI allows you to easily initiate the library construction program right after installation, making it simple to create and run automated liquid handling protocols. To further enhance the usability of EZY-AutoPrep 48/24, we can customize the design based on customer needs for common NGS library construction methods.

## Specification

Model	EZY AutoPrep - 48		EZY AutoPrep - 24			
Throughput	48		16			
Deck locations	24		12			
Compatible Consumable	SBS standard 96 well plate, deep well plate, reservoirs etc.					
Tips	200µL and 50µL					
Magnetic plate	96-well annular magnetic plate					
XYZ Robot	X-axis Repeated Positioning Precision : ±0.1 mm Y-axis Repeated Positioning Precision : ±0.1 mm Z-axis Repeated Positioning Precision : ±0.1 mm					
Pipettor	Pipettor type	24-channel fixed spacing pipettors	8-channel fixed spacing pipettors			
	Pipetting principle	Air displacement pipetting technology				
	Pipetting range	2 - 200 µL				
	Precision(CV)	2 µL: ≤5%	100 µL: ≤1%	200 µL: ≤1%		
	Accuracy	2 µL: ±10%	100 µL: ±2%	200 µL: ±1.5%		
Gripper	Motorized Gripper for automated consumable transfer and handling					
Temperature control module	2 Temperature Control Blocks. Temperature control range : 4~75°C Temperature control accuracy : ±1°C Temperature control uniformity : ±1°C					
Fluorescence detection module	Simultaneous Detection of 8 samples, 2-20µL sample, 0.4 ng~100 ng					
Heating & Oscillation Module	(Room Temperature +5°C) ~ 99°C Temperature Accuracy : ±2.0°C; Temperature Uniformity : ≤ 1.5°C; Oscillation Speed: 200rpm to 2000rpm					
PCR Module	Temperature Range : Lid : 30°C~ 105°C, Module : 4°C~ 99°C Uniformity : ≤ 1°C Accuracy : ± 0.5°C					
UV sterilization	Equipped with UV sterilization lamp, high-efficiency purification filter device					
Interface	Integrated 14" Colour Touch Screen Windows PC					
Instrument port	USB port, CAN communication					
Ambient condition	Temperature requirement : 18 - 25°C, humidity: ≤ 80 %					
Instrument Weight	200KG		170Kg			
Dimension (W×D×H)	1180mm W X 860mm D X 955mm H			940mm W X 860mm D X 860mm H		
Power input	100~240 V, 50/60 Hz, rated power 2000 W			100~240 V, 50/60 Hz, rated power 1700 W		

## ORDERING INFORMATION

Commercial Name	Cat No.
EZY AutoPrep - 48 Automated NGS Library Preparation Workstation	G2MBR4-0712
EZY AutoPrep - 24 Automated NGS Library Preparation Workstation	G2MBR4-0660