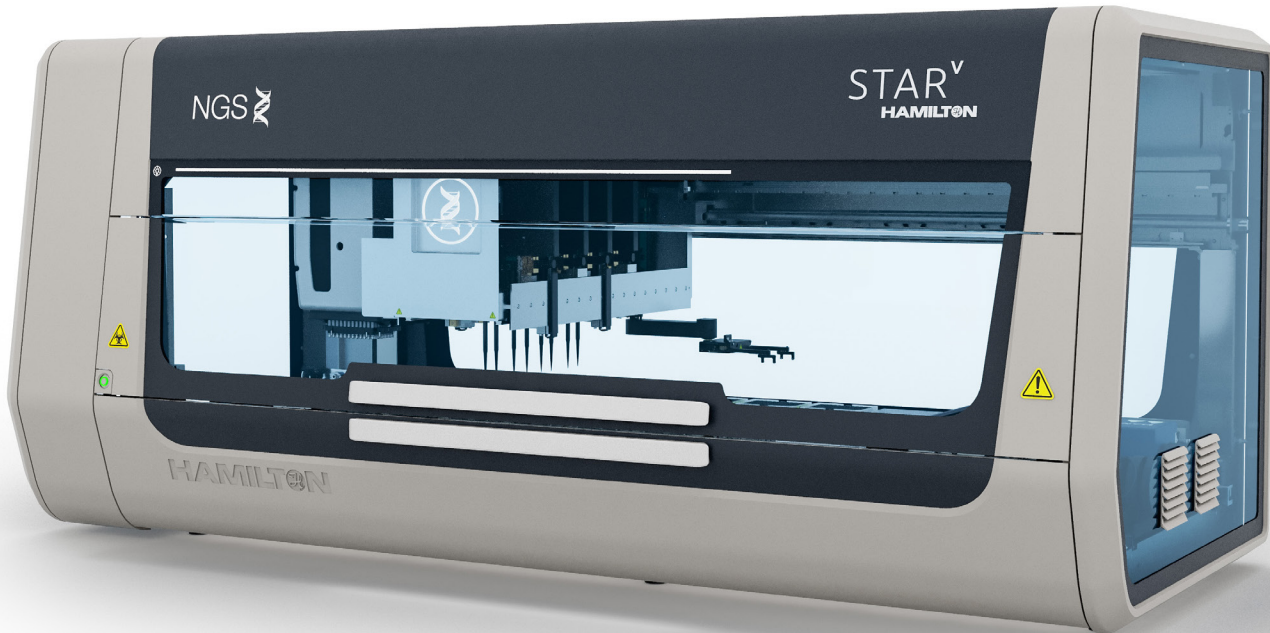# NGS STAR V
Level-up your Library Preparation

Communicative
Maximum process reliability via intelligent safety lights

Cool
Temperature control devices meet reagent and sample needs

Contemporary
NGS steps into Hamilton's automation technology future

SMART EFFICIENT INTELLIGENT

It's time for the next step. Welcome the newest member of our NGS library preparation family: the NGS STAR V. It cares about your automated high-throughput library preparation with respect to usability, reproducibility, traceability and safety needs.

TEMPERATURE

The NGS STAR V workspace is equipped with all modules and devices required for your automated library preparation workflow.

Because precision is key in NGS library preparation, we offer several temperature-controlled positions. The Cooling Carrier Module ensures the optimal temperature for samples or reagent tubes and traceability by scanning the approriate barcodes during the loading of the carriers. Two SBS cooling positions ensure temperature-controlled positions being accessible by Pipetting Channels and Multi Probe Head 96. Perfect sample handling is provided by a Thermoshaker.

The On-Deck Thermal Cycler instrument, together with the Hamilton PCR ComfortLid reduces hands-on time and ensures precise and uniform incubation steps.

INTELLIGENT

Safety is the core issue in any laboratory. Whether for you as a user, for your samples and processes, or the investment as it is. Therefore, it's essential for us that you can work with an optimal system, both today and tomorrow. NGS STAR V Status Light colors indicate running, error, finished, or user input required. Since it illuminates the inside of the Pipettor, the status is still visible from a distance. On the software-side, the NGS STAR V Framework (based on VENUS Software) ensures that programming new methods is even more user-friendly. This means that even complex NGS methods can be programmed quickly and be tailored to the needs of the user.

Additionally, two transportation tools for plate transport steps, combined with a magnetic stand, complete the ideal library preparation system: the NGS STAR V.

- Based on the ML STAR V for automated high-throughput library preparation
- 2D-Barcode Reader for traceability of samples and reagents
- Temperature-controlled pipetting positions meet the needs of protocol steps
- Integrated On-Deck Thermal Cycler with automation-friendly PCR ComfortLid
- Qualified methods for time-efficient workflow implementation
- Proven VENUS Software ensures optimal workflows on your NGS STAR V

Specifications

Physical Dimensions

Description	
Width	220 cm
Depth	98 cm
Height	96 cm
Weight	approx. 550 kg

Ordering Configuration

Description	Part Number
NGS STAR V 2.0 MPH96	ML STAR V with 8 independent channels, MPH96, Plate Gripper, ODTC, Thermoshake, 2 CPACs, Cooling Carrier
NGS STAR V 2.0	ML STAR V with 8 independent channels, Plate Gripper, ODTC, Thermoshake, 2 CPACs, Cooling Carrier

System Specifications

Description	
Temperature	+15 - +35 °C
Humidity	15% - 85% with no condensation
Altitude	0 - 2000 m above sea level

Pipetting Channels

Description
CO-RE® Technology
Independent Channels
capacitive Liquid Level Detection (cLLD)
Tip Type Detection

Pipetting Volumes

Tip Size	Precision CV (%)
50 µL	1 µL Volume ([R] 5%; CV 4%)
300 µL	50 µL Volume ([R] 2%; CV 0.75%)
1000 µL	100 µL Volume ([R] 2%; CV 0.75%)

Features

| Description	
UV Light	For deck decontamination
FLUOREYE	Channel-based on-deck reader for fluorescence-based quantification and normalization

Add-On Options

Description	Manufacturer
NGS STAR V 2.0 Bench	Hamilton Bonaduz
Swing Arm for Monitor (only available in combination with Bench)	Hamilton Bonaduz
Mini Chiller Olé 280 for Cooling Carrier	Huber
Tubing Adapter NW8	Huber

The Hamilton Genomics Squad

NGS STARlet

- Traceability of samples and reagents
- Minimal hands-on time for almost any NGS library preparation workflow
- Automated library preparation for high priority samples or smaller sample throughput
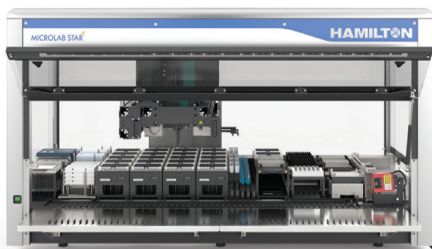
NGS STAR

- Tried and true performance for many years
- Proven design, including qualified methods from many kit providers
- Upgradable to higher throughput needs

NIMBUS Presto

- More than 15 biologically-verified nucleid acid extraction protocols from leading kit vendors
- NOW available: Circulomics HMW DNA extraction application
- Configurable loading area for 96 samples
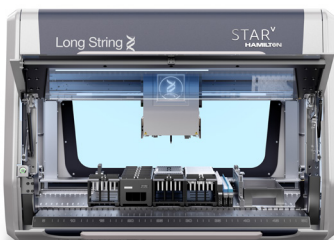
Long String STAR V

- Automated walk-away UHMW DNA extraction
- Optimal magnetic disk handling via Hamilton MagRod technology
- Scalable preparation of UHMW DNA for Bionano OGM for increased number of samples