

Mini Nucleic Acid Preparation Workstation



The VERSA Mini NAP/PCR Setup is a small, automated liquid handling workstation designed to perform virtually every task for nucleic acid preparation with high precision, throughput and accuracy.

With built-in shaker, temperature control, and optional magnetic block and vacuum manifold, the VERSA Mini NAP/PCR Setup can isolate nucleic acids and prepare nucleic acid samples for PCR.

This nucleic acid preparation workstation can conserve expensive reagents, eliminate concerns associated with volumetric variations caused by handling errors, as well as handle repetitive pipetting protocols.

The VERSA nucleic acid preparation workstation and software have been specifically designed to easily automate commercially-available extraction kits (magnetic bead and vacuum manifold techniques) and industry recognized protocols. Moreover, it provides customization solutions for researchers interested in creating their own nucleic acid preparation protocols.

Features:

- Compatible with many commercially available kits
- Magnetic bead or vacuum manifold available
- Integrated tip changer and autoclavable tubes to reduce cross-contamination issues
- User friendly software interface
- UV/HEPA-filter hood option
- Throughput for setting up 1000 PCR reactions/day
- 96-well / 384-well plate and strip compatible
- On-deck master mix preparation available
- Carousel option
- HEPA Filter / UV enclosure option
- Liquid-level sensing option
- Micro-fuge tubes, 96-well / 384-well plate compatible
- Controlled sample mixing
- Integrated time controlled liquid handling
- Nucleic acid extraction and isolation
- Single and multiplex PCR reaction setup
- Real-time PCR reaction setup

- Sequencing reaction setup
- Genomic library screening
- Oligo-based gene synthesis plate setup
- PCR Clean-up
- Colony PCR screening
- Master-mix preparation
- Cherry picking and reagent pooling
- Serial and parallel dilution
- Plate reformatting

In addition to nucleic acid and PCR preparation applications, this system can also be programmed to carry out general liquid- handling tasks, such as: serial dilution, cherry picking, plate reformatting and plate replication. The VERSA Mini NAP/PCR Workstation, when housed in an appropriate bio-safety cabinet, can be utilized to handle BSL-2 and BSL-3 agents reducing the risk of iatrogenic infections in laboratory workers.

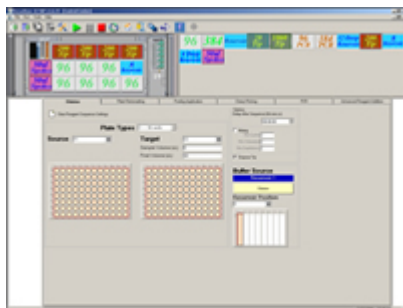
System Configuration

The Workstation:

With one robotic arm, equipped with a single channel dual SyringePipettor and two-channel ReagentDrop, and a plate transporter, this system can generate nucleic acid isolations and series of PCR reaction setups ranging in volumes from 1 μ L to 1000 μ L.

Instrument Integration:

This VERSA nucleic acid preparation workstation can be easily integrated with complimentary accessories such as incubators, micro plate readers, thermocyclers, and others.



Software & Deck Layout for Nucleic Acid Preparation

VERSAware Mini NAP/PCR Setup software is easily programmable for the preparation of nucleic acid samples. It can be customized to isolate DNA/RNA, prepare PCR master mixes, add nucleic acid templates, move plates from temperature control block to magnetic blocks, and load samples into PCR plates and strips.

The deck configurations shown are a general representation for setting up reactions for nucleic acid preparation using commercially available kits. Additional labware may be required depending on the setup and the individual method being performed.

Specifications:

Volume	1 μ L to 1000 μ L
Precision	CV value <2% at 1 μ L
Deck Capacity	<ul style="list-style-type: none">• Four microtitre plates (with adaptor to accommodate individual and/or strip-tubes)• Reagent block (4°C)• Shaker – can also be used as plate nest• Magnetic block option – can also be used as plate nest• Vacuum manifold option• Plate cooler option• Carousel option• Plate Transporter• Three tip-box positions
Pipette Tips	20 μ L, 50 μ L, 200 μ L and 1000 μ L standard (96-well racked)
Pipetting Head (Module)	Single Channel Dual SyringePipettor with Two-Channel ReagentDrop
Dimensions	W 55 x L 60 x H 60 cm
Weight	28kg
Software	Customized user-friendly VERSAware Mini NAP/PCR software featuring simple on-screen prompts and drop-down menus
Computer System	Laptop computer with Windows Operating Software