

An abstract graphic on the left side of the page, composed of a dense grid of small white dots. The dots are arranged in a way that creates a sense of depth and movement, with some dots appearing brighter than others, giving it a 3D effect. The overall shape is roughly rectangular but with wavy, organic edges.

2022

# PRODUCT GUIDE

- Liquid Handling
- Purification
- Extraction
- Services

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# ABOUT US

Gilson is a family-owned global manufacturer of sample management and purification solutions for the life sciences industry. We help researchers advance the pace of discovery by creating easy-to-use lab devices that improve reproducibility and traceability. Since 1957, we've been developing innovative products, such as the first continuously adjustable-volume pipette, PIPETMAN®. By partnering closely with the scientific community, we have advanced our portfolio offerings, adding automated pipetting systems and chromatography instruments, plus intuitive software management capabilities. Backed by worldwide R&D, service, and support, Gilson strives to enable verifiable science and to make lab life easier for our customers.



## Our Vision

Enabling verifiable science and making lab life easier for researchers.

## Our Mission

To partner with the scientific community and help researchers advance the pace of discovery by creating instruments and services that improve their results.

## A Global Presence

Whether through its integrated network (POs and MOs) or through its team of distributors, the Gilson brand is present and recognized in laboratories all over the world.



- Product Organization (PO)
- Market Organization (MO)
- Gilson Distributor



## Gilson's Interactive Guide

This version of Gilson's product guide includes interactive links to documents, articles, and other resources that allow you to learn more about our technology and solutions. Below, you'll find a key to what each icon represents. On each relevant product page, simply click on the blue icons to access relevant documentation or resources.



Get in touch with our customer support to receive a quote for your product of interest.



Find additional tools and resources to learn more about Gilson solutions and technologies.



Visit [www.gilson.com](http://www.gilson.com) to learn more about each product.



Download or read an article or customer case study related to the product page you're reading.



Find useful how-to or overview videos related to the product page you're viewing.



Our experts are available to answer all your questions. Contact us with any specific needs or requests.



Download useful files.



Click on the link to reach the related accessories or product page within the product guide.

Please note: this product guide is meant to be viewed digitally. Visit [gilson.com](http://gilson.com) to access any of the relevant links throughout this guide.

# COVID-19 SOLUTIONS

## SUPPORTING YOU IN THE FIGHT AGAINST COVID-19

We've consolidated our tools, technology, services, and resources that could help you as you continue with COVID-19 testing or studying the virus. Gilson is your partner in this fight. We want to enable you to be as efficient and safe as possible using the most reliable sample prep technology on the market.

### MANUAL LIQUID HANDLING

Our manual liquid handling products can be used in every step of the COVID-19 testing workflow, where accurate, reproducible, and safe transfer of samples and reagents is required.

- Full range of manual pipettes, including single, multichannel, and Bluetooth®-connected
- Get absolute protection from cross-contamination with **MICROMAN® E** and **Capillary Piston (CP) tips**
- **PIPETMAN® M** 1200 µL can be used for the preparation of KingFisher RNA extraction deep well plates
- Gilson's Accredited **Pipette Service Centers** can provide onsite pipette clinics or back to base service programs to the exact level and frequency of service and calibration required by your facility



### Connected Products

- **PIPETMAN® M Connected** and **TRACKMAN® Connected** offer enhanced manual pipetting with the ability to add sample traceability in conjunction with offer enhanced pipetting.
- Full range of programmable, electronic pipettes
- **PIPETMAN M Connected** works in conjunction with **TRACKMAN Connected** tablet and accessories
- Full traceability for transfers from tubes to plates
- qPCR template to plan and execute your qPCR or RT-LAMP test
- Results saved in **SciNote**'s electronic lab notebook (ELN)



### Pipette Tips

Either for air-displacement or positive-displacement pipettes, we offer an extensive range of tips. From standard grade to high purity sterile filter tips, our easy-to-identify packaging fit your application and your needs, ensuring sample integrity within your workflow.



Find more tools and resources for the fight against COVID-19 at [www.gilson.com](http://www.gilson.com).

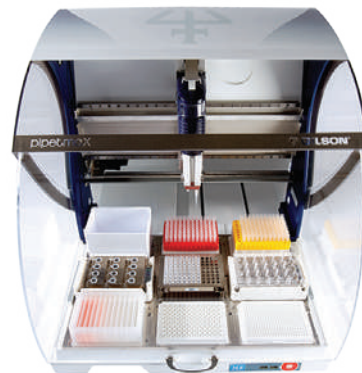




## AUTOMATED LIQUID HANDLING

**PIPETMAX®** helps automate many COVID-19 protocols, freeing up your time for other laboratory tasks.

- Low-cost entry-level automation
- qPCR Assistant enables you to design and run your qPCR COVID-19 tests automatically. The Protocol Builder allows to easily build protocols for any methods
- New 4x1200 pipette head enables fast sample transfers from tubes to plates
- Bespoke PCR cabinet with UV light and HEPA filtration
- Final report tracks can be directly imported into your thermocycler

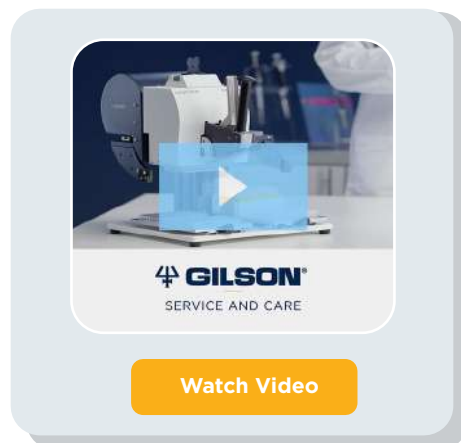


We offer a customizable, automated viral transport media system that fits your budget.

- Compact, low-cost tube filling system
- Flexible tube/vial/plate holders
- Peristaltic pumping technology for dispensing
- Small footprint for use in biosafety cabinets
- Quick start-up and installation
- Easy-to-sterilize flow path for minimized contamination

## INSTRUMENT SERVICE

Keep your instruments running like new with our preventative maintenance programs, extended warranty contracts, rapid in-house or onsite repair service and performance verification.



## BENCHTOP PRODUCTS

Our flexible, low-cost benchtop products include dry baths, vortexers, and centrifuges.

### Dry Baths

- For heat inactivation of the virus
- RT-LAMP test development

### Plate and Tube Centrifuge

- To mix samples and reagents
- To remove air bubbles from PCR plates

### Vortex Mixers

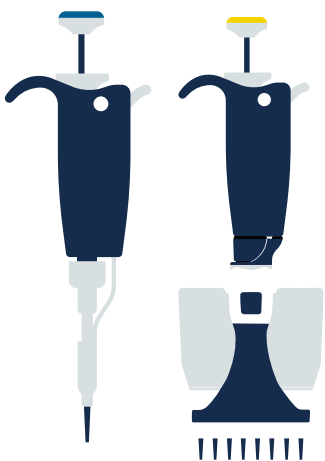
- High-speed mixing of samples and reagents
- Mixing of Mastermix components
- Mixing of sample and lysis buffer



# SERVICE EXPERTS READY TO HELP

## WE'RE HERE TO HELP

We are committed to the highest caliber of quality and complete customer satisfaction with our suite of products and services. This commitment doesn't end with your purchase—it only just begins. We provide custom solutions to help you meet a wide range of laboratory requirements including: service, preventative maintenance, calibration, and general product support. Gilson has dedicated service, support, and training teams worldwide to help you maintain maximum performance of your instruments, make your lab life easier, and ensure reliability of your data.



### MANUAL LIQUID HANDLING

#### Have our Expert Technicians Restore your Pipettes

Gilson is the expert on pipettes with over 50 years of experience in the industry. Regular maintenance of your pipettes ensures they operate within specification and deliver reproducible data with the accuracy you need. Regular service also helps minimize downtime in your lab, reduces the likelihood of unplanned, costly repairs, and increases the lifespan of your pipettes. Gilson service technicians are factory trained and use manufacturer parts along with proprietary software, such as Gilson Volumetrics™. Gilson Volumetrics utilizes automatic data transfer from our analytical balances and environmental probes to generate your service documentation with the utmost attention to detail and accuracy of data. Gilson is an ISO 9001-certified company and ISO 17025-accredited service is available throughout the organization.



### AUTOMATED LIQUID HANDLING

#### Avoid Unexpected System Downtime and Assure Accuracy

Keep your instruments running like new by signing up for preventative maintenance services. With regularly scheduled preventative maintenance, you'll extend the life of your instruments and save time and money by avoiding unexpected interruptions to your work. Additionally, you can have confidence in the accuracy and reliability of your results because we'll ensure your instruments are operating within original specifications.



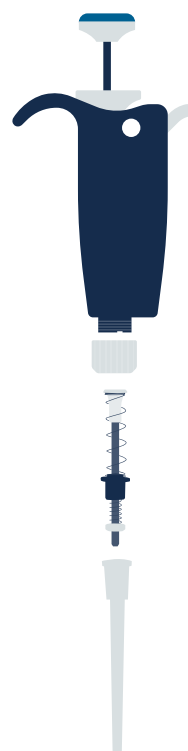
# SERVICES & SUPPORT

## QUALITY PIPETTE SERVICE MADE EASY

Never question the integrity of your samples. Our flexible, tiered service level offerings, along with the option for ISO 17025 accredited service, are tailored to fit your lab's needs. By regularly servicing your pipettes, you can minimize unplanned, costly repairs while increasing the lifespan of your pipettes.

### Quality Pipette Service Made Easy

Never question the integrity of your samples. Our flexible, tiered service level offerings, along with the option for ISO 17025 accredited service, are tailored to fit your lab's needs. By regularly servicing your pipettes, you can minimize unplanned, costly repairs while increasing the lifespan of your pipettes.



WHAT'S INCLUDED	LITE	PRO	PREMIUM
Visual & Functional Inspection	●	●	●
Internal & External Cleaning	●	●	●
Leak Test	●	●	●
Gravimetric Check	●	●	●
Preventative Maintenance	●	●	●
Re-grease As Needed	●	●	●
Pipette Label	●	●	●
Mail-In or Onsite Service Available	●	●	●
Calibration and Detailed Certificate		●	●
ISO 17025 Calibration Available		●	●
Lifetime Warranty			●
Free Repairs			●

### ISO 17025 Accredited Service Available

Gilson's ISO 17025 accredited calibration labs can offer additional reporting on your calibration certificates for maximum traceability, perfect for GLP/GMP compliant labs. We can provide ISO 17025 compliant service both in our dedicated Service Centers as well as on-site in your lab. You can be sure your pipettes maintain their original accuracy, precision, and performance capabilities.

### Ensure Accuracy and Reliability for your Instruments & Systems

Keep your instruments running like new by signing up for preventative maintenance services with our team of expert technicians. With regularly scheduled preventative maintenance, you'll extend the life of your systems and save time and money by avoiding unexpected interruptions to your work. Additionally, you can have confidence in the accuracy and reliability of your results because we'll ensure your instruments are operating within original specifications.



These pipette service offerings are only available in select locations. Visit [www.gilson.com](http://www.gilson.com) to learn more about our service and support options for your pipettes, instruments, and lab systems.



# OEM CAPABILITIES

## ORIGINAL EQUIPMENT MANUFACTURER PRODUCTS

Bring your ideas to market faster and with lower development and manufacturing costs by becoming an Original Equipment Manufacturer (OEM) partner with Gilson. We provide reliable and precise liquid handling components or complete systems that can be easily integrated into your core instrument, with support from a worldwide network you can depend on. Our philosophy is simple: build and support relationships that are as strong and reliable as our products.

### Get to Market Faster with Our OEM Solutions

As a partner with Gilson, you will work closely with our research and development scientists and engineers and draw on their technical expertise to solve problems and develop your product. From proposal development to finished product and beyond, our team of experts is here to help you every step of the way.



Bring Us  
Your Idea



Partner  
with Gilson

### Customization Capabilities

Draw on our proven experience and strong engineering and manufacturing capabilities to help develop your custom product. We offer expertise and assistance throughout the entire process—from development and integration of the product, to support and on-going training.



Fast Product  
Development



On-Time  
Delivery

### KEY BENEFITS

- Custom Products
- Software Control Options
- Fully Tested and Validated Product
- Custom Branding
- Outstanding Service and Support
- Modular Design for Easy Integration
- ISO 9001 Certified
- Regulatory Compliance
- Custom Packaging and Literature



Visit [www.gilson.com](http://www.gilson.com) to learn more about our OEM capabilities.





### **Highly Customizable Automated Liquid Handling Systems to Fit your Exact Needs**

Gilson can provide standard liquid handling instruments to highly customized instrumentation across a wide variety of applications. Customization can be applied to simple, small components or to complete liquid handlers tailored to your unique specifications. Gilson has the liquid handling solutions to meet your requirements. Whether you want to aspirate, collect, dispense, inject, mix, or pump liquids, we can provide reliable, quality OEM products to fit your application.



### **Increase your Brand Awareness with Value Added Manual Liquid Handling Products**

Gilson offers the ability to help increase your brand awareness with value added products. As an industry leader in manual pipetting, we can provide customized tools that deliver the precise control needed for accurate sample and reagent volume transfers. We offer a variety of pipettes in a range of ergonomic designs and volume sizes, as well as pipette controllers, tips, and accessories that enhance the pipetting experience and provide reproducible results. Our OEM/PL pipette is a genuine Gilson product providing the “Best Value” combination of quality, features, service, and price. Additionally, our Account Managers can help you align your company vision with product offerings that can be customized to increase your recognition in the market.



### **Automate Your Kits Through a Value Added Partnership (VAP)**

The Value Added Partnership (VAP) is a shared cooperation in which Gilson maintains ownership of installation and support at your customers’ sites. Our VAP option is ideal for reagent manufacturers who wish to offer a complete, automated assay method to their customers without investing in sales or hardware support. In a VAP, you will work with our technical team to automate your method and validate your protocol on a specified Gilson liquid handling system. This shared cooperation allows you to benefit from our technical expertise and global coverage while increasing your kit and consumable revenue.

# LIQUID HANDLING

## Trusted Results Begin with Trusted Liquid Handling Tools

Gilson liquid handling tools deliver the precise control you need for sample and reagent volume transfers, ensuring reproducible results while making life in the lab easier. Beginning with the legendary PIPETMAN® technology, our liquid handling tools have evolved with your needs. Ergonomically designed with scientists like you in mind, we offer durable solutions from manual, single channel units to completely automated liquid handling systems.



### PIPETTE SELECTION GUIDE

	Description	Benefits	Throughput	Comfort
Single Channel, Air-displacement	PIPETMAN® M  PIPETMAN® M Connected	<ul style="list-style-type: none"> <li>Ease-of-Use</li> <li>On-Target Performance</li> <li>PIPETMAN® M Connected Makes Manual Processes Verifiable</li> </ul>	L—M—H Medium to High	✓✓✓✓
	PIPETMAN® L 	<ul style="list-style-type: none"> <li>Performance and Comfort</li> <li>Secure Pipetting</li> <li>Fully Autoclavable</li> </ul>	L—M—H Medium to High	✓✓✓✓
	PIPETMAN® G 	<ul style="list-style-type: none"> <li>Minimized Pipetting Forces</li> <li>Reliable Results</li> <li>Built-to-Last and Convenient</li> </ul>	L—M—H Low to Medium	✓✓✓
	PIPETMAN® Classic 	<ul style="list-style-type: none"> <li>Built-to-last</li> <li>Extremely Easy to Maintain</li> </ul>	L—M—H Low to Medium	✓
Multichannel, Air-displacement	PIPETMAN® M  PIPETMAN® M Connected	<ul style="list-style-type: none"> <li>Ease-of-Use</li> <li>On-Target Performance</li> <li>PIPETMAN® M Connected Makes Manual Processes Verifiable</li> </ul>	L—M—H Medium to High	✓✓✓✓
	PIPETMAN® L 	<ul style="list-style-type: none"> <li>Performance and Comfort</li> <li>Secure Pipetting</li> <li>Fully Autoclavable</li> <li>Newest Models Equipped with V-rings Fit Most Tip Brands</li> </ul>	L—M—H Medium to High	✓✓✓✓
	PIPETMAN® G 	<ul style="list-style-type: none"> <li>Minimized Pipetting Forces</li> <li>Reliable Results</li> <li>Built-to-Last and Convenient</li> </ul>	L—M—H Low to Medium	✓✓
Positive-displacement	MICROMAN® E 	<ul style="list-style-type: none"> <li>Reliable Results Even with Non-Aqueous Liquids</li> <li>Overall Protection</li> <li>Designed with Comfort in Mind</li> </ul>	L—M—H Low to Medium	✓✓✓
Semi-auto	PLATEMASTER® 	<ul style="list-style-type: none"> <li>Save Time and Increase your Productivity</li> <li>Simplifies Sample Prep</li> <li>Convenient for any Microplate Application</li> </ul>	L—M—H High	✓✓✓✓
Automated	PIPETMAX® 	<ul style="list-style-type: none"> <li>Upgrade to Automation for Reliable, Accurate Pipetting</li> <li>Free Yourself from Tedious Sample Prep Work</li> <li>Stay Flexible—for Now and for the Future</li> <li>PIPETMAN® Inside</li> </ul>	L—M—H High	✓✓✓✓



## PIPETTE FAMILIES



### What are Manual Air-Displacement Pipettes?

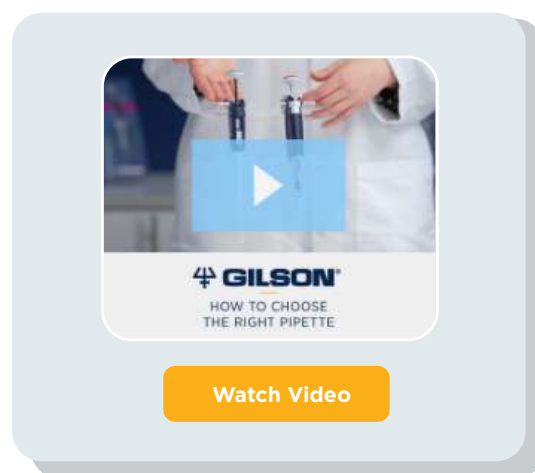
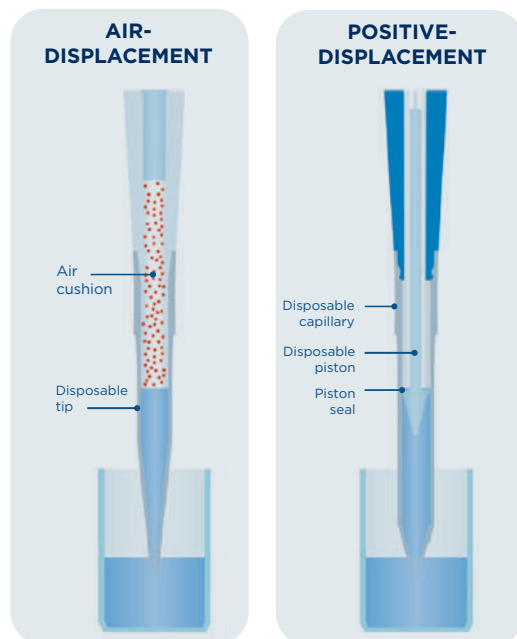
Air-displacement pipettes are very accurate for standard pipetting applications. The piston, integrated in the lower part of the pipette, moves the liquid under the action of an air cushion (called dead volume) between the pipette and the liquid sample. It is recommended to use an air-displacement pipette with aqueous and non-viscous samples. Temperature and atmospheric pressure, as well as the specific weight and viscosity of the solution, can affect the performance of air-displacement pipettes.

### What are Electronic Air-Displacement Pipettes?

Electronic pipettes work like manual air-displacement pipettes under the action of an air cushion. The manual movement of the piston is carried out by an electronic motor, requiring virtually zero pipetting forces. They decrease the risk of RSI-type injuries caused by repetitive pipetting and improve comfort as well as reproducibility at the bench.

### What are Positive-Displacement Pipettes?

Positive-displacement technology is ideal when working with infectious, viscous, foaming, hot, cold, or volatile liquids because the disposable piston within the capillary piston (CP) tip is in direct contact with the sample. The CP technology thus removes any air cushion inside the pipette and ensures the volume accuracy is not affected by the fluid's properties. This also helps prevent contamination and protects both the user and the pipette.



## The Right Choice for your Liquid Handling

Liquid Types	Applications	Your Gilson Solutions	Associated Gilson Consumables
Aqueous (ex. water, sucrose, Tris, buffer with a pH of 7)	Biology Biochemistry Clinical assays and immunoassays Cell culture Analytical chemistry	PIPETMAN® Classic PIPETMAN® G PIPETMAN® L PIPETMAN® M PIPETMAN® M Connected	PIPETMAN® DIAMOND Tips
Viscous (ex. glycerol, surfactants, oil)	Molecular Biology Petrochemistry Point of Care Diagnostic Pharmaceutical Cosmetics Environment Food Quality Control	MICROMAN® E DISTRIMAN®	Capillary Pistons DISTRITIPS®
Volatile (ex. ethanol, hexane, formaldehyde)			
Hot or cold			
Foaming			
Contaminated or toxic (ex. blood, infectious bacteria or viruses, hazardous radioactive isotopes)			
Corrosive (ex. hydrochloric or sulfuric acid)			

## MAKE YOUR LAB AS SMART AS YOUR SCIENCE

TRACKMAN® Connected is a tablet with exclusive applications and accessories that make pipetting on different labware more reliable, improving the efficiency and traceability of your experiment.



### Boost Your Experiment Reliability

When paired with PIPETMAN® M Connected, the installed PipettePilot® app guides you through your pipetting protocol. The app displays where, when, and how much to pipette with real-time interactions to prevent errors.

### Get Immediate Reproducibility

With the digitally documented protocol, your team can be confident that a protocol is being executed the same each time.

### Improve the Traceability of your Experiment

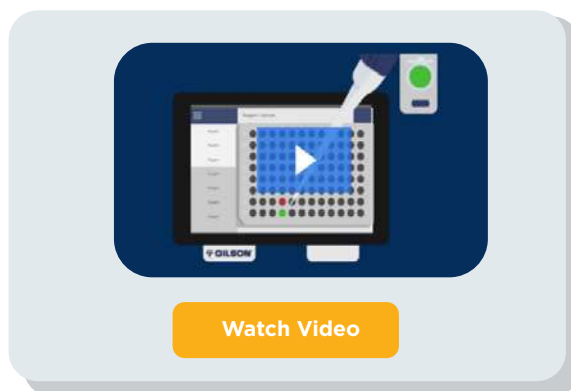
Integrate connected tools into your protocols in a safe and convenient way.

TRACKMAN Connected offers complete traceability of your experiments by recording pipetting actions and environmental conditions.

### Access Pipette Analytics and Calibration History



PipetteScope® informs you exactly when your pipette needs to be calibrated. Through the app, you can easily request a calibration appointment and also view service history reports in one central location. PipetteScope gives you instant access to the pipette usage analytics as well as access to the user guide.



Find more tools and resources at [www.gilson.com](http://www.gilson.com).



Please contact your local Gilson sales representative to find out about the availability of this product in your country.







## INSIDE YOUR KIT

### Tablet with PipettePilot® and PipetteScope® Apps

Interact with all your apps at the bench with the tablet included in your kit. The tablet comes preloaded with PipettePilot to create and track pipetting tasks. The app displays where and when to pipette with real time interactions to prevent pipetting errors and provides you with a report for complete traceability of your experiment.

Our other application, PipetteScope, helps you keep tabs on your pipette last calibration, user's guide, and other useful pipetting metrics.

### Environment Sensor

Monitor temperature, pressure, and humidity during your experiment with your environment sensor.

### Benchtop Pipetting Accessories

Get all the accessories to integrate your tablet at the bench in a safe way: microplate holder, tempered glass screen protector, 5V power adapter, microplate adapter, and strip adapters.

## Pair it with PIPETMAN® M Connected

Explore new possibilities in protocol execution assistance, traceability, and data acquisition through its Bluetooth® connection to Gilson applications. For more information about PIPETMAN M Connected, refer to [page 14](#).



Full range of accessories can be found on page 26.

## Make Pipetting Easier for Your Molecular Biology Applications

We've worked closely with QIAGEN to program their gold-standard protocols into TRACKMAN Connected to reduce errors and bring greater traceability to your molecular biology applications.

Depending on your protocol needs, we have three TRACKMAN Connected Starter Kits available: Single Channel, Multichannel, and Pro. Each starter kit includes PIPETMAN M Connected pipettes, TRACKMAN Connected tablet and accessories, and tips.

TRACKMAN® CONNECTED	
Model	Part Number
TRACKMAN Connected EU Plug	FB1020
TRACKMAN Connected UK Plug	FB1021
TRACKMAN Connected US Plug	FB1022

TRACKMAN® CONNECTED STARTER KITS	
Model	Part Number
TRACKMAN Connected Starter Kit Single Channel (EU)	FB10200
TRACKMAN Connected Starter Kit Single Channel (UK)	FB10201
TRACKMAN Connected Starter Kit Single Channel (US)	FB10202
TRACKMAN Connected Starter Kit Multichannel (EU)	FB10210
TRACKMAN Connected Starter Kit Multichannel (UK)	FB10211
TRACKMAN Connected Starter Kit Multichannel (US)	FB10212
TRACKMAN Connected Starter Kit Pro (EU)	FB10220
TRACKMAN Connected Starter Kit Pro (UK)	FB10221
TRACKMAN Connected Starter Kit Pro (US)	FB10222



Visit [www.gilson.com](http://www.gilson.com) to learn more about TRACKMAN Connected Starter Kits.

# pipetman®

M CONNECTED

## PIPETTE SMARTER. REPORT FASTER. CONFIDENTLY.

PIPETMAN® M Connected is an electronic, Bluetooth®-enabled pipette that offers accuracy and precision in both standard and repetitive pipetting modes. Requiring virtually no pipetting forces to aspirate and dispense samples,

PIPETMAN M Connected helps reduce pipetting fatigue and increase pipetting efficiency. PIPETMAN M Connected is available in 20 models, covering a volume range from 0.5 µL to 10 mL for single channel models, and 0.5 µL to 1200 µL for multichannel models.

### Make Manual Processes Verifiable

With PIPETMAN M Connected, explore new possibilities in protocol execution assistance and data acquisition through the Bluetooth® connection to Gilson applications. The pipette interacts in real time with your TRACKMAN® Connected system for increased accuracy and efficiency in both standard and repetitive modes.

### GILSON APPLICATIONS

#### PipettePilot®

The PipettePilot app comes preloaded on the TRACKMAN Connected tablet. The app displays where and when to pipette in real time to prevent pipetting errors. The app also provides you with a report for complete traceability of your experiment.

#### PipetteScope®

With PipetteScope, know exactly when your pipette needs to be calibrated, request a calibration appointment, and view service history reports, all in one location. Additionally, with the app, you'll gain visibility into your pipette's usage analytics and get quick access to user's guides. Download it for free on Google Play.

### PIPETMAN M Connected Software

Executing custom protocols has never been easier. PIPETMAN M Connected Software allows you to create, save, and transfer up to ten custom protocols into PIPETMAN M Connected.

Download it for free on [www.gilson.com](http://www.gilson.com).



Please contact your local Gilson sales representative to find out about the availability of this product in your country.



PIPETMAN® M CONNECTED SINGLE CHANNEL										
Model	PIPETMAN DIAMOND Tips		Part Number	Gilson Specifications				ISO 8655-2		
				Standard PIPET mode				REPETITIVE mode volume	Systematic error (µL)	Random error (µL)
				Volume Range	Volume (µL)	Systematic error (µL)	Random error (µL)			
 P10M	D10 DL10	DF10ST DFL10ST	F81040	0.5-10 µL	0.5 1 5 10	± 0.040 ± 0.025 ± 0.060 ± 0.080	≤ 0.013 ≤ 0.012 ≤ 0.020 ≤ 0.025	0.5-10 µL	± 0.12 ± 0.12 ± 0.12 ± 0.12	≤ 0.08 ≤ 0.08 ≤ 0.08 ≤ 0.08
 P20M	D200	DF30ST	F81041	2-20 µL	2 10 20	± 0.075 ± 0.100 ± 0.150	≤ 0.025 ≤ 0.035 ≤ 0.050	2-20 µL	± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1
 P100M	D200	DF100ST	F81042	5-100 µL	5 10 50 100	± 0.35 ± 0.30 ± 0.38 ± 0.40	≤ 0.10 ≤ 0.10 ≤ 0.12 ≤ 0.15	5-100 µL	± 0.8 ± 0.8 ± 0.8 ± 0.8	≤ 0.3 ≤ 0.3 ≤ 0.3 ≤ 0.3
 P200M	D200 D300	DF200ST DF300ST	F81043	20-200 µL	20 100 200	± 0.40 ± 0.80 ± 1.00	≤ 0.15 ≤ 0.22 ≤ 0.26	5-200 µL	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
 P300M	D200 D300	DF200ST DF300ST	F81044	20-300 µL	20 30 150 300	± 0.80 ± 0.70 ± 0.90 ± 1.05	≤ 0.16 ≤ 0.20 ≤ 0.23 ≤ 0.30	10-300 µL	± 4.0 ± 4.0 ± 4.0 ± 4.0	≤ 1.5 ≤ 1.5 ≤ 1.5 ≤ 1.5
 P1200M	D1000 D1200	DF1000ST DF1200ST	F81045	100-1200 µL	100 120 600 1200	± 2.5 ± 2.4 ± 3.6 ± 6.0	≤ 0.4 ≤ 0.4 ≤ 0.8 ≤ 1.2	20-1200 µL	± 16 ± 16 ± 16 ± 16	≤ 6.0 ≤ 6.0 ≤ 6.0 ≤ 6.0
 P5000M	D5000		F81046	500-5000 µL	500 2500 5000	± 10 ± 15 ± 25	≤ 2 ≤ 4 ≤ 7	100-5000 µL	± 40 ± 40 ± 40	≤ 15.0 ≤ 15.0 ≤ 15.0
 P10mLM	D10mL		F81047	1-10 mL	1 mL 5 mL 10 mL	± 25 ± 30 ± 50	≤ 4 ≤ 8 ≤ 12	200 µL-10 mL	± 60 ± 60 ± 60	≤ 30.0 ≤ 30.0 ≤ 30.0
PIPETMAN® M CONNECTED MULTICHANNEL										
 P8x10M	D10 DL10	DF10ST DFL10ST	F81048	0.5-10 µL	0.5 1 5 10	± 0.05 ± 0.04 ± 0.08 ± 0.10	≤ 0.02 ≤ 0.02 ≤ 0.04 ≤ 0.06	0.5-10 µL	± 0.24 ± 0.24 ± 0.24 ± 0.24	≤ 0.16 ≤ 0.16 ≤ 0.16 ≤ 0.16
 P12x10M			F81049							
 P8x20M	DL10 D200	DFL10ST DF30ST	F81050	1-20 µL	1 2 10 20	± 0.08 ± 0.09 ± 0.15 ± 0.25	≤ 0.05 ≤ 0.06 ≤ 0.10 ≤ 0.12	1-20 µL	± 0.4 ± 0.4 ± 0.4 ± 0.4	≤ 0.2 ≤ 0.2 ≤ 0.2 ≤ 0.2
 P12x20M			F81051							
 P8x100M	D200	DF100ST	F81052	10-100 µL	10 50 100	± 0.25 ± 0.50 ± 0.80	≤ 0.14 ≤ 0.20 ≤ 0.25	5-100 µL	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
 P12x100M			F81053							
 P8x200M	D200 D300	DF100ST DF200ST DF300ST	F81054	20-200 µL	20 100 200	± 0.50 ± 1.00 ± 2.00	≤ 0.16 ≤ 0.30 ≤ 0.50	5-200 µL	± 3.2 ± 3.2 ± 3.2	≤ 1.2 ≤ 1.2 ≤ 1.2
 P12x200M			F81055							
 P8x300M	D200 D300	DF200ST DF300ST	F81056	10-300 µL	10 30 150 300	± 1.00 ± 1.00 ± 1.50 ± 2.40	≤ 0.18 ≤ 0.18 ≤ 0.375 ≤ 0.45	10-300 µL	± 8.0 ± 8.0 ± 8.0 ± 8.0	≤ 3.0 ≤ 3.0 ≤ 3.0 ≤ 3.0
 P12x300M			F81057							
 P8x1200M	D1200	DF1200ST	F81058	50-1200 µL	50 120 600 1200	± 4.0 ± 4.0 ± 6.0 ± 9.6	≤ 0.7 ≤ 0.7 ≤ 1.5 ≤ 1.8	50-1200 µL	± 32 ± 32 ± 32 ± 32	≤ 12 ≤ 12 ≤ 12 ≤ 12
 P12x1200M			F81059							

Gilson maximum permissible errors are guaranteed only when PIPETMAN pipettes are used with the recommended PIPETMAN DIAMOND Tips.

Under these conditions, Gilson volumetric specifications in standard pipetting (PIPET mode) are guaranteed with a performance exceeding ISO 8655-2 recommendations for this mode. In the absence of ISO recommendations for repetitive pipetting mode for air-displacement pipettes, Gilson volumetric specifications for repetitive pipetting (REPETITIVE mode) are guaranteed within ISO 8655-2 recommendations for standard pipetting (Cf. ISO 8655-2 table 1).



Full range of accessories can be found on page 26.

## GUARANTEED PERFORMANCE WITH OUTSTANDING ACCURACY

The PIPETMAN® M electronic pipette combines the simplicity of a mechanical pipette with the consistency of an electronic liquid handling tool. The PIPETMAN M range has been designed for guaranteed accuracy and precision in both standard and repetitive modes for reliable sample preparation.

### On-Target Performance

Trust your results with guaranteed performance in both standard and repetitive pipetting modes.

### Pipetting Comfort

Lightweight and perfectly balanced with low ejection and volume setting forces, for hours of pipetting comfort.





















### Ease-of-Use

With a streamlined user interface and four pipetting modes, control of your sample prep is at your fingertips. Switch to custom mode to execute your own protocol transferred from the PIPETMAN M Software.



PIPETMAN M is only available in select locations. For more information, please contact your local Gilson representative.



PIPETMAN® M SINGLE CHANNEL										
Model	PIPETMAN DIAMOND Tips		Part Number	Gilson Specifications				ISO 8655-2		
				Standard PIPET mode				REPETITIVE mode volume	Systematic error (µL)	Random error (µL)
				Volume Range	Volume (µL)	Systematic error (µL)	Random error (µL)			
 P10M	D10 DL10	DF10ST DFL10ST	<b>F81022</b>	0.5-10 µL	0.5 1 5 10	± 0.040 ± 0.025 ± 0.060 ± 0.080	≤ 0.013 ≤ 0.012 ≤ 0.020 ≤ 0.025	0.5-10 µL	± 0.12 ± 0.12 ± 0.12 ± 0.12	≤ 0.08 ≤ 0.08 ≤ 0.08 ≤ 0.08
 P20M	D200	DF30ST	<b>F81023</b>	2-20 µL	2 10 20	± 0.075 ± 0.100 ± 0.150	≤ 0.025 ≤ 0.035 ≤ 0.050	2-20 µL	± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1
 P100M	D200	DF100ST	<b>F81013</b>	5-100 µL	5 10 50 100	± 0.35 ± 0.30 ± 0.38 ± 0.40	≤ 0.10 ≤ 0.10 ≤ 0.12 ≤ 0.15	5-100 µL	± 0.8 ± 0.8 ± 0.8 ± 0.8	≤ 0.3 ≤ 0.3 ≤ 0.3 ≤ 0.3
 P200M	D200 D300	DF200ST DF300ST	<b>F81024</b>	20-200 µL	20 100 200	± 0.40 ± 0.80 ± 1.00	≤ 0.15 ≤ 0.22 ≤ 0.26	5-200 µL	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
 P300M	D200 D300	DF200ST DF300ST	<b>F81014</b>	20-300 µL	20 30 150 300	± 0.80 ± 0.70 ± 0.90 ± 1.05	≤ 0.16 ≤ 0.20 ≤ 0.23 ≤ 0.30	10-300 µL	± 4.0 ± 4.0 ± 4.0 ± 4.0	≤ 1.5 ≤ 1.5 ≤ 1.5 ≤ 1.5
 P1200M	D1000 D1200	DF1000ST DF1200ST	<b>F81015</b>	100-1200 µL	100 120 600 1200	± 2.5 ± 2.4 ± 3.6 ± 6.0	≤ 0.4 ≤ 0.4 ≤ 0.8 ≤ 1.2	20-1200 µL	± 16 ± 16 ± 16 ± 16	≤ 6.0 ≤ 6.0 ≤ 6.0 ≤ 6.0
 P5000M	D5000		<b>F81016</b>	500-5000 µL	500 2500 5000	± 10 ± 15 ± 25	≤ 2 ≤ 4 ≤ 7	100-5000 µL	± 40 ± 40 ± 40	≤ 15.0 ≤ 15.0 ≤ 15.0
 P10mLM	D10mL		<b>F81017</b>	1-10 mL	1 mL 5 mL 10 mL	± 25 ± 30 ± 50	≤ 4 ≤ 8 ≤ 12	200 µL-10 mL	± 60 ± 60 ± 60	≤ 30.0 ≤ 30.0 ≤ 30.0
PIPETMAN® M MULTICHANNEL										
 P8x10M	D10 DL10	DF10ST DFL10ST	<b>F81025</b>	0.5-10 µL	0.5 1 5 10	± 0.05 ± 0.04 ± 0.08 ± 0.10	≤ 0.02 ≤ 0.02 ≤ 0.04 ≤ 0.06	0.5-10 µL	± 0.24 ± 0.24 ± 0.24 ± 0.24	≤ 0.16 ≤ 0.16 ≤ 0.16 ≤ 0.16
 P12x10M			<b>F81026</b>							
 P8x20M	DL10 D200	DFL10ST DF30ST	<b>F81027</b>	1-20 µL	1 2 10 20	± 0.08 ± 0.09 ± 0.15 ± 0.25	≤ 0.05 ≤ 0.06 ≤ 0.10 ≤ 0.12	1-20 µL	± 0.4 ± 0.4 ± 0.4 ± 0.4	≤ 0.2 ≤ 0.2 ≤ 0.2 ≤ 0.2
 P12x20M			<b>F81028</b>							
 P8x100M	D200	DF100ST	<b>F81018</b>	10-100 µL	10 50 100	± 0.25 ± 0.50 ± 0.80	≤ 0.14 ≤ 0.20 ≤ 0.25	5-100 µL	± 1.6 ± 1.6 ± 1.6	≤ 0.6 ≤ 0.6 ≤ 0.6
 P12x100M			<b>F81019</b>							
 P8x200M	D200 D300	DF100ST DF200ST DF300ST	<b>F81029</b>	20-200 µL	20 100 200	± 0.50 ± 1.00 ± 2.00	≤ 0.16 ≤ 0.30 ≤ 0.50	5-200 µL	± 3.2 ± 3.2 ± 3.2	≤ 1.2 ≤ 1.2 ≤ 1.2
 P12x200M			<b>F81030</b>							
 P8x300M	D200 D300	DF200ST DF300ST	<b>F81031</b>	10-300 µL	10 30 150 300	± 1.00 ± 1.00 ± 1.50 ± 2.40	≤ 0.18 ≤ 0.18 ≤ 0.375 ≤ 0.45	10-300 µL	± 8.0 ± 8.0 ± 8.0 ± 8.0	≤ 3.0 ≤ 3.0 ≤ 3.0 ≤ 3.0
 P12x300M			<b>F81032</b>							
 P8x1200M	D1200	DF1200ST	<b>F81020</b>	50-1200 µL	50 120 600 1200	± 4.0 ± 4.0 ± 6.0 ± 9.6	≤ 0.7 ≤ 0.7 ≤ 1.5 ≤ 1.8	50-1200 µL	± 32 ± 32 ± 32 ± 32	≤ 12 ≤ 12 ≤ 12 ≤ 12
 P12x1200M			<b>F81021</b>							

Gilson maximum permissible errors are guaranteed only when PIPETMAN pipettes are used with the recommended PIPETMAN DIAMOND Tips.

Under these conditions, Gilson volumetric specifications in standard pipetting (PIPET mode) are guaranteed with a performance exceeding ISO 8655-2 recommendations for this mode. In the absence of ISO recommendations for repetitive pipetting mode for air-displacement pipettes, Gilson volumetric specifications for repetitive pipetting (REPETITIVE mode) are guaranteed within ISO 8655-2 recommendations for standard pipetting (Cf. ISO 8655-2 table 1).

ACCESSORIES	
Description	Part Number
PIPETMAN M Power Carrousel	<b>FB1001</b>
PIPETMAN M Stand Adaptor	<b>F807023</b>



Full range of accessories can be found on page 26.



## INCREASED COMFORT AND PRODUCTIVITY

Designed for performance and comfort, PIPETMAN® L offers a comprehensive range of models, adapted to all your needs.

### Convenient Use

Lightweight and balanced, PIPETMAN L combines an ergonomic design with minimized pipetting forces, giving you the ability to pipette longer without fatigue.

Right-handed or left-handed? No problem. Adjust the location of the tip ejector to the most comfortable position for you.

### Secure Pipetting

Reduce pipetting errors and avoid accidental volume changes during pipetting cycles with a true volume-locking mechanism for improved accuracy and precision. PIPETMAN L variable volume models are all fully autoclavable without disassembly for maximum convenience and protection from cross-contamination.

### Extended Range & Tip Compatibility

Available as a fixed or variable volume, the PIPETMAN L line covers a full volume range from 0.2 µL to 10 mL for single channel models, and from 0.5 µL to 1200 µL for multichannel models. Precise, accurate, and reliable, they can be intensively used with confidence in many applications.

Four PIPETMAN L multichannel models (model name ending with VR), covering a volume range from 20 µL to 300 µL, are equipped with V-rings at the bottom of the tip holders for a proper fit with most tip brands.



Adjustable Tip Ejector

\*To determine if your PIPETMAN L is autoclavable, check to see if the serial number begins with NK or newer versions. If you're unsure, please contact your local Gilson representative.



Full range of accessories can be found on page 26.



PIPETMAN® L SINGLE CHANNEL—VARIABLE VOLUME MODELS

Model	PIPETMAN® DIAMOND Tips		Part Number		Volume (µL)	Maximum Permissible Errors			
			With Stainless Steel Ejector	With Plastic Ejector		Gilson		ISO 8655	
						Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
P2L	D10 DL10	DF10ST DFL10ST	FA10001M	FA10001P	0.2	± 0.024	≤ 0.012	± 0.08	≤ 0.04
					0.5	± 0.025	≤ 0.012	± 0.08	≤ 0.04
					1	± 0.027	≤ 0.013	± 0.08	≤ 0.04
					2	± 0.030	≤ 0.014	± 0.08	≤ 0.04
P10L	D10 DL10	DF10ST DFL10ST	FA10002M	FA10002P	0.5	± 0.040	≤ 0.016	± 0.12	≤ 0.08
					1	± 0.025	≤ 0.012	± 0.12	≤ 0.08
					5	± 0.075	≤ 0.030	± 0.12	≤ 0.08
					10	± 0.100	≤ 0.040	± 0.12	≤ 0.08
P20L	D200	DF30ST	FA10003M	FA10003P	2	± 0.10	≤ 0.030	± 0.2	≤ 0.1
					10	± 0.10	≤ 0.050	± 0.2	≤ 0.1
					20	± 0.20	≤ 0.060	± 0.2	≤ 0.1
P100L	D200	DF100ST	FA10004M	FA10004P	10	± 0.35	≤ 0.10	± 0.8	≤ 0.3
					50	± 0.40	≤ 0.12	± 0.8	≤ 0.3
					100	± 0.80	≤ 0.15	± 0.8	≤ 0.3
P200L	D200 D300	DF200ST DF300ST	FA10005M	FA10005P	20	± 0.50	≤ 0.20	± 1.6	≤ 0.6
					100	± 0.80	≤ 0.25	± 1.6	≤ 0.6
					200	± 1.60	≤ 0.30	± 1.6	≤ 0.6
P1000L	D1000 D1200	DF1000ST DF1200ST	FA10006M	FA10006P	100	± 3.0	≤ 0.6	± 8.0	≤ 3.0
					500	± 4.0	≤ 1.0	± 8.0	≤ 3.0
					1000	± 8.0	≤ 1.5	± 8.0	≤ 3.0
P5000L	D5000		FA10007		500	± 12	≤ 3	± 40	≤ 15.0
					2500	± 15	≤ 5	± 40	≤ 15.0
					5000	± 30	≤ 8	± 40	≤ 15.0
P10mLL	D10mL		FA10008		1000	± 30	≤ 6	± 60	≤ 30.0
					5000	± 40	≤ 10	± 60	≤ 30.0
					10000	± 60	≤ 16	± 60	≤ 30.0

PIPETMAN® L MULTICHANNEL MODELS

P8x10L	D10 DL10	DF10ST DFL10ST	FA10013	0.5	± 0.08	≤ 0.04	± 0.24	≤ 0.16
			FA10014	1	± 0.08	≤ 0.05	± 0.24	≤ 0.16
				5	± 0.20	≤ 0.10	± 0.24	≤ 0.16
P12x10L				10	± 0.20	≤ 0.10	± 0.24	≤ 0.16
P8x20L	DL10 D200	DFL10ST DF30ST	FA10009	2	± 0.10	≤ 0.08	± 0.4	≤ 0.2
			FA10010	10	± 0.20	≤ 0.10	± 0.4	≤ 0.2
				20	± 0.40	≤ 0.15	± 0.4	≤ 0.2
P12x20L								
P8x200L	D200	DF200ST DF300ST	FA10011	20	± 0.50	≤ 0.25	± 3.2	≤ 1.2
			FA10012	100	± 1.00	≤ 0.40	± 3.2	≤ 1.2
				200	± 2.00	≤ 0.50	± 3.2	≤ 1.2
P12x200L								
P8x200LVR	D200	DF200ST DF300ST	FA10035	20	± 0.50	≤ 0.25	± 3.2	≤ 1.2
			FA10036	100	± 1.00	≤ 0.40	± 3.2	≤ 1.2
				200	± 2.00	≤ 0.50	± 3.2	≤ 1.2
P12x200LVR								
P8x300L	D300	DF200ST DF300ST	FA10015	20	± 1.00	≤ 0.35	± 8.0	≤ 3.0
			FA10016	30	± 1.00	≤ 0.35	± 8.0	≤ 3.0
				150	± 1.50	≤ 0.60	± 8.0	≤ 3.0
P12x300L				300	± 3.00	≤ 1.00	± 8.0	≤ 3.0
P8x300LVR	D300	DF200ST DF300ST	FA10037	20	± 1.00	≤ 0.35	± 8.0	≤ 3.0
			FA10038	30	± 1.00	≤ 0.35	± 8.0	≤ 3.0
				150	± 1.50	≤ 0.60	± 8.0	≤ 3.0
P12x300LVR				300	± 3.00	≤ 1.00	± 8.0	≤ 3.0
P12x1200L	D1200	DF1200ST	FA10039	100	± 6.0	≤ 0.9	± 32	≤ 12.0
			FA10040	120	± 6.0	≤ 0.9	± 32	≤ 12.0
				600	± 8.0	≤ 1.2	± 32	≤ 12.0
P12x1200L				1200	± 10.0	≤ 1.5	± 32	≤ 12.0

Gilson maximum permissible errors are guaranteed only when PIPETMAN pipettes are used with the recommended PIPETMAN DIAMOND Tips. For a pipette with a plastic tip ejector, the part number ends with the letter P | For a pipette with a stainless steel tip ejector, the part number is ends with the letter M. P5000L and P10mLL are available with a plastic ejector only.

PIPETMAN® L KITS

Model*	Part Number	PIPETMAN L Models	PIPETMAN® DIAMOND Tips	Accessories
PIPETMAN L Starter Kit	F167350	P20L P200L P1000L	D200 D1000	3 SINGLE™ pipette holders 3 plastic ejectors 1 Gilson Guide to Pipetting 1 Two-minute inspection poster
PIPETMAN L Micro-volume Kit	F167550	P2L P10L P100L	DL10 D200	3 SINGLE™ pipette holders 3 plastic ejectors 1 Gilson Guide to Pipetting 1 Two-minute inspection poster
PIPETMAN L 4-pipette Kit	F167370	P2L P20L P200L P1000L	DL10 D200 D1000	4 SINGLE™ pipette holders 1 Gilson Guide to Pipetting 1 Two-minute inspection poster

\*PIPETMAN L are already equipped with stainless-steel tip ejectors. Plastic tip ejectors are provided as accessories in Micro-volume and Starter Kits.

## COMFORTABLE PIPETTING WITH SECURED FIXED VOLUME

The PIPETMAN® L Fixed pipettes offer the same comfortable, lightweight design as the variable volume models with a fixed volume that reduces the risk of any volume error during pipetting. This makes them an ideal choice for clinical diagnostics, quality control, and any routine testing applications even for non-trained lab technicians. Fifteen models of the air-displacement-based PIPETMAN L Fixed pipettes are available, covering a volume range of 1 µL to 5 mL.

PIPETMAN® L Fixed Models								
Model	Part Number	PIPETMAN® DIAMOND Tips		Volume (µL)	Gilson		ISO8655	
					Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
F1L	FA10017	D10 DL10	DF10ST DFL10ST	1	± 0.02	≤ 0.015	± 0.05	≤ 0.05
F2L	FA10018	D10 DL10	DF10ST DFL10ST	2	± 0.05	≤ 0.02	± 0.08	≤ 0.04
F5L	FA10019	D10 DL10	DF10ST DFL10ST	5	± 0.050	≤ 0.025	± 0.125	≤ 0.075
F10L	FA10020	D10 DL10	DF10ST DFL10ST	10	± 0.06	≤ 0.03	± 0.12	≤ 0.08
F20L	FA10021	D200	DF30ST	20	± 0.10	≤ 0.05	± 0.20	≤ 0.10
F25L	FA10022	D200	DF30ST	25	± 0.20	≤ 0.07	± 0.50	≤ 0.20
F50L	FA10023	D200	DF100ST	50	± 0.35	≤ 0.12	± 0.50	≤ 0.20
F100L	FA10024	D200	DF100ST	100	± 0.55	≤ 0.15	± 0.80	≤ 0.30
F200L	FA10025	D200	DF200ST	200	± 1.2	≤ 0.30	± 1.60	≤ 0.60
F250L	FA10026	D300	DF300ST	250	± 1.50	≤ 0.75	± 4.00	≤ 1.50
F300L	FA10027	D1000	DF1000ST	300	± 2.4	≤ 0.50	± 4.00	≤ 1.50
F400L	FA10028	D1000	DF1000ST	400	± 2.4	≤ 0.80	± 4.00	≤ 1.50
F500L	FA10029	D1000	DF1000ST	500	± 3.0	≤ 0.80	± 4.00	≤ 1.50
F1000L	FA10030	D1000	DF1000ST	1000	± 5.0	≤ 1.3	± 8.00	≤ 3.00
F5000L	FA10031	D5000		5000	± 20.0	≤ 7.0	± 40.00	≤ 15.00



Fixed volume PIPETMAN L are equipped with a plastic ejector. Depending on your needs and applications, metal ejectors are available as spare parts.



Please contact your local Gilson representative for more information.



Full range of accessories can be found on page 26.





## MINIMIZED PIPETTING FORCES

PIPETMAN® G offers one of the lowest pipetting forces commercially available. With a redesigned piston assembly system and high-quality piston grease, PIPETMAN G guarantees hours of comfortable pipetting.

### Reliable Results

PIPETMAN G relies on the legendary quality, accuracy, and precision of PIPETMAN, with reduced pipetting forces.








### Built-to-Last and Convenient

Made of PVDF and stainless steel, PIPETMAN G offers premium durability. The PIPETMAN G clip ejector allows for convenient access to serviceable parts.





Durable and reliable, they are available either in single or multichannel models equipped with metal tip ejectors.





PIPETMAN® G SINGLE CHANNEL								
Model	PIPETMAN® DIAMOND Tips		Part Number	Volume (µL)	Maximum Permissible Errors			
					Gilson		ISO 8655	
					Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
 P2G	D10 DL10	DF10ST DFL10ST	F144054M	0.2	± 0.024	≤ 0.012	± 0.08	≤ 0.04
				0.5	± 0.025	≤ 0.012	± 0.08	≤ 0.04
				1	± 0.025	≤ 0.012	± 0.08	≤ 0.04
				2	± 0.030	≤ 0.014	± 0.08	≤ 0.04
 P10G*	D10 DL10	DF10ST DFL10ST	F144055M	1	± 0.025	≤ 0.012	± 0.12	≤ 0.08
				5	± 0.075	≤ 0.030	± 0.12	≤ 0.08
				10	± 0.100	≤ 0.040	± 0.12	≤ 0.08
 P20G	D200	DF30ST	F144056M	2	± 0.10	≤ 0.030	± 0.2	≤ 0.1
				10	± 0.10	≤ 0.050	± 0.2	≤ 0.1
				20	± 0.20	≤ 0.060	± 0.2	≤ 0.1
 P100G	D200	DF100ST	F144057M	10	± 0.35	≤ 0.10	± 0.8	≤ 0.3
				50	± 0.40	≤ 0.12	± 0.8	≤ 0.3
				100	± 0.80	≤ 0.15	± 0.8	≤ 0.3
 P200G	D200 D300	DF200ST DF300ST	F144058M	20	± 0.50	≤ 0.20	± 1.6	≤ 0.6
				100	± 0.80	≤ 0.25	± 1.6	≤ 0.6
				200	± 1.60	≤ 0.30	± 1.6	≤ 0.6
 P1000G	D1000 D1200	DF1000ST DF1200ST	F144059M	100	± 3.0	≤ 0.6	± 8.0	≤ 3.0
				500	± 4.0	≤ 1.0	± 8.0	≤ 3.0
				1000	± 8.0	≤ 1.5	± 8.0	≤ 3.0
 P5000G**	D5000		F144066	500	± 12	≤ 3	± 40	≤ 15.0
				2500	± 15	≤ 5	± 40	≤ 15.0
				5000	± 30	≤ 8	± 40	≤ 15.0
 P10mLG**	D10mL		F144067	1000	± 30	≤ 6	± 60	≤ 30.0
				5000	± 40	≤ 10	± 60	≤ 30.0
				10000	± 60	≤ 16	± 60	≤ 30.0

PIPETMAN® G MULTICHANNEL								
Model	PIPETMAN® DIAMOND Tips		Part Number	Volume (µL)	Maximum Permissible Errors			
					Gilson		ISO 8655	
					Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
 P8x10G P12x10G	D10 DL10	DF10ST DFL10ST	F144068 F144069	1	± 0.08	≤ 0.05	± 0.24	≤ 0.16
				5	± 0.20	≤ 0.10	± 0.24	≤ 0.16
				10	± 0.20	≤ 0.10	± 0.24	≤ 0.16
 P8x20G P12x20G	DL10 D200	DFL10ST DF30ST	F144070 F144071	2	± 0.10	≤ 0.08	± 0.4	≤ 0.20
				10	± 0.20	≤ 0.10	± 0.4	≤ 0.20
				20	± 0.40	≤ 0.20	± 0.4	≤ 0.20
 P8x200G P12x200G	D200 D300	DF200ST DF300ST	F144072 F144073	20	± 0.50	≤ 0.25	± 3.2	≤ 1.2
				100	± 1.00	≤ 0.40	± 3.2	≤ 1.2
				200	± 2.00	≤ 0.50	± 3.2	≤ 1.2
 P8x300G P12x300G	D200 D300	DF200ST DF300ST	F144074 F144075	30	± 1.00	≤ 0.35	± 8.0	≤ 3.0
				150	± 1.50	≤ 0.60	± 8.0	≤ 3.0
				300	± 3.00	≤ 1.00	± 8.0	≤ 3.0

Gilson maximum permissible errors are guaranteed only when PIPETMAN® pipettes are used with the recommended PIPETMAN® DIAMOND Tips.  
 \*P10G model can be used up to 0.5 µL. | \*\* P5000G and P10mLG do not have tip ejectors.

PIPETMAN® G KITS				
Model*	Part Number	PIPETMAN G Models	PIPETMAN® DIAMOND Tips	Accessories
PIPETMAN G Starter Kit	F167900	P20G P200G P1000G	D200 D1000	3 SINGLE™ pipette holders 3 plastic ejectors 3 Comfort Handles Gilson Guide to Pipetting 1 Two-minute inspection poster
PIPETMAN G Micro-volume Kit	F167800	P2G P10G P100G	DL10 D200	3 SINGLE™ pipette holders 3 plastic ejectors Gilson Guide to Pipetting 1 Two-minute inspection poster
PIPETMAN G Large-volume Kit	F167920	P5000G P10mLG	-	2 bags of 10 filters
PIPETMAN G Four Pipette Kit	F167360	P2G P20G P200G P1000G	DL10 D200 D1000	4 SINGLE™ pipette holders 4 Comfort Handles Gilson Guide to Pipetting 1 Two-minute inspection poster

PLASTIC EJECTORS	
Model	Part Number
P2/P10 with adapter	F107027
P20	F107028
P100	F107029
P200	F107030
P1000	F107031



Full range of accessories can be found on page 26.

\*PIPETMAN G come equipped with stainless-steel tip ejectors. Plastic tip ejectors are provided as extra accessories in micro-volume and starter kits.

## THE WORLD PIPETTING STANDARD

The PIPETMAN® Classic line, one of the world standards in pipetting, offers a wide range of continuously adjustable, air-displacement pipettes with legendary accuracy and precision. The PIPETMAN Classic line is available in eight single channel models covering a range of volumes from 0.2 µL to 10 mL.

### Built to Last


Made of highly resistant materials like PVDF and stainless steel, PIPETMAN Classic offers uncontested durability and reliability. Built to last, it is the economical solution for years of pipetting.

### Extremely Easy to Maintain

Routine cleaning and maintenance are all that is required to keep PIPETMAN Classic in pristine condition for years.

The PIPETMAN Classic design allows for easy access to user-serviceable parts, along with a fully autoclavable tip holder and ejector.

### An Evolution

1969 The Original PIPETMAN	1972 PIPETMAN® Classic	2007 PIPETMAN® Neo	2011 PIPETMAN® G	2012 PIPETMAN® L
				
The PIPETMAN story began more than 50 years ago with the invention of the original PIPETMAN, the world's FIRST continuously adjustable variable volume pipette.	PIPETMAN Classic is one of the world standards in pipetting. It boasts accuracy, precision, and reliability.	PIPETMAN Neo contains all the benefits that built the reputation of the legendary PIPETMAN Classic, with lower pipetting forces.	PIPETMAN G provides the durability and dependable accuracy in results of the PIPETMAN Classic with the added bonus of increased comfort.	Built for traceability and comfort, PIPETMAN L is designed to increase daily productivity, giving you the ability to pipette longer without fatigue.



## PIPETMAN® CLASSIC SINGLE CHANNEL—VARIABLE VOLUME MODELS

Model	PIPETMAN® DIAMOND Tips		Part Number	Volume (µL)	Maximum Permissible Errors			
					Gilson		ISO 8655	
					Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
P2	D10 DL10	DF10ST DFL10ST	F144801	0.2	± 0.024	≤ 0.012	± 0.08	≤ 0.04
				0.5	± 0.025	≤ 0.012	± 0.08	≤ 0.04
				1	± 0.025	≤ 0.012	± 0.08	≤ 0.04
				2	± 0.030	≤ 0.014	± 0.08	≤ 0.04
P10	D10 DL10	DF10ST DFL10ST	F144802	1	± 0.025	≤ 0.012	± 0.12	≤ 0.08
				5	± 0.075	≤ 0.030	± 0.12	≤ 0.08
				10	± 0.100	≤ 0.040	± 0.12	≤ 0.08
P20	D200	DF30ST	F123600	2	± 0.10	≤ 0.030	± 0.2	≤ 0.1
				5	± 0.10	≤ 0.040	± 0.2	≤ 0.1
				10	± 0.10	≤ 0.050	± 0.2	≤ 0.1
				20	± 0.20	≤ 0.060	± 0.2	≤ 0.1
P100	D200	DF100ST	F123615	10	± 0.35	≤ 0.10	± 0.8	≤ 0.3
				50	± 0.40	≤ 0.12	± 0.8	≤ 0.3
				100	± 0.80	≤ 0.15	± 0.8	≤ 0.3
P200	D200 D300	DF200ST DF300ST	F123601	20	± 0.50	≤ 0.20	± 1.6	≤ 0.6
				100	± 0.80	≤ 0.25	± 1.6	≤ 0.6
				200	± 1.60	≤ 0.30	± 1.6	≤ 0.6
P1000	D1000 D1200	DF1000ST DF1200ST	F123602	100	± 3.0	≤ 0.6	± 8.0	≤ 3.0
				500	± 4.0	≤ 1.0	± 8.0	≤ 3.0
				1000	± 8.0	≤ 1.5	± 8.0	≤ 3.0
P5000*	D5000		F123603	500	± 12	≤ 3	± 40	≤ 15.0
				2500	± 15	≤ 5	± 40	≤ 15.0
				5000	± 30	≤ 8	± 40	≤ 15.0
P10mL*	D10mL		F161201	1000	± 30	≤ 6	± 60	≤ 30.0
				2000	± 30	≤ 6	± 60	≤ 30.0
				5000	± 40	≤ 10	± 60	≤ 30.0
				10000	± 60	≤ 16	± 60	≤ 30.0

Gilson maximum permissible errors are guaranteed only when PIPETMAN pipettes are used with the recommended PIPETMAN DIAMOND Tips.

\*P5000 and P10mL do not have tip ejectors.

## PIPETMAN® CLASSIC KITS

Model	Part Number	PIPETMAN Classic Models	PIPETMAN® DIAMOND Tips	Accessories
PIPETMAN Classic Starter Kit	F167300	P20 P200 P1000	D200 D1000	3 SINGLE™ pipette holders 1 Gilson Guide to Pipetting
PIPETMAN Classic Micro-volume Kit	F167500	P2 P10 P100	DL10 D200	3 SINGLE™ pipette holders 1 Gilson Guide to Pipetting
PIPETMAN Classic Large-Volume Kit	F167400	P5000 P10mL	-	2 bags of 10 filters
PIPETMAN Classic Four Pipette Kit	F167380	P2 P20 P200 P1000	DL10 D200 D1000	4 SINGLE™ pipette holders 4 PIPETMAN Comfort Handles 1 Gilson Guide to Pipetting 1 Two-minute inspection poster



Full range of accessories can be found on page 26.

# PIPETTE ACCESSORIES

## CARROUSEL™ PIPETTE STAND

Protects pipettes from shocks and contamination

Holds up to seven Gilson pipettes for space saving

### Ordering information

CARROUSEL, stand for 7 pipettes	F161401
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## SINGLE™ PIPETTE HOLDER

Holds your single or multichannel PIPETMAN®

Sticks to any smooth, dry surface

Prevents liquid from running inside shaft

### Ordering information

Single Pipette Holder	F161406
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## POWER CARROUSEL™

PIPETMAN® M and PIPETMAN® M Connected charging stand

Charges up to five pipettes at once in one hour

Always keeps your PIPETMAN M and PIPETMAN M Connected operational

### Ordering information

POWER CARROUSEL	FB1001
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## UNIVERSAL MULTICHANNEL STAND

Holds any brand of 8- or 12-channel pipettes securely

Compact design to save space

### Ordering information

Universal Multichannel Stand	F161417
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## GILSON REAGENT RESERVOIRS

Disposable, ideal for dispensing reagent with multichannel pipettes

25 mL and 50 mL available

### Ordering information

Reagent Reservoir 25 mL, 100	F267660
Reagent Reservoir 50 mL, 100	F267670



## COLORIS™ IDENTIFICATION CLIPS

Identify or personalize your PIPETMAN®

Write your name or application to avoid mix-ups and then snap into place

### Ordering information

10 Coloris Identification Clips, mixed colors	F161301
10 Coloris Identification Clips, red	F161302
10 Coloris Identification Clips, yellow	F161303
10 Coloris Identification Clips, green	F161304
10 Coloris Identification Clips, blue	F161305
10 Coloris Identification Clips, white	F161306



### COMFORT HANDLE

Clips on to PIPETMAN® Classic, PIPETMAN® Neo, and PIPETMAN® G models.

Reduces the force needed to grip the pipette for maximum comfort

#### Ordering information

COMFORT HANDLE pack of 3, blue	F161486
COMFORT HANDLE pack of 3, white	F161488
COMFORT HANDLE pack of 50, blue	F161485
COMFORT HANDLE pack of 50, white	F161487
COMFORT HANDLE stickers, 120	F161499



### PLASTIC EJECTORS

For PIPETMAN® Classic, PIPETMAN® G, and PIPETMAN® L models

#### Ordering information

Plastic ejector P2/P10 with adapter	F107027
Plastic ejector P20	F107028
Plastic ejector P100	F107029
Plastic ejector P200	F107030
Plastic ejector P1000	F107031



### JIMMY™ MICROTUBE OPENER

Clips on to pipette

Increases pipetting efficiency

Lessens the fatigue associated with manual tube opening

#### Ordering information

The JIMMY Microtube Opener	F144983
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### DISPOSABLE FILTERS

For PIPETMAN Classic, PIPETMAN G, and PIPETMAN L P5000 and P10mL models

#### Ordering information

Bag of 10 Filters for P5000/P10mL	F161280
Bag of 100 Filters for P5000/P10mL	F161241



### TRIO™ PIPETTE STAND

Safely stores and protects three PIPETMAN pipettes

Helps organize your workbench

#### Ordering information

TRIO Pipette Stand for 3 pipettes	F161405
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### PIPETMAN® M CONNECTED

Connect your PIPETMAN M Connected to your PC, through a Bluetooth® connection

#### Ordering information

Bluetooth® USB Dongle	F807027
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### HIGHEST QUALITY TIPS FOR SUPERIOR RESULTS

Not all pipette tips are created equal. Trust Gilson's PIPETMAN® DIAMOND Tips to deliver the accuracy and precision your experiments demand. All tips are manufactured using the highest quality materials and state-of-the-art manufacturing techniques so you can be assured of consistent lot-to-lot performance.

### Guarantee Your PIPETMAN® Results

PIPETMAN DIAMOND Tips are designed to fit your PIPETMAN perfectly. Using PIPETMAN DIAMOND Tips in conjunction with your Gilson pipette can guarantee maximum accuracy and precision.

### Affordable And Versatile For Every Application

Your needs, budget, and tip consumption vary according to your specific research activity. With our extensive range of packaging, PIPETMAN DIAMOND Tips are an affordable option for every lab and every application.

### Contamination-Free

Our tips are made of the highest-grade material within a fully traceable clean room environment, ensuring they offer low retention and are free of contaminants that can alter your experiments. From mold to bench, they are guaranteed, certified, and traceable to meet the most stringent demands in many applications.



### Choose the Right Tip for Your Needs

From purity level to volume range, this handy interactive tip selection guide will help you find the perfect tip for your application. Download now to get a clear view of our entire pipette tips offering.

GILSON TIPS SELECTION GUIDE											
We recommend this interactive matrix to help you in selecting the right tip for your instrument and application.											
Click on the columns to filter the tips by volume range, purity level, and application.											
Volume Range	Purity Level	Application	Material	Volume	Retention	Leakage	Tip Type	Tip Size	Tip Length	Tip Width	Tip Height
0.1-10 µl	High	PCR	Polystyrene	0.1, 0.2, 0.5, 1, 2, 5, 10	Low	Low	Standard	100, 200, 500, 1000	12.5, 17.5, 22.5, 27.5, 32.5, 37.5	1.8, 2.3, 2.8, 3.3, 3.8, 4.3	12.5, 17.5, 22.5, 27.5, 32.5, 37.5
0.1-10 µl	High	PCR	Polystyrene	0.1, 0.2, 0.5, 1, 2, 5, 10	Low	Low	Standard	100, 200, 500, 1000	12.5, 17.5, 22.5, 27.5, 32.5, 37.5	1.8, 2.3, 2.8, 3.3, 3.8, 4.3	12.5, 17.5, 22.5, 27.5, 32.5, 37.5
0.1-10 µl	High	PCR	Polystyrene	0.1, 0.2, 0.5, 1, 2, 5, 10	Low	Low	Standard	100, 200, 500, 1000	12.5, 17.5, 22.5, 27.5, 32.5, 37.5	1.8, 2.3, 2.8, 3.3, 3.8, 4.3	12.5, 17.5, 22.5, 27.5, 32.5, 37.5
0.1-10 µl	High	PCR	Polystyrene	0.1, 0.2, 0.5, 1, 2, 5, 10	Low	Low	Standard	100, 200, 500, 1000	12.5, 17.5, 22.5, 27.5, 32.5, 37.5	1.8, 2.3, 2.8, 3.3, 3.8, 4.3	12.5, 17.5, 22.5, 27.5, 32.5, 37.5

[Download Tip Selection Table](#)

## WIDE RANGE OF TIP PACKAGING

### BLISTER REFILL

Individually wrapped racks of tips that are convenient, clean, and eco-friendly

Ready to use, just peel the lid and insert into the empty box

Uses 45% less plastic than regular rack box

Fully autoclavable

Available as sterilized and filter tips



### TOWERPACK

A quick, easy, and affordable rack refill system

Uses 60% less space on your bench and 70% less plastic than regular rack boxes

The whole range of TOWERPACK fits the amazingly easy-to-use universal reload box

One-hand system operation

Fully autoclavable

Available sterilized



### TIPACK™

The design is more compact, convenient, ergonomic and eco-friendly

ROCKY RACK system and hinged 180° angled lid makes it extremely easy to fit tips on multichannel pipettes

Fully autoclavable

Available as sterilized and filter tips



### RELOAD PACK

Quickest way to reload empty box

Uses 70% less plastic, recyclable packaging is eco-friendly

Easy to store, takes up less bench space

Affordable and convenient

Fully autoclavable



### EASYPACK AND ECOPACK

Purchase in bulk and save money by simply reloading these tips into empty racks

Bags are sealed with rapid-sealing strip for easy access and to prevent contamination

Minimal waste

Fully autoclavable

EASYPACK: 5 bags x 200 tips

ECOPACK: 10 bags x 1000 tips



### STERILPACK

Individually wrapped sterilized tips

Complete protection from contaminants up to the moment of use

Wrapped in medical-grade quality plastic

Sterilization guaranteed for 5 years

400 individually wrapped sterilized tips



After your purchase, detailed quality and conformity information can be found on our quality certificates, available for download at <http://go.gilson.com/TIPQC>.



Download tip selection table at [www.gilson.com](http://www.gilson.com).

STANDARD PIPETMAN® DIAMOND TIPS						
	Description	Volume Range	Tip Length	Qty/Pack	Autoclavable Tips	Sterilized Tips
					Part Number	Part Number
RELOAD PACK	 DL10 RELOAD PACK	0.1-20 µL	45 mm	960	F167012	-
	 D200 RELOAD PACK	2-200 µL	51 mm	960	F167013	-
	 D1000 RELOAD PACK	100-1000 µL	66 mm	576	F167014	-
BLISTER REFILL	 DL10 BLISTER REFILL	0.1-20 µL	45 mm	960	F172200	F172201
	 D200 BLISTER REFILL	2-200 µL	51 mm	960	F172300	F172301
	 D300 BLISTER REFILL	10-300 µL	51 mm	960	F172400	F172401
	 D1000 BLISTER REFILL	100-1000 µL	66mm	960	F172500	F172501
	 D1200 BLISTER REFILL	100-1200 µL	84 mm	960	F172800	F172801
TIPACK	 D10 TIPACK	0.1-10 µL	30 mm	960	F171100	F171101
	 DL10 TIPACK	0.1-20 µL	45 mm	960	F171200	F171201
	 D200 TIPACK	2-200 µL	51 mm	960	F171300	F171301
	 D300 TIPACK	10-300 µL	51 mm	960	F171400	F171401
	 D1000 TIPACK	100-1000 µL	66 mm	960	F171500	F171501
	 D1200 TIPACK	100-1200 µL	84 mm	960	F171600	F171601
	 D5000 TIPACK	0.5-5 mL	10.4 cm	600	F161370	-
	 D10mL TIPACK	1-10 mL	16 cm	240	F161230	-
TOWERPACK	 D10 TOWERPACK	0.1-10 µL	30 mm	960	F167101	F167201
	 DL10 TOWERPACK	0.1-20 µL	45 mm	960	F167102	F167202
	 D200 TOWERPACK	2-200 µL	51 mm	960	F167103	F167203
	 D300 TOWERPACK	10-300 µL	51 mm	960	F167105	F167205
	 D1000 TOWERPACK	100-1000 µL	66 mm	672	F167104	F167204
ECOPACK	 D10 ECOPACK	0.1-10 µL	30 mm	10,000	F161630	-
	 DL10 ECOPACK	0.1-20 µL	45 mm	10,000	F161450	-
	 D200 ECOPACK	2-200 µL	51 mm	10,000	F161930	-
	 D300 ECOPACK	10-300 µL	51 mm	10,000	F161730	-
	 D1000 ECOPACK	100-1000 µL	66 mm	10,000	F161670	-
	 D1200 ECOPACK	100-1200 µL	84 mm	10,000	F161110	-
EASYPACK	 D10 EASYPACK (5 bags of 200)	0.1-10 µL	30 mm	1,000	F161631	-
	 DL10 EASYPACK (5 bags of 200)	0.1-20 µL	45 mm	1,000	F161451	-
	 D200 EASYPACK (5 bags of 200)	2-200 µL	51 mm	1,000	F161931	-
	 D300 EASYPACK (5 bags of 200)	10-300 µL	51 mm	1,000	F161731	-
	 D1000 EASYPACK (5 bags of 200)	100-1000 µL	66 mm	1,000	F161671	-
	 D1200 EASYPACK (5 bags of 200)	100-1200 µL	84 mm	1,000	F161111	-
	 D5000 EASYPACK (3 bags of 334)	0.5-5 mL	10.4 cm	1,002	F161571	-
	 D10mL EASYPACK (4 bags of 50)	1-10 mL	16 cm	200	F161210	-
STERIL PACK	 D200ST STERILPACK	2-200 µL	51 mm	400	-	F161330
	 D1000ST STERILPACK	100-1000 µL	66 mm	400	-	F161340

### PIPETMAN® DIAMOND FILTER TIPS

	Description	Volume Range	Tip Length	Qty/Pack	Sterilized Tips	
					Part Number	Part Number
BLISTER REFILL	DFL10ST BLISTER REFILL	0.1 - 10 µL	45 mm	960	F172203	
	DF30ST BLISTER REFILL	2 - 30 µL	51 mm	960	F172303	
	DF100ST BLISTER REFILL	10 - 100 µL	51 mm	960	F172403	
	DF200ST BLISTER REFILL	20 - 200 µL	51 mm	960	F172503	
	DF300ST BLISTER REFILL	10 - 300 µL	51 mm	960	F172703	
	DF1000ST BLISTER REFILL	100 - 1000 µL	66 mm	960	F172603	
	DF1200ST BLISTER REFILL	100 - 1200 µL	84 mm	960	F172803	
TIPACK	DF10ST Filter TIPACK	0.1 - 10 µL	30 mm	960	F171103	
	DFL10ST Filter TIPACK	0.1 - 10 µL	45 mm	960	F171203	
	DF30ST Filter TIPACK	2 - 30 µL	51 mm	960	F171303	
	DF100ST Filter TIPACK	10 - 100 µL	51 mm	960	F171403	
	DF200ST Filter TIPACK	20 - 200 µL	51 mm	960	F171503	
	DF300ST Filter TIPACK	10 - 300 µL	51 mm	960	F171603	
	DF1000ST Filter TIPACK	100 - 1000 µL	66 mm	960	F171703	
	DF1200ST Filter TIPACK	100 - 1200 µL	84 mm	960	F171803	



D10 are short collar tips. DL10 are long collar tips.

### EMPTY RELOAD BOXES

Description	Qty/Pack	Part Number
Universal Reload Box (1 rack) for TOWERPACK	1	F167100
DL10/D200 Empty Box for BLISTER REFILL and RELOAD Pack	2	F171204
D1000 Empty Box for BLISTER REFILL and RELOAD Pack	2	F171504

### EMPTY RELOAD RACKS

Description	Qty/Pack	Part Number
D10 Empty Racks for ECOPACK and EASYPACK	2	F171102
DL10 Empty Racks for ECOPACK and EASYPACK	2	F171202
D200 Empty Racks for ECOPACK and EASYPACK	2	F171302
D300 Empty Racks for ECOPACK and EASYPACK	2	F171402
D1000/D1200 Empty Racks for ECOPACK and EASYPACK	2	F171502
D5000 Empty Rack for ECOPACK and EASYPACK	1	F161360
D10mL Empty Rack for ECOPACK and EASYPACK	1	F161220



Universal Reload box for use with TOWERPACKS.

Empty Box for use with RELOAD PACK and BLISTER REFILL.

Empty Rack for use with ECOPACK and EASYPACK loose tips.

### BLISTER REFILL FOR PIPETMAX®-CERTIFIED 384-WELL

	Description	Volume Range	Tip Length	Qty/Pack	Autoclavable Tips	Sterilized Tips
					Part Number	Part Number
BLISTER REFILL	DSL10 BLISTER REFILL 384-Certified	0.1-20 µL	45 mm	960	F172210	F172211
	DS200 BLISTER REFILL 384-Certified	2-200 µL	51 mm	960	F172310	F172311
	DS1000 BLISTER REFILL 384-Certified	100-1000 µL	66 mm	960	F172510	F172511
	D1200 BLISTER REFILL 384-Certified	50-1000 µL	84 mm	960	-	F172800
FILTER BLISTER REFILL	DSFL10ST BLISTER REFILL 384-Certified	0.1-10 µL	45 mm	960	-	F172213
	DSF30ST BLISTER REFILL 384-Certified	2-30 µL	51 mm	960	-	F172313
	DSF200ST BLISTER REFILL 384-Certified	20-200 µL	51 mm	960	-	F172513
	DSF1000ST BLISTER REFILL 384-Certified	100-1000 µL	66 mm	960	-	F172613

PIPETMAN® EXPERT TIPS							
	Description	Volume Range	Tip Length	Pack		Case	
				Qty	Part Number	Qty	Part Number
FILTER TIPS	EF10ST Sterilized Filter Tips	0.1 - 10 µL	28.83 mm	960	F1731031	4,800	F1731032
	EFL10ST Sterilized Filter Tips	0.1 - 10 µL	45.34 mm	768	F1732031	3,072	F1732032
	EF20ST Sterilized Filter Tips	1 - 20 µL	51.44 mm	768	F1733031	3,072	F1733032
	EF100ST Sterilized Filter Tips	1 - 100 µL	51.44 mm	768	F1734031	3,072	F1734032
	EF200ST Sterilized Filter Tips	1 - 200 µL	58.57 mm	768	F1735031	3,072	F1735032
	EF300ST XL Sterilized Filter Tips	1 - 300 µL	77.50 mm	384	F1736031	3,072	F1736032
	EF1000ST XL Sterilized Filter Tips	50 - 1250 µL	102.2 mm	384	F1737031	3,072	F1737032
TIPACK	E10 TIPACK	0.1 - 10 µL	28.83 mm	960	F1731001	4,800	F1731002
	EL10 TIPACK	0.1 - 20 µL	45.34 mm	768	F1732001	3,072	F1732002
	E200 TIPACK	1 - 200 µL	51.44 mm	768	F1733001	3,072	F1733002
	E300 TIPACK	1 - 300 µL	58.57 mm	768	F1736001	3,072	F1736002
	E1000 XL TIPACK	50 - 1250 µL	102.2 mm	384	F1735001	3,072	F1735002
STERILIZED TIPACK	E10ST Sterilized TIPACK	0.1 - 10 µL	28.83 mm	960	F1731011	4,800	F1731012
	EL10ST Sterilized TIPACK	0.1 - 20 µL	45.34 mm	768	F1732011	3,072	F1732012
	E200ST Sterilized TIPACK	1 - 200 µL	51.44 mm	768	F1733011	3,072	F1733012
	E300ST Sterilized TIPACK	1 - 300 µL	58.57 mm	768	F1736011	3,072	F1736012
	E1000ST XL Sterilized TIPACK	50 - 1250 µL	102.2 mm	384	F1735011	3,072	F1735012
TOWERPACK	EL10 TOWERPACK Reload System	0.1 - 20 µL	45.34 mm	960	F1732051	3,840	F1732052
	E200 TOWERPACK Reload System	1 - 200 µL	51.44 mm	960	F1733051	3,840	F1733052
	E300 TOWERPACK Reload System	1 - 300 µL	58.57 mm	960	F1736051	3,840	F1736052
	E1000 XL TOWERPACK Reload System	50 - 1250 µL	102.2 mm	768	F1735051	3,072	F1735052
	EL10 TOWERPACK Reload Kits	0.1 - 20 µL	45.34 mm	960	F1732061	-	-
	E200 TOWERPACK Reload Kits	1 - 200 µL	51.44 mm	960	F1733061	-	-
	E300 TOWERPACK Reload Kits	1 - 300 µL	58.57 mm	960	F1736061	-	-
	E1000 TOWERPACK Reload Kits	50 - 1250 µL	102.2 mm	768	F1735061	-	-
MEGAPACK / EASYPACK	EL10ST Sterilized MEGAPACK	0.1 - 20 µL	45.34 mm	960	F1732071	4,800	F1732072
	EL200ST Sterilized MEGAPACK	1 - 200 µL	51.44 mm	960	F1733071	4,800	F1733072
	EL10 EASYPACK	0.1 - 20 µL	45.34 mm	1,000	F1734511	10,000	F1734512
	E200 EASYPACK	1 - 200 µL	51.44 mm	1,000	F1739311	10,000	F1739312
	10 µL Empty Racks	-	-	1	F1732021	24	F1732022
	200 µL Empty Racks	-	-	1	F1733021	24	F1733022
	300 µL Empty Racks	-	-	1	F1734021	24	F1734022
	1000 µL Empty Racks	-	-	1	F1735021	16	F1735022
GEL LOADING TIPS	E10 Gel Loading Flat Tips	0.1 - 10 µL	45.72 mm	200	F1731181	800	F1731182
	E10 Gel Loading Round Tips	0.1 - 10 µL	45.72 mm	200	F1731281	800	F1731282
	E200 Gel Loading Flat Tips	1 - 200 µL	82.55 mm	200	F1733181	800	F1733182
	E200ST Sterilized Gel Loading Flat Tips	1 - 200 µL	82.55 mm	200	F1733381	800	F1733382
	E200 Gel Loading Round Tips	1 - 200 µL	82.55 mm	200	F1733281	800	F1733282
	E200ST Sterilized Gel Loading Round Tips	1 - 200 µL	82.55 mm	200	F1733481	800	F1733482



Certified Free - RNase/DNase, Human DNA, Pyrogens, PCR Inhibitors

PIPETMAN EXPERT Tips are available in select countries only.



Download tip selection table at [www.gilson.com](http://www.gilson.com).





## WIDE RANGE OF TIP PACKAGING

### TIPACK™

Filter, Autoclavable, Sterilized

Uniquely designed TIPACK features a dual-purpose lid

Hinged to easily open and close while using tips

Pull it out of the hinges to set on top or discard for high-throughput tip usage



### MEGAPACK

Autoclavable, Sterilized

Uses 70% less plastic

Sterilized MEGAPACKS give you the choice to expose 96 tips at a time or 192

Ideal for high throughput pipetting



### EASYPACK

Autoclavable

Purchase in bulk and save money by simply reloading these tips into empty racks

Resealable bags for easy access

EASYPACK: 5 bags x 200 tips



### TOWERPACK

A quick, easy and affordable rack refill system

Uses 60% less space on your bench and 70% less plastic than regular rack box

One-hand system operation



### Certified Contaminant Free

These tips are certified free of human DNA, RNases, DNases, PCR inhibitors, and pyrogens.

### Gilson Universal Fit Tips

Designed to fit perfectly and provide the best results with Gilson pipettes, the universal design of PIPETMAN EXPERT Tips allows them to be used with most leading pipette brands. Additionally, because of the universal fit, PIPETMAN EXPERT Tips allow you to stock up on one brand of tips with practical packaging options, saving you time, money, and bench space.

### Space Saving Environment Friendly Packaging

The Towerpack and MegaPack configurations allow labs to store more tips using less space on the bench. Less packaging material is used and the plastic is recyclable.

### Gel Loading Tip Solutions

Receive maximum accuracy and the best possible results when using PIPETMAN EXPERT long, round tips and the specially patented flat gel loading tips.

### Choose the Right Tip for Your Needs

From purity level to volume range, this handy interactive tip selection guide will help you find the perfect tip for your application. Download now to get a clear view of our entire pipette tips offering.

GILSON TIPS SELECTION GUIDE									
Tip Type	Volume	Material	Filter	Autoclavable	Sterilized	Special Features	Applications	Part Number	Quantity
Standard	10-1000 µl	PS	Yes	Yes	Yes	Universal Fit	General Lab Use	1000000	1000
Long Round	10-1000 µl	PS	Yes	Yes	Yes	Universal Fit	General Lab Use	1000000	1000
Flat Gel Loading	10-1000 µl	PS	Yes	Yes	Yes	Universal Fit	General Lab Use	1000000	1000

[Download Tip Selection Table](#)

### EXCELLENT FIT FILTER TIPS FOR MOLECULAR BIOLOGY APPLICATIONS

AmpliPur® Expert Tips are ISO 8655-compliant and provide a significant value for the money spent. They are manufactured according to certified quality standards, ensuring each tip is free of DNase and RNase. These filter tips protect precious samples from cross-contamination and are designed to fit various pipette brands.

#### Excellent Fit

AmpliPur Expert Tips are designed to fit various pipette brands for maximum convenience on the bench. Equipped with a filter, they also help prevent cross-contamination.

#### Ideal for Molecular Biology Applications

These tips significantly contribute to molecular testing performance by ensuring sample integrity during the pipetting process.

#### ISO 8655 Compliant

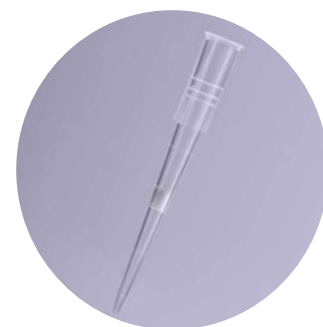
Manufactured according to the certified Gilson quality standard, AmpliPur Expert Tips comply with ISO 8655 requirements and are certified free of RNase and DNase, preserving your sample integrity.



Amplipur® Expert Tips			
Volume Range	Nominal Volume of Compatible Pipettes**	Qty/Commercial Unit (CU)	Part Number (Commercial Units)
0.5-10 µL	2 µL / 10 µL	960 (10 racks of 96 tips)	F174101
1-20 µL	20 µL	960 (10 racks of 96 tips)	F174201
10-200 µL	100 µL*** / 200 µL / 300 µL	960 (10 racks of 96 tips)	F174301
100-1000 µL	1000 µL	960 (10 racks of 96 tips)	F174401
100-1200 µL	1000 µL / 1200 µL	960 (10 racks of 96 tips)	F174501

\*\*Within ISO 8655 specifications.

\*\*\*Compatible with many of 100 µL pipettes, except Gilson P100 single channel.



Please contact your local Gilson representative for more information.



Download tip selection table at [www.gilson.com](http://www.gilson.com).





## ERGONOMIC PIPETTING FOR NON-AQUEOUS LIQUIDS

MICROMAN<sup>®</sup> E positive-displacement pipettes, along with capillary pistons, offer the highest precision when ergonomically pipetting non-aqueous samples, such as viscous or volatile liquids. Capillary pistons eliminate the air cushion between the sample and disposable piston, ensuring the accuracy of the pipette is not affected by the physical properties of the sample.

### Contamination-Free Pipetting

Minimize the potential for pipette, sample, and human contamination with MICROMAN E. Dispose of the capillary piston (CP) tip safely and without hand contact by simply pushing the push button until the last stop.



Volume Switch

### Reliable Results Even with Non-Aqueous Liquids

Whether a viscous, volatile, hot, or cold sample, MICROMAN E can handle the job with accuracy and precision. Have complete confidence in your results with the volume switch that reduces the risk of accidental volume adjustment.

### Triple Protection

Positive-displacement technology makes the ideal solution to prevent from aerosols or sample carry-over, protecting the pipette, the user, and the sample.



## CAPILLARY PISTONS

### 100% Protection Against Contamination







The disposable piston is located inside the capillary tip so users can be assured that no harmful samples will contaminate the pipette.

- No risk of chemical contamination
- Slender profile—fits most tubes



Find more tools and resources at [www.gilson.com](http://www.gilson.com).



MICROMAN® E							
Model	Part Number	Capillary Piston	Volume	Maximum Permissible Errors			
				Gilson		ISO 8655	
				Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
 M10E	FD10001	CP10 CP10ST	1 5 10	± 0.09 ± 0.10 ± 0.15	≤ 0.03 ≤ 0.03 ≤ 0.06	± 0.2 ± 0.2 ± 0.2	≤ 0.1 ≤ 0.1 ≤ 0.1
 M25E	FD10002	CP25 CP25ST	3 10 25	± 0.25 ± 0.27 ± 0.30	≤ 0.08 ≤ 0.08 ≤ 0.10	± 0.7 ± 0.7 ± 0.7	≤ 0.3 ≤ 0.3 ≤ 0.3
 M50E	FD10003	CP50 CP50ST	20 50	± 0.34 ± 0.70	≤ 0.20 ≤ 0.30	± 0.7 ± 0.7	≤ 0.3 ≤ 0.3
 M100E	FD10004	CP100 CP100ST	10 50 100	± 0.50 ± 0.75 ± 1.00	≤ 0.20 ≤ 0.30 ≤ 0.40	±1.5 ±1.5 ±1.5	≤ 0.6 ≤ 0.6 ≤ 0.6
 M250E	FD10005	CP250 CP250ST	50 100 250	± 1.50 ± 1.70 ± 2.50	≤ 0.30 ≤ 0.30 ≤ 0.50	± 6 ± 6 ± 6	≤ 2.0 ≤ 2.0 ≤ 2.0
 M1000E	FD10006	CP1000 CP1000ST	100 500 1000	± 3.0 ± 5.0 ± 8.0	≤ 1.6 ≤ 2.5 ≤ 4.0	± 12 ± 12 ± 12	≤ 4.0 ≤ 4.0 ≤ 4.0

CAPILLARY PISTON							
Capillary Piston Model		Volume Range	MICROMAN® E Model Compatibility	CP Qty/ Box	Box Qty/ Commercial Unit	CP Qty/ Commercial Unit	Part Number
Bulk - To be Assembled*	Capillary Piston 25 µL (CP25)	3-25 µL	M25E	100	2	200	F148112
	Capillary Piston 50 µL (CP50)	20-50 µL	M50E	100	2	200	F148113
	Capillary Piston 250 µL (CP250)	50-250 µL	M250E	100	2	200	F148114

Capillary Piston Model		Volume Range	MICROMAN® E Model Compatibility	CP Qty/ Rack	Rack Qty/ Commercial Unit	CP Qty/ Commercial Unit	Part Number
TIPACK - Assembled CP	Capillary Piston 10 µL (CP10)	1-10 µL	M10E	96	2	192	F148412
	Capillary Piston 10 µL (CP10)	1-10 µL	M10E	96	10	960	F148312
	Capillary Piston 25 µL (CP25)	3-25 µL	M25E	96	10	960	F148012
	Capillary Piston 50 µL (CP50)	20-50 µL	M50E	96	10	960	F148013
	Capillary Piston 100 µL (CP100)	10-100 µL	M100E	96	2	192	F148414
	Capillary Piston 100 µL (CP100)	10-100 µL	M100E	96	10	960	F148314
	Capillary Piston 250 µL (CP250)	50-250 µL	M250E	96	10	960	F148014
	Capillary Piston 1000 µL (CP1000)	100-1000 µL	M1000E	91	2	182	F148560
TIPACK - Assembled Sterilized CP	Sterilized Capillary Piston 10 µL (CP10ST)	1-10 µL	M10E	96	2	192	F148413
	Sterilized Capillary Piston 10 µL (CP10ST)	1-10 µL	M10E	96	10	960	F148313
	Sterilized Capillary Piston 25 µL (CP25ST)	3-25 µL	M25E	96	6	576	F148712
	Sterilized Capillary Piston 50 µL (CP50ST)	20-50 µL	M50E	96	6	576	F148713
	Sterilized Capillary Piston 100 µL (CP100ST)	10-100 µL	M100E	96	2	192	F148415
	Sterilized Capillary Piston 100 µL (CP100ST)	10-100 µL	M100E	96	10	960	F148315
	Sterilized Capillary Piston 250 µL (CP250ST)	50-250 µL	M250E	96	6	576	F148714
	Sterilized Capillary Piston 1000 µL (CP1000ST)	100-1000 µL	M1000E	91	2	182	F148180

\*Capillary and piston are separated



Full range of accessories can be found on page 28.



## FASTER MULTIPLE DISPENSING

DISTRIMAN® is a positive-displacement, continuously adjustable, repetitive pipette with direct read out designed to simplify multiple dispensing when used with DISTRITIPS syringes. With DISTRIMAN, you can dispense the exact volume required for any protocol, even fractional volumes. It is ideal for repetitive dispensing in clinical, hospital, biological, chemical, food and beverage, pharmaceutical, cosmetics, and forensics labs.

### Simplifies Multiple Dispensing

Dispense exact volumes without tedious calculations and ensure optimal pipetting results even with volatile or viscous liquids.

### An Economical Solution

DISTRIMAN covers a large volume range with only three DISTRITIPS syringes, making it very economical. DISTRITIPS are available in standard or pre-sterilized form (boxes of 50).

DISTRIMAN is the only continuously adjustable mechanical repetitive pipette with direct volume readout available on the market.



DISTRIMAN®	
Description	Part Number
DISTRIMAN (1 µL to 1.25 mL)	F164001

DISTRITIPS							
DISTRITIPS (Pack of 50)	Aliquot Range	Part Number	Volume (µL)	Maximum Permissible Errors			
				Gilson		ISO 8655	
				Systematic Error (µL)	Random Error (µL)	Systematic Error (µL)	Random Error (µL)
125 µL Micro Micro Pre-Sterile*	1-12.5 µL	F164100 F164130	2	± 0.100	≤ 0.080	± 0.2	≤ 0.1
			5	± 0.125	≤ 0.075	± 0.2	≤ 0.1
			10	± 0.200	≤ 0.100	± 0.2	≤ 0.1
1250 µL Mini Mini Pre-Sterile*	10-125 µL	F164110 F164140	20	± 0.80	≤ 0.20	± 1.5	≤ 0.6
			50	± 1.00	≤ 0.40	± 1.5	≤ 0.6
			100	± 1.00	≤ 0.60	± 1.5	≤ 0.6
12.5 mL Maxi Maxi Pre-Sterile*	0.1-1.25 mL	F164120 F164150	200	± 6.0	≤ 1.0	± 12.0	≤ 4.0
			500	± 7.5	≤ 1.5	± 12.0	≤ 4.0
			1000	± 10.0	≤ 2.5	± 12.0	≤ 4.0

\*Pre-sterile refers to sterility assurance level between SAL10<sup>-2</sup> and SAL10<sup>-5</sup> (individually wrapped).



# repet-tips

## REPET-TIPS FOR MOTORIZED REPETITIVE DISPENSING SOLUTION

Specifically made for the REPETMAN® positive-displacement electronic pipette, the REPET-TIPS® cover volumes from 0.1 to 50 mL, in either sterile or non-sterile formats as well as adaptors for 25 and 50 mL tips. The tip-size encoding system of the REPETMAN automatically identifies the REPET-TIP when placed on the pipette, and displays the appropriate volume on the LCD screen.



REPET-TIPS					
REPET-TIPS	Non-Sterile	Sterile*	REPET-TIPS	Non-Sterile	Sterile*
Repet-Tip (0.1 mL, box of 100)	F164510	F164515	Repet-Tip (10.0 mL, box of 100)	F164557	F164558
Repet-Tip (0.5 mL, box of 100)	F164520	F164525	Repet-Tip (12.5 mL, box of 100)	F164560	F164565
Repet-Tip (1.0 mL, box of 100)	F164527	F164528	Repet-Tip (25 mL, box of 50)**	F164570	-
Repet-Tip (1.25 mL, box of 100)	F164530	F164535	Repet-Tip (25 mL, box of 25)**	-	F164575
Repet-Tip (2.5 mL, box of 100)	F164540	F164545	Repet-Tip (50 mL, box of 25)**	F164580	F164585
Repet-Tip (5.0 mL, box of 100)	F164550	F164555	Adapter for 25/50 mL Repet-Tip (set of 10)	F164591	-
* Sterile / Endotoxin-free (less than 0.01 I.U./mL) ** One autoclavable adapter is provided in each box			Adapter for 25/50 mL Repet-Tip (set of 5)	-	F164592

For the 25 and 50 mL sizes, a special adaptor is used that is supplied with the tips.

The adaptors are also available separately, non-sterile (Part No. F164591) and sterile (Part No. F164592).

REPET-TIPS are not available in the United States.



REPET-TIPS can fit motorized repetitive dispensers from other brands. Please contact your local Gilson representative for more information.



## THE EFFICIENT SOLUTION FOR PIPETTING UP TO 100 MILLILITERS AT ONCE

MACROMAN is a reliable pipette controller which can be used with glass and plastic serological pipettes from 1 to 100 mL, with a total volume range from 0.1 to 100 mL.

### Optimal Speed Control

The aspirating and dispensing speed can be set using pressure sensitive triggers or by using the thumbwheel while pipetting. The speed is adjustable up to 25 mL in less than three seconds.

The screen continuously displays battery status as well as the aspiration and dispensing speed setting.

### Comfortable Use

Prevent hand fatigue with MACROMAN's ergonomic handle featuring wide triggers for maximum comfort and stress-free pipetting.

The Lithium-Ion battery enables a longer, vibration-free use with reduced charging time.

Increase precision by choosing your flow rate mode from slow drops to rapid dispensing.

All stands are included with MACROMAN for stable and easy storage on the bench.



MACROMAN®		
Description	Volume Range	Part Number
MACROMAN	0.1 to 100 mL	F110120

MACROMAN ACCESSORIES			
Description	Part Number	Description	Part Number
Charging desk stand	F107200	Filter, 0.45 µm, sterile (set of 10)	F107207
Wall mount	F107201	Power supply	F107203
Magnetic wall mount	F107202	Lithium-Ion battery	F107208
Filter, 0.22 µm, standard (set of 10)	F107204	Nosepiece	F107209
Filter, 0.22 µm, sterile (set of 10)	F107205	Adjustable side stand	F107210
Filter, 0.45 µm, standard (set of 10)	F107206	Pipette adaptor	F107211

# serological

## PIPETTES

### OPTIMIZED PIPETTING CONTROL

Ideal for scientists who need to easily and quickly transfer liquid aliquots from one container to another with precision, the Gilson disposable plastic serological pipettes are perfect for use with MACROMAN® to help you in your daily cell-culture, molecular biology, and microbiology applications.

#### Reliable

Gilson serological pipettes are made with USP Class VI polystyrene and are free of contaminants that can alter your experiment. They are gamma-sterilized, non-pyrogenic, and certified free of detectable RNase/DNase. The polyester fiber plug provides a high level of protection against over-pipetting and contamination by liquids and aerosols.

#### Easy Volume Control

Our serological pipettes offer precise volume control and have color-coded rings for easy size identification, as well as dark ascending and descending graduations so you can easily read the aspirated and dispensed volumes. They also have negative graduations for extra capacity.

#### Flexible

Available in models ranging from 1 to 50 mL, these serological pipettes are recommended for use with MACROMAN but can also be used with any pipette controller. They enable precise and convenient dispensing of different kinds of liquids for a variety of tasks.

SEROLOGICAL PIPETTES				
Description	Qty/Case	Part Number	Volume	Ring
<b>Serological Pipettes - Sterile Bags</b>				
40 sterile bags of 25 units	1000	F110121	1 mL	●
	1000	F110123	2 mL	●
20 sterile bags of 25 units	500	F110125	5 mL	●
	500	F110127	10 mL	●
10 sterile bags of 20 units	200	F110129	25 mL	●
<b>Serological Pipettes - Sterile Individually Wrapped</b>				
10 bags of 100 sterile, individually wrapped units	1000	F110122	1 mL	●
	1000	F110124	2 mL	●
4 bags of 50 sterile, individually wrapped units	200	F110126	5 mL	●
	200	F110128	10 mL	●
	200	F110130	25 mL	●
4 bags of 25 sterile, individually wrapped units	100	F110131	50 mL	●



# platemaster®

## FAST MICROPLATE PIPETTING

PLATEMASTER® is an easy-to-use solution for high throughput pipetting of 96- and 384-well microplates.

### Save Time and Increase Your Productivity

With minimal setup, you can fill 96- or 384-well plates in less than one minute and significantly reduce the number of pipetting steps.

### Simplifies Sample Prep

PLATEMASTER requires no programming, no power, and minimal training, so you can start pipetting right away.

### Convenient for any Microplate Application

From plate-to-plate transfers to supernatant removal, achieve accuracy and precision on the bench or under the hood.



PLATEMASTER				
Model	Part Number	PIPETMAN® DIAMOND Tips	Volume	Dimensions
PLATEMASTER P20	F110761	D200, DS200, D200ST, DS200ST, DF100ST, DF200ST, DFS200ST, DF30ST	0.5 µL-20 µL Adjustable in 0.1 µL increments	300 x 450 x 400 mm
PLATEMASTER P220	F110762	D200, DS200, D300, D200ST, DS200ST, D300ST, DF200ST, DFS200ST, DF300ST, DF30ST	2 µL-220 µL Adjustable in 1 µL increments	300 x 450 x 400 mm

### Watch PLATEMASTER in action



Watch Video

### PLATEMASTER® ACCESSORIES

Description	Part Number
384-well adapter, positioned by wheel	F1077602
384-well adapter, positioned by hand	F1077603
Alu-heater block for PLATEMASTER, 96 x 0.2 mL, for PCR tubes, stripes, and PCR plates Ø 7.8 mm	F1077604
Pipetting head height adjusters (2 units)	F1077605
Lubrication box of O-rings PLATEMASTER	F1077606



Find more tools and resources at [www.gilson.com](http://www.gilson.com).





A close-up photograph of a blue, curved component of a Gilson microscope. The component is made of a textured material and features the Gilson logo, which consists of a stylized 'G' with a vertical line through it, followed by the word 'GILSON' in a bold, sans-serif font. The component is secured with several screws. A black adjustment knob is visible on the left side. The background is a plain, light color.

**GILSON**



# pipetmax®

## MAXIMIZE REPRODUCIBILITY OF YOUR BIOLOGICAL SAMPLE PREP

Increase reproducibility and the pace of your experiments with this easy-to-use, affordable, and automated liquid handling platform.

### Upgrade to Automation for Reliable, Accurate Pipetting

Protect your important samples from procedural errors and maximize accuracy and precision with fully automated pipetting protocols utilizing PIPETMAN® technology.

### Free Yourself from Tedious Sample Prep Work

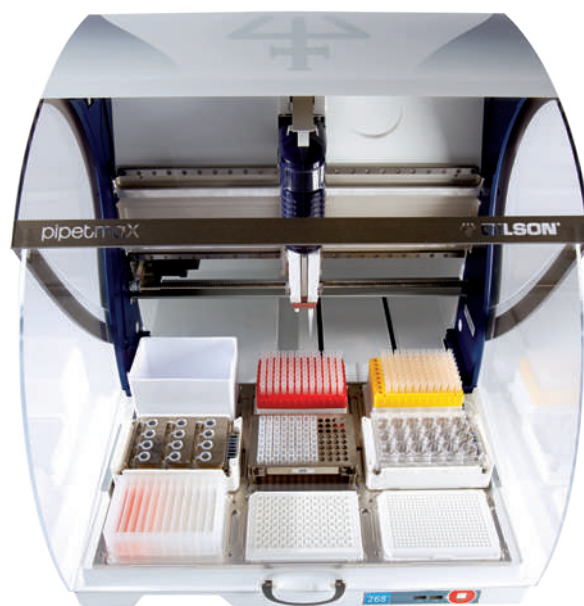
Let PIPETMAX® prepare samples for you! Enjoy more freedom away from the bench and focus on what's important—your next discovery.

### Stay Flexible—For Now And For The Future

Using any reagent or kit, adapt your pipetting protocols to meet the unique needs of your research.

### PIPETMAN Inside

With PIPETMAN technology inside, you can trust your pipetting to be reliable and consistent plate-to-plate, lot-to-lot, and time-after-time.



## APPLICATION VERSATILITY

### PCR, qPCR, RT-qPCR

- Promega GoTaq® Probe 1-Step RTqPCR
- Promega GoTaq® PCR Core System II
- Takara One Step PrimeScript™ RT-PCR Kit (Perfect Real Time)

### NGS LIBRARY PREPARATION

- Lucigen NxSeq® DNA Sample Prep Kit
- Illumina® Nextera® XT DNA Library Preparation Kit
- Agencourt® AMPure® XP PCR purification system
- NEBNext® Ultra™ II DNA Library Prep Kit for Illumina®
- NEBNext® Ultra II Directional RNA Library Prep Kit for Illumina®



Download application notes at [www.gilson.com](http://www.gilson.com).



PIPETMAX®	
Specification	Description
Removable Tray Capacity	Two options: 9-position removable tray (microplate footprints, but not for 384-well microplates) 9-position removable tray for 384-well microplates
Control	Touchscreen tablet or PC control via USB and TRILUTION® micro software
Pipette Head Options	Eight channel 1 µL - 20 µL Eight channel 20 µL - 200 µL Four channel 100µL - 1200µL Single channel 1000 µL
Pipette Head Mounts	Two PIPETMAX pipetting heads
Labware Compatibility	Standard shallow- and deep-well microplates and microcentrifuge tubes
Dimensions (W x D x H)	<b>PIPETMAX with rotating cover</b> 54.4 x 65.5 x 53.1 cm (21.4 x 25.8 x 20.9 in)
	<b>PIPETMAX with rotating cover installed on optional riser assembly for off-bed tip disposal</b> 54.4 x 65.5 x 69.6 cm (21.4 x 25.8 x 27.4 in)
	<b>PIPETMAX without cover</b> 50.8 x 64.3 x 49.5 cm (20 x 25.3 x 19.5 in)
	<b>PIPETMAX without rotating cover installed on optional riser assembly for off-bed tip disposal</b> 52.3 x 65 x 65.8 cm (20.6 x 25.6 x 25.9 in)
Environmental Conditions	Indoor use Altitude: up to 2000 m Temperature range: 5°C-40°C Humidity: Maximum relative humidity 80% for temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C

ACCESSORIES	
Part Number	Description
FC10022	PIPETMAX MAX8X20 Pipette Head
FC10021	PIPETMAX MAX8X200 Pipette Head
FC10023	PIPETMAX MAX4x1200 Pipette Head
32000391	PIPETMAX D1200 Tip Reload Box
32000274	Tip Disposal Bin
32000177	PIPETMAX Riser Off-Bed Tip Disposal
32000340	TRILUTION micro V3 for PC
32000341	PIPETMAX Standard V3 Tablet Kit

### CELL-BASED ASSAYS

- Promega ADP-Glo™ Kinase Assay
- CellTiter-Glo® Luminescent Cell Viability Assay
- Promega MultiTox-Fluor Multiplex Cytotoxicity Assay
- Promega Caspase- Glo® 3/7 Assay
- Promega CellTox™ Green Cytotoxicity Assay

### CUSTOM AND GENERAL APPLICATIONS

- Normalization - import volumes or concentrations as a .csv
- Pooling
- Cherry-picking — import wells as a .csv
- Serial Dilutions
- 96 to 384 transfers
- 2 custom protocols included with PIPETMAX

# safe aspiration

STATION

## QUICK AND EASY ASPIRATION OF LIQUID WASTE

The Safe Aspiration Station is a stand-alone motorized vacuum unit, ideal for cell culture, ELISA tests, and liquid waste disposal. The closed unit is designed to prevent contamination hazards, and all parts in contact with liquids are fully autoclavable. Associated with the Safe Aspiration Kit, which includes a set of different adapters, the Safe Aspiration Station is easy to use on a bench or in laminar flow cabinets

### Safe and Contamination-Free

The station is equipped with a 4-liter Polypropylene (PP) bottle, a level detection system to prevent liquid overflow, and an in-line hydrophobic filter that traps aerosols for safe disposal of contaminated or hazardous liquids.

### Adaptable and Convenient

The station also ensures an adjustable aspiration level indicated by a board of LEDs.

The choice of the adapter and the easy setting of the vacuum level enable quick and accurate aspiration of liquids from a variety of vessels.

The ergonomic hand operator can be stored on the bottle handle. The Safe Aspiration Kit also contains a stand with storing gaps for the adapters and the hand operator to help your workspace remain clean and organized.



#### SAFE ASPIRATION STATION

Description	Part Number
Safe Aspiration Station, EU Plug	F110744
Safe Aspiration Station, US Plug	F110745
Safe Aspiration Station, UK Plug	F110746
Safe Aspiration Station, AU Plug	F110747
Safe Aspiration Station, JP Plug	F110748
Safe Aspiration Station, CN Plug	F110749

#### SAFE ASPIRATION KIT

Description	Part Number
Safe Aspiration Kit	F110750



# dispensman®

## DISPENSE LIQUIDS SIMPLY AND ACCURATELY

DISPENSAN® is a bottle-top dispenser for convenient, safe, and precise delivery of common laboratory solutions and solvents. Its innovative, three-position nozzle controls the dispensing of liquids, the removal of air in the system to avoid liquid loss, and includes an anti-drip safety feature that returns liquid to the bottle.

### Precise

Dispense just the liquid needed every time with a quick, easy, and precise volume setting.

### No Loss of Liquid

Prime your operation by purging the air in RECYCLE position keeping the liquid inside the bottle and avoiding any loss of liquid.

### Safe

Keep your bench and other devices safe with the anti-drip system and the return of liquid into the bottle after use.

### Flexible

- Numerous bottle adaptors
- Adaptable to every type of liquid with an easy calibration by the user
- Fully autoclavable at 121°C
- Convenient 3-position nozzle



DISPENSAN®							
Model	Part Number	Volume Range	Scaling (mL)	Maximum Permissible Errors			
				Gilson		ISO 8655	
				Systematic Error (mL)	Random Error (mL)	Systematic Error (mL)	Random Error (mL)
DISPENSAN 2.5 mL	F110101	0.25-2.5 mL	0.05	± 0.012	≤ 0.002	± 0.030	≤ 0.010
DISPENSAN 5.0 mL	F110102	0.5-5 mL	0.10	± 0.030	≤ 0.005	± 0.030	≤ 0.010
DISPENSAN 10 mL	F110103	1-10 mL	0.20	± 0.060	≤ 0.010	± 0.060	≤ 0.020
DISPENSAN 25 mL	F110104	2.5-25 mL	0.50	± 0.150	≤ 0.025	± 0.150	≤ 0.050
DISPENSAN 50 mL	F110105	5-50 mL	1.00	± 0.300	≤ 0.050	± 0.300	≤ 0.100



## GUIDING YOU TO SUCCESS

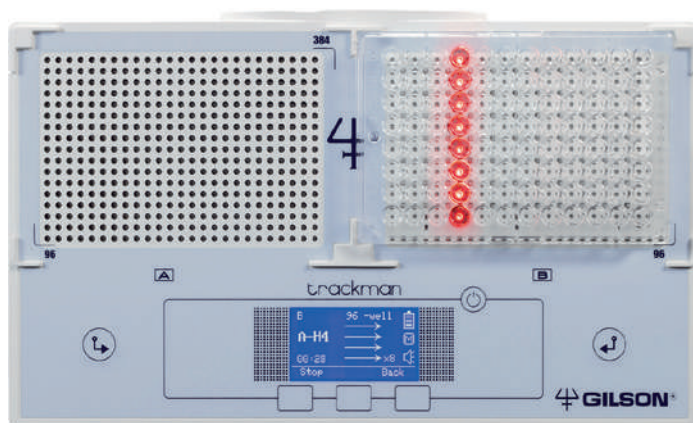
Get on track and stay on track as you pipette flawlessly from one microplate to another with the help of TRACKMAN®.

### Secure Your Results

TRACKMAN simplifies your work, improves your productivity, and helps eliminate pipetting errors and cross-contamination.

### Versatile Performance

The LED lights on TRACKMAN help you place your 96- and 384-well microplates in the correct position on the light panel, while fixed notches secure your plates firmly in place.



### Complete Your Equipment

Expand the functionality of your TRACKMAN with the versatile microtube-holder to transfer liquids from one microtube to another (0.5 mL, 1.5 mL, and 2 mL).

#### TRACKMAN®

Description	Part Number
TRACKMAN	F70301

#### TRACKMAN ACCESSORIES

Description	Part Number
Microtube Holder	F70105
Pedal for TRACKMAN	F70261

# digital dry bath

SERIES

## UNIFORM TEMPERATURE DELIVERY FOR A VARIETY OF TUBE SIZES

The compact Digital Dry Bath Series delivers precise temperatures to your samples using digital temperature and time controls with built-in calibration functionality, improving reliability and reproducibility. The aluminum blocks (sold separately) accommodate tubes from 0.5–50 mL. Custom blocks are available.

DIGITAL DRY BATH SERIES					
One-Block Digital Dry Bath		Two-Block Digital Dry Bath		Four-Block Digital Dry Bath	
Description	Part Number	Description	Part Number	Description	Part Number
One-Block Digital Dry Bath 115V, US Plug	36110300	Two-Block Digital Dry Bath 115V, US Plug	36110400	Four-Block Digital Dry Bath 115V, US Plug	36110500
One-Block Digital Dry Bath, 230V, EU Plug	36110310	Two-Block Digital Dry Bath, 230V, EU Plug	36110410	Four-Block Digital Dry Bath, 230V, EU Plug	36110510
One-Block Digital Dry Bath, 230V, UK Plug	36110320	Two-Block Digital Dry Bath, 230V, UK Plug	36110420	Four-Block Digital Dry Bath, 230V, UK Plug	36110520



# roto-mini

PLUS

## FLEXIBLE VARIABLE SPEED ROTATOR FOR A RANGE OF APPLICATIONS

With speeds from 5–70 rpm, the Roto-Mini Plus variable speed rotator offers three operational mixing modes (Mix, Pause, and Rock) and accommodates standard tube sizes from 0.5–50 mL, making it a flexible addition to any lab.

ROTO-MINI PLUS	
Description	Part Number
Roto-Mini Plus with tube holders, 115V, US Plug	36110100
Roto-Mini Plus with tube holders, 230V, EU Plug	36110110
Roto-Mini Plus with tube holders, 230V, UK plug	36110120



# mini vortex

MIXER

## SMALL SIZE, POWERFUL MIXING

With touch-activated operation, the Mini Vortex Mixer delivers a fixed speed of 2,800 rpm for mixing tubes up to 50 mL. The entire operation is quiet, smooth, and contained in a small footprint.

MINI VORTEX MIXER	
Description	Part Number
Mini Vortex Mixer, 100–240V, US Plug	36110700
Mini Vortex Mixer, 100–240V, EU Plug	36110710
Mini Vortex Mixer, 100–240V, UK Plug	36110720



# vortex

MIXER

## MAXIMIZE MIXING, MINIMIZE NOISE, AND VIBRATION

With a unique counter-balance system, the powerful Vortex Mixer offers instant vortex mixing without noise and vibration. The mixer features both touch and continuous operation with speeds from 200–3,200 rpm and can be used in a range of temperature environments (+4–65°C). Several optional mixing heads are available.

VORTEX MIXER	
Description	Part Number
Vortex Mixer with standard cup head, 115V, US Plug	36110740
Vortex Mixer with standard cup head, 230V, EU Plug	36110750
Vortex Mixer with standard cup head, 230V, UK Plug	36110760

ACCESSORIES	
Description	Part Number
Vortexer Flat head	36117310
COMBO™ Head	36117320
Optional Foam Rack for 12 x 15mL tubes	36117330
Optional Foam Rack for 5 x 50 mL tubes	36117340
Horizontal Head, for 12 x 1.5 mL	36117350
Horizontal Head, for 4 x 15 mL	36117360
Horizontal Head, for 2 x 50 mL	36117370



# digital mini

## INCUBATOR

### SELF-CONTAINED TEMPERATURE CONTROLS IMPROVE INCUBATION ACCURACY

Using digital temperature controls, the Digital Mini Incubator allows you to accurately set the internal temperature without an external thermometer. The compact incubator accommodates 2 L flasks and has a built-in internal universal outlet for other electrical connections. Models for heating only or heating and cooling are available.

#### Two Models are Available:

- Heat only—temperature range of 5°C above ambient to 60°C
- Heat and cooling—temperature range of 15°C below ambient to 60°C\*

DIGITAL MINI INCUBATOR	
Description	Part Number
Digital Mini Incubator, with heating only 100–230V US Plug	36110800
Digital Mini Incubator, with heating only 100–230V, EU Plug	36110810
Digital Mini Incubator, with heating only 100–230V, UK Plug	36110820
Digital Mini Incubator, with heating and cooling 100–230V, US Plug	36110840
Digital Mini Incubator, with heating and cooling 100–230V, EU Plug	36110850
Digital Mini Incubator, with heating and cooling 100–230V, UK Plug	36110860

ACCESSORY	
Description	Part Number
Extra Shelf 10.5 x 8"	36117380



\* Minimum temperature is approx. 7°C in 22°C room temp.

## QUICK AND SAFE SAMPLE CENTRIFUGATION

The CENTRY™ 103 Minicentrifuge is an easy-to-use and portable benchtop device ideal for the quick separation of particles from a supernatant. It also enables a quick spin down of a drop of liquid from the walls of microtubes.

### Reliable and Safe

CENTRY 103 Minicentrifuge integrates several safety features: it automatically stops after six minutes of continuous spinning, opening the lid anytime engages the brake, a pinch-type connector tightly secures the rotor, and a red light indicates when the power is switched on.

### User-Friendly

Thanks to its ergonomic design, small footprint, and optional battery control, the CENTRY 103 Minicentrifuge can be used anywhere. The quick and easy starting and ending operations are controlled by pressing down on the lid.

The CENTRY 103 Minicentrifuge promptly reaches a fixed speed of 6,000 rpm, without adjustment.



### Watch CENTRY 103 Minicentrifuge in action



Watch Video

### CENTRY™ 103 MINICENTRIFUGE

Description	Part Number
CENTRY 103 Minicentrifuge (Universal Plug)	F110736



Find more tools and resources at [www.gilson.com](http://www.gilson.com).



# centry™

117

## IMPROVED TEMPERATURE STABILITY KEEPS SAMPLES SAFE

Reaching speeds of up to 13,500 rpm, the CENTRY™ 117 Microcentrifuge has an easy-to-use touchscreen and built-in timer and offers one-button recall of up to nine stored custom run programs. Its proprietary air-flow system ensures temperature stability, preserving sample integrity on extended runs. The rotor design accommodates either 1.5–2.0 mL tubes or PCR strips.

### CENTRY™ 117 MICROCENTRIFUGE

Description	Part Number
CENTRY 117 Microcentrifuge, 115V, US Plug	36110200
CENTRY 117 Microcentrifuge, 230V, EU Plug	36110210
CENTRY 117 Microcentrifuge, 230V, UK Plug	36110220



# centry™

101

## NO MORE SPILLS WITH SPECIAL ROTOR DESIGN

With its patented swing-out rotor design, the CENTRY™ 101 Plate Centrifuge prevents microplate contents from spilling, increasing the reliability of your reactions. The two-plate capacity centrifuge accepts most popular PCR plates and microplates and easily fits into hoods and on crowded benchtops.

### CENTRY™ 101 PLATE CENTRIFUGE

Description	Part Number
CENTRY 101 Plate Centrifuge, 115V, US Plug	36117390
CENTRY 101 Plate Centrifuge, 230V, EU Plug	36117400
CENTRY 101 Plate Centrifuge, 230V, UK Plug	36117410





The compact MINIPULS® 3 Peristaltic Pump is a high-performance, low-pulse, peristaltic pump with interchangeable pump heads for delivering a variety of liquids—from biological to chemical. Six different channel and flow rate configurations are available.

## Low-Pulse Liquid Transfer

Utilizing positive-displacement pump technology, liquid flows nearly pulse-free as a result of ten stainless steel rollers. MINIPULS 3 produces smooth flows with excellent accuracy and precision, even at high flow rates.

## Flow Rates to Meet Your Needs

With a choice of six quickly interchangeable pump heads, you'll have a wide range of flow rates to use for your applications.

- Four standard models (1, 2, 4, or 8 channels): 0.3 µL/min to 30 mL/min
- Two high flow models (2 or 4 channels): 1 mL/min to 220 mL/min

## Easy to Operate

MINIPULS 3 is easy to install, simple to operate, and easy to maintain. With a simple keypad control and easy-to-read LCD screen, start/stop, flow direction, increase/decrease flow rate, and prime functions are easily accessible. Remote start/stop is also possible.

## Select the Right Tubing

The most suitable material according to your sample's chemical compatibility.

- Contains a large variety of internal diameters to reach desired flow rates.
- Features appropriate connectors and extension tubing.



Please contact your local Gilson representative for more information.

## MINIPULS TUBING

TUBING FOR R1, R2, R4, R8, PUMP HEADS Length = Approximately 40 cm (16 in.)							
Material	Internal Diameter (mm)	Reference Tubing (Calibrated Tubing)	Color Coded Stops		Extension Tubing 3 m (118 in.)	Connectors	Maximum Flow Rate (mL/min)
PVC	0.25	F117932	●	●	F117952	F117985	0.4
	0.38	F117933	●	●	F117953	F117986	0.7
	0.51	F117934	●	●	F117954	F117986	1.4
	0.76	F117936	●	●	F117956	F117987	2.1
	1.02	F117938	○	○	F117958	F1179941	4.1
	1.30	F117940	○	○	F117960	F1179941	6.2
	1.52	F117942	●	●	F117962	F1179941	9.1
	1.65	F117943	●	●	F117963	F1179941	10.5
	2.06	F117945	●	●	F117965	F1179941	15.7
	2.29	F117946	●	●	F117966	F1179941	19.7
	2.79	F117948	●	○	F117968	F1179951	23.2
3.18	F117949	●	○	F117969	F1179951	29.0	
Iso-Versinic <sup>®</sup> or Viton <sup>®</sup>	0.5	F1817741	●	●	F117740	F117986	1.8
	1.0	F1817743	●	●	F117742	F1179941	4.0
	2.0	F1817745	●	●	F117744	F1179941	12.6
	3.0	F117747	●	●	F117746	F1179951	27.3
	4	F117749	●	●	F117748	-	33.0
Silicone	0.64	F1825111	●	○	F1825131	F117987	1.5
	1.02	F1825112	○	○	F1825132	F1179941	4.1
	2.06	F1825113	●	●	F1825133	F1179951	14.7
	2.79	F1825114	●	○	F117975	F1179951	22.8
Santoprene <sup>™</sup> or PharMed <sup>®</sup>	0.51	F1825101	●	●	F1825121	F117986	1.4
	1.02	F1825102	○	○	F1825122	F1179941	4.8
	2.06	F1825103	●	●	F1825123	F1179941	15.0

TUBING FOR R2HF & R4HF HIGH FLOWPUMP HEADS Length = 3 m (118 in.)			
Material	Internal Diameter (mm)	Reference Tubing (Calibrated Tubing)	Maximum Flow Rate (mL/min)
PVC	2.06	F117965	24
	2.29	F117966	29
	2.79	F117968	41
	3.16	F117969	49
	4.0	F117970	75
	5.0	F117980	113
	6.0	F117981	163
	8.0	F117982	213
Iso-Versinic <sup>®</sup> or Viton <sup>®</sup>	2.0	F117744	23
	3.0	F117746	48
	4.0	F117748	86
	6.0	F117750	181
Silicone	2.0	F1825133	25
	3.0	F117975	44
	4.0	F117976	71
	5.0	F117977	115
	6.0	F117978	150
Santoprene <sup>™</sup> or PharMed <sup>®</sup>	7.0	F117979	220
	2.0	F1825123	25
	3.2	F1825124	53
6.4	F1825125	171	

MINIPULS 3			
Description	Part Number	Maximum Flow Rate	Number of Channels
Pump Module MINIPULS 3	F155001	-	-
R1 Pump Head	F117604	up to 30 mL/min	1
R2 Pump Head	F117800	up to 30 mL/min	2
R4 Pump Head	F117606	up to 30 mL/min	4
R8 Pump Head	F117608	up to 30 mL/min	8
R2/HF Pump Head (High Flow)	F117830	up to 220 mL/min	2
R4/HF Pump Head (High Flow)	F117831	up to 220 mL/min	4

# Fraction collector

FC 203B

## IDEAL SOLUTIONS FOR SMALL TO LARGE CAPACITY COLLECTION

Gilson offers advanced solutions for fraction collection with a complete line of stand-alone and software-controlled fraction collectors ranging from small footprint to large vessel capacity models. The built-in, easy-to-use keypad makes setup and operation simple and capable of interfacing with any HPLC system.

Gilson Fraction Collectors collect samples based on time, drop, or peak,\* making them the preferred choice for a range of separation applications. The collectors accommodate a wide variety of collection vessels, including microplates, vials, and tubes and can be used with any FPLC, FLASH, or HPLC system.

Multicolumn adapters are available for parallel collection from multiple channels. With up to ten programmable time windows to use, and an optional 3-way diverter valve allows for diversion of column void volumes, peaks of no interest, and equilibration volumes to be diverted to a waste vessel.

### Compact and Portable

With one rack and up to 128 fractions, the compact, lower capacity FC 203B Fraction Collector is commonly configured with a MINIPULS 3 for low pressure chromatography. Contact closures allow the pump to be stopped after all fractions have been collected.

*\*Peak collection requires a detector and a 3-way valve.*



FC 203B Fraction Collector	
Description	Part Number
FC 203B, 110/220 V	171011
FC203B with 3-way valve	171011DV



# Fraction collector

FC 204

The FC 204 Fraction Collector is a large-bed fraction collector capable of handling up to 768 test tubes, vials, and up to eight shallow- or deep-well microplates.

## Adaptable to Many Collection Strategies

The FC 204 standard model is equipped with a 3-way valve to divert the fluid path to waste. A high flow model is also available for flow rates up to 200 mL/min. With repetitive collection in the same set of tubes or in different tubes, the FC 204 is ideal for LC purification works. The optional Multicolumn adapter allows for collection from up to 18 separate channels.

- Compact, low-cost tube filling system
- Flexible tube/vial/plate holders
- Peristaltic pumping technology for dispensing
- Small footprint for use in biosafety cabinets
- Quick start-up and installation
- Easy-to-sterilize flow path for minimized contamination



Visit [www.gilson.com](http://www.gilson.com) to learn more about our fraction collectors.



Request a quote today at [www.gilson.com](http://www.gilson.com) or from your local Gilson representative.

### FC 204 Fraction Collector

Description	Part Number
FC 204, 110/220 V	171041
FC 204, 110/220V, 200ML/MIN	171043

# LIQUID HANDLERS

Gilson liquid handling tools deliver the precise control you need for sample and reagent volume transfers, ensuring reproducible results while making life in the lab easier. Beginning with the legendary PIPETMAN® technology, our liquid handling tools have evolved with your needs. We offer completely automated liquid handling systems.



## LIQUID HANDLER SELECTION GUIDE

GX-241  
Liquid Handler



The GX-241 Liquid Handler offers a two-rack platform for large or small volume injection and automatic fraction collection using tubes, vials, or microplates. Its small footprint makes it an ideal choice for labs where bench space is limited.

GX-271  
Liquid Handler



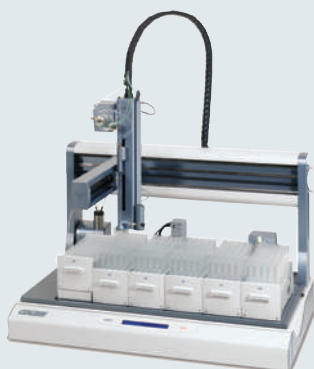
The GX-271 Liquid Handler offers a small footprint, medium capacity liquid handler and autosampler offers small-to-large volume injection, fraction collection, and liquid handling capabilities. Its optional dynamic syringeless pumping system is capable of delivering microliters to hundreds of milliliters, with no change in hardware.

GX-274  
Liquid Handler



The GX-274 Liquid Handler increases the throughput and efficiency of liquid transfers, serial dilutions, and other common tasks by processing up to four samples in parallel.

GX-281  
Liquid Handler



This GX-281 Liquid Handler provides a versatile, large capacity platform that can be configured for injection, fraction collection, and re-injection as part of a semi-preparative or preparative HPLC purification system. With optional accessories, it can also be used as a flexible liquid handler for performing a wide variety of automated, unattended liquid handling applications.





# gx-271

## LIQUID HANDLER

This small footprint, medium capacity liquid handler and autosampler offers small-to-large volume injection, fraction collection, and liquid handling capabilities. Its optional dynamic syringeless pumping system is capable of delivering microliters to hundreds of milliliters, with no change in hardware.

### Innovative Injection Modules

This mid-throughput liquid handler can be configured with a GX Direct Injection Module for injection onto an HPLC or LC/MS system. An innovative injection port design that attaches directly to the injection valve reduces void volumes and minimizes carryover associated with calibrated connection tubing, allowing injection volumes from 2  $\mu\text{L}$  up to 25 mL. The continuous flow path design on all injection valves allows the system flow to continue even as the injection valve switches from load to inject, ensuring consistent pressure and flow.

### Versatile, Space-Saving Design

With a small footprint of only 23 inches of linear bench space and a mid-size bed capacity, you'll have the perfect blend of size, performance, and capacity. On-bed reservoirs provide access for up to four solvents without utilizing a position on the bed. The modular design supports the use of Code 20-, 200-, or 34X-series racks and easily accommodates a variety of tubes, vials, and microplates.



Request a quote today at [www.gilson.com](http://www.gilson.com) or from your local Gilson representative.

# LOADING SYSTEMS

Gilson provides loading systems, allowing for sample transfers and other liquid handling tasks. These reliable systems can fit in any automated liquid handling platform or in HPLC semi-preparative and preparative systems.



## LOADING SYSTEM SELECTION GUIDE

VERITY® 4X20  
SYRINGE PUMPS

4020 SINGLE 4120 DUAL  
WITH TEE 4220 DUAL



### VERITY® Syringe Pumps Provide Speed and Reliability

- Performs small- and large-volume, repetitive liquid transfers
- Available in single, dual, and dual syringe with tee configurations
- Compatible with all Gilson liquid handlers

GX SOLVENT SYSTEM



### Bi-Directional Pump for the VERITY® GX-271 and GX-281 Liquid Handlers

The GX Solvent System can switch from aspirate to dispense mode and can deliver liquids at flow rates up to 50 mL/min. It can accommodate up to five different reservoir solvents.



 GILSON®



The VERITY® 4120 Dual with Tee Syringe Pump is equipped with two syringes that are user-selectable. The capacity of the left syringe must be greater than or equal to the right syringe. The instrument includes one valve to direct liquid from reservoir or probe (on the left) and a tee connected via junction tubing (on the right). Single syringe and standard dual (no tee) models are also available.

The VERITY 4120 Dual with Tee Syringe Pump assures accuracy in sample transfers, dilutions, reagent additions, mixing, and other liquid handling tasks. It offers speed and reliability for liquid handling tasks.

VERITY® 4120 Dual with Tee Syringe Pump	
Technical Specification	Definition
Communication	USB
Dimensions (W x D x H)	22.6 x 17.1 x 26.9 cm (8.9 x 6.7 x 10.6 in.)
Precision	1%
Syringe Capacity	100 µL, 250 µL, 500 µL, 1 mL, 5 mL, 10 mL, or 25 mL
Software Control	PC control via USB and TRILUTION® LH or TRILUTION® LC Software
Tee	<b>Type:</b> Three port, no moving parts <b>Diameter of channels:</b> 1.5 mm <b>Length of channels:</b> 14 mm <b>Angle between channels:</b> 120° <b>Liquid contact material:</b> PEEK <b>Dead volume:</b> 51 µL
Volumetric Accuracy	±2% (10%-90% syringe capacity, water)
Weight	6.8 kg (15.0 lbs.)



VERITY® 4120 Dual with Tee Syringe Pump	
Description	Part Number
VERITY® 4120 Dual with Tee Syringe Pump	31130002



Request a quote today at [www.gilson.com](http://www.gilson.com) or from your local Gilson representative.

# RACKS

## Standard and Custom Racks

Gilson offers standard and custom racks to meet the needs of any and all applications. A variety of vessels can be accommodated including tubes, vials, microplates, and microchips.

## RackCount™ System

RackCount System overlays add numbering patterns to rack positions allowing you to quickly and easily locate specific samples or collected fractions on the bed of Gilson liquid handlers. The overlays are available in serpentine or non-serpentine numbering patterns.



# ACCESSORIES

## Optimize Your Instrumentation

Complementing durable and flexible instruments, Gilson accessories optimize instrumentation to fit application requirements for the ultimate solution.



## ACCESSORIES SELECTION GUIDE

VALVEMATE® II Valve Actuator



### Increase the Flexibility of Your System

- Extends the capability of any chromatography or liquid handling system by offering options for solvent selection, column switching, and sample trapping
- Wide variety of valves, available in stainless steel or in biocompatible materials
- Fully controlled either via keypad or by TRILUTION® LC and LH Software

Orbital Shaker

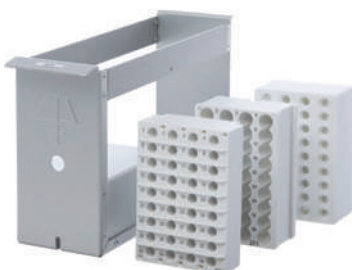


The Orbital Shaker is specifically designed for on-line or off-line liquid handling, vortexing, and mixing. It is a fully functional, stand-alone instrument. This compact shaker fits on one rack position of a GX-281 Liquid Handler bed. The shaker provides a range of customer-controlled shaking (20 to 720 rpm), allowing vortexing on various vessel sizes and sample volumes.

### Compatible with a Wide Range of Racks

The Orbital Shaker is compatible with all Code 200-series racks. A single rack attaches easily using set screws; rack placement is accurately guided by locator pins.

Racks



Gilson offers standard and custom SPE racks to meet the needs of any and all applications. A variety of vessels can be accommodated including tubes, vials, or microplates.



# PURIFICATION

Get the yield and reproducibility you need for trusted results with VERITY® purification systems. Whether you isolate targeted or non-targeted bioactive molecules from natural extracts or synthesis, or need milligrams to kilogram purifications, our VERITY systems offer you a wide array of components to build the perfect system to meet your specific needs. All systems are easily controlled by intuitive software, letting you focus on the science. Backed by Gilson's long history in preparative chromatography, rest reassured that VERITY solutions are built to last and will make your life in the lab easier.



## PURIFICATION SYSTEM SELECTION GUIDE

### Compact Systems

- Ideal for laboratory sharing system between multiple users
- Accommodate multiple purification techniques (FLASH, HPLC, CPC) and detection (UV-VIS, DAD, ELS, MS)
- Compatible with HPLC columns from 10 to 100mm, FLASH column up to 800g and CPC columns up to 1 liter

VERITY®  
Compact LC  
System



#### PLC Purification System for Preparative and Flash Chromatography

- Compact footprint and easy to use with flexible features
- Intuitive and integrated Gilson Glider Software





## PURIFICATION SYSTEM SELECTION GUIDE

### Modular Automated Systems

- Automated injections and fraction collections using multiple detection modes (UV-VIS, DAD, ELS, MS, pH)
- Ideal for multiple injections of the same or for a range of samples
- Share the system between multiple users in open access without user's presence
- Compatible with HPLC columns from 4.6 to 50mm

VERITY® 271  
HPLC System

VERITY® 281  
HPLC System



#### Analytical to Semi-Prep HPLC System

Optimized footprint modular system with a multitude of options for columns up to 20mm diameter, our VERITY® 271 System with 322 pumps offers mid-size bed capacity platform for injection/fraction collection controlled by powerful and flexible TRILUTION® LC software.

#### Large Capacity Preparative HPLC System

The VERITY® 281 System offers large bed capacity platform for injection/fraction collection on columns up to 50mm. This modular system proposes a multitude of options for columns switching and detection, all controlled by powerful and flexible TRILUTION® LC software.

# PUMPS

Gilson offers unsurpassed flexibility in pumping systems with an extensive product range and accommodations.



## PUMP SELECTION GUIDE

VERITY® 3011  
ISOCRATIC PUMP



### Ideal Pumping Solution for Chemical Reaction in Petroleum Applications, and GPC Cleanup in Environmental Applications

- High-pressure rating, up to 8,700 psi (600 bar), for accommodating industrial level applications
- Quick-connect pump heads for simple maintenance and reduced downtime
- Flow rates from 10  $\mu$ L/min to 10 mL/min and integrated touchscreen controller for convenient, stand-alone operation

305 HPLC PUMP  
306 HPLC PUMP



### Cost-Effective, Dependable Pumping Solution

- Available in isocratic, binary, and ternary configurations
- Interchangeable pump heads to accommodate flow rates from 10  $\mu$ L/min to 200 mL/min at pressure up to 8700 psi (600 bar), depending on the pump head.

322 HPLC PUMP



### Multi Solvent Pump for Analytical to Semi-Preparative HPLC

- Accommodates flow rates from 0.30 mL/min up to 30 mL/min at pressures up to 4,350 psi (300 bar)
- High-pressure dynamic mixer
- Performs a binary gradient with a single unit

333/334 HPLC PUMPS



### The Pumping Choice for Preparative HPLC

- Accommodates flow rates ranging from 1 mL/min to 200 mL/min at pressures up to 3,040 psi (210 bar) using columns up to 50 mm ID
- Multi-solvent selection with a Valvemate II Module
- Features a variable-volume, dynamic mixer for optimized high pressure gradient performance



### MAKE YOUR LAB LIFE EASIER

The VERITY® 3011 Isocratic Pump is an innovative liquid delivery solution for chemical reaction monitoring in petroleum applications and for gel permeation chromatography (GPC) in environmental and food, and beverage testing applications.

#### Simple Head Changing

The VERITY 3011 Isocratic Pump features a virtually pulse-free, stable solvent flow rate, ensuring stable flow delivery to detectors, and allowing for a wider range of application capabilities on one pump. The pump also features an easily interchangeable quick-connect pump head, making maintenance simple and reducing costly downtime.

The reproducibility and accuracy in reactions when using this pump, coupled with its low operation and maintenance costs, makes the VERITY 3011 Pump an ideal choice for many laboratories that pursue improved results and are trying to minimize costs, operators, and downtime.



#### KEY FEATURES

The VERITY 3011 Isocratic Pump offers a stand-alone pumping system with high valued features:

- Quick-connect pump heads for easy installation, and simple maintenance
- High pressure rating for accommodating industrial level applications in the petroleum industry
- Integrated touchscreen controller for convenient, stand-alone operation
- Compact and stackable design that fits easily into a refrigeration unit or a fume hood
- Flow rates from 0.01 to 10 mL/min, depending on the pump head, and pressures of up to 600 bar (8702 psi)

#### VERITY® 3011 Pump

Verity 3011 Pump	38114001
PUMP HEADS	
Description	Part Number
5 SS Pump Head Assembly (Stainless Steel)	38014217
10 SS Pump Head Assembly (Stainless Steel)	38014216



Request a quote today at [www.gilson.com](http://www.gilson.com) or from your local Gilson representative.



# DETECTORS

Gilson offers a complete line of HPLC detection solutions that are ideal for analytical, semi-preparative, and preparative HPLC applications.



## DETECTOR SELECTION GUIDE

VERITY® 1741 UV-VIS Detector



### UV-VIS DIODE ARRAY DETECTION

With a large selection of flow cells for semi-preparative to preparative purification (up to 500mL/min), the reliable and versatile VERITY® 1741 UV-VIS Detector is coupled with the power of multiple-wavelength scanning range from 200nm to 800nm.

VERITY® 1920 Mass Spectrometer



### MASS DETECTION

- Mass spectrometry provides high detection sensitivity and selectivity for compounds purification thus improving time to discovery.
- With a mass range of 10-2000 m/z, the VERITY 1920 MS helps you detect small to large molecules such as peptides and small proteins easily.
- This detector can utilize either electrospray ionization (ESI) or atmospheric pressure chemical ionization (APCI) ion source and safely yield high purity compounds.

VERITY® 1601 ELS DETECTOR



### ELS DETECTION

- Evaporative Light-Scattering Detection is a nearly-universal and powerful detection mode for liquid chromatography which is commonly used as a complementary option to UV-Vis detection when analytes do not possess any chromophore.
- Designed specifically for the needs of preparative HPLC and Flash Chromatography, the VERITY® 1601 provides a cost-effective solution with excellent reliability. Thanks to its specific nebulizer, it features low-temperature evaporation leveraging semi-volatile or thermally labile compounds detectability.

VERITY® 1810 Conductivity and pH Monitor



### CONDUCTIVITY AND PH DETECTION

- Compact instrument with an integrated conductivity sensor and an external optional pH sensor, ideal for biological purifications.







### ISOLATE, ANALYZE, AND DESALT OLIGONUCLEOTIDES IN ONE CONTINUOUS RUN

The VERITY® Oligonucleotide Purification System offers a single, automated HPLC system for the purification, analysis, and desalting of reagent-grade synthetic oligonucleotides in one continuous run. The system seamlessly changes between preparative and analytical scales, saving time and equipment space, while built-in error handling allows for unattended operation.

#### A Single System to Save Space and Money

This single platform system replaces the need for multiple systems to perform all the steps in an oligonucleotide purification process. Purification, analysis, and system scale-up are all accomplished with this one system. Not only does it free up precious lab space, but it also saves money on instrument purchases and maintenance.

#### Zero Downtime with Continuous Sample Processing

Monitor real-time data from previous runs while conducting additional preparative, analytical, and desalting runs.

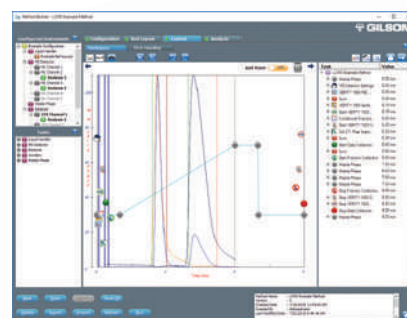
#### Automated Operation

When combined with the VALVEMATE® II Valve Actuator, the system automatically switches between columns, helping you to complete other work without the need to change configurations between different techniques. Built-in, software-based error handling conditions for each process stage can be customized for fully automated, unattended operation without fear of sample loss.

#### One Software Package, All Techniques

TRILUTION® LC software facilitates a seamless exchange of preparative and analytical methods without manual intervention and little to no instrument downtime.

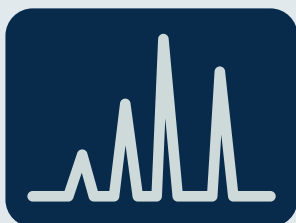
The easy-to-use software helps you to perform successful purifications and gives you the ability to customize your methods.



Download application notes at [www.gilson.com](http://www.gilson.com).

## VERITY® Oligonucleotide Purification System

Description	Part Number
<b>GX-271 Liquid Handler</b> <ul style="list-style-type: none"><li>● GX-Direct Injection Module with Sample Loops</li><li>● GX Solvent System</li></ul> <b>322 HPLC Pumps (2 sets)</b> <b>1741 UV-VIS Detectors with Flow Cells</b> <b>VERITY® 1810 Conductivity and pH Monitor</b> <b>Valvemate® II Valve Actuators, each with one Valve</b>	26440001



### OTHER PURIFICATION APPLICATIONS

Based on similar modular platforms, contact us to choose for purification of:

- Synthetic Peptides
- Antibodies (mAbs)
- Bioactive compounds from natural products
- DNA and RNA fragments



Request a quote today at [www.gilson.com](http://www.gilson.com) or from your local Gilson representative.





# LC PURIFICATION SYSTEMS

With the capability to purify compounds by preparative HPLC, flash chromatography CPC on the same instrument, Gilson's PLC 2050/2250/2500 Purification Systems simplify and streamline compound purification. These compact systems feature UV-VIS detection, an integrated pumping system, fraction collector, touchscreen control, and Gilson Glider Software

These customizable instruments are available in simple configurations for basic applications, but with a wide range of upgrade options to meet your lab's demands. PLC 2050 and PLC 2250 Purification Systems with Autosampler are configured with a VERITY® GX-241 Liquid Handler for automated sample injections and increased throughput.

These systems allow you to queue samples and create multiple, unattended runs.



## High Performance Features

- Intuitive touchscreen interface for easy method writing and modifying of parameters
- Built-in automatic injection valve
- Two or four independent solvent inlets for binary or quaternary gradients
- Three-rack fraction collector capacity with unlimited collection cycles
- Variable dynamic mixing chamber
- Dual reciprocating pump technology
- Four-wavelength UV-VIS or DAD detector
- Conductivity/pH monitor
- Evaporative light scattering detection (ELSD Option)

## PLC Purification Systems for Each Column Size

**PLC 2050: Flow rates up to 50 mL/min with pressure up to 300 bar**

- Prep HPLC: 10–30 mm diameter ID columns
- CPC: 100 mL column
- Flash Chromatography: 2.5–70 g cartridges

**PLC 2250: Flow rates up to 250 mL/min with pressure up to 230 bar**

- Prep HPLC: 10–70 mm diameter ID columns
- CPC: 250 mL column
- Flash Chromatography: 10–600 g cartridges

**PLC 2500: Flow rates up to 500 mL/min with pressure up to 110 bar**

- Prep HPLC: 20–100 mm diameter ID columns
- CPC: 1000 mL column
- Flash Chromatography: up to 1.2 kg cartridges



PLC Purification Systems are compatible with CPC columns.



The VERITY® CPC Lab MS System allows you to perform mass directed purification of target compounds by centrifugal partition chromatography (CPC). This automated, cost-effective, liquid-liquid purification technique utilizes reusable, silica-free chromatographic columns, and the VERITY® 1920 Mass Spectrometer to streamline your workflow and allow you to quickly isolate added value molecules with high yields and purity.



### Efficient and Streamlined Workflow

The reusable, silica-free columns offer high injection capacities of milligrams to kilograms. There are no columns to replace or silica to recycle, and no risk of blocked or contaminated columns. The VERITY CPC Lab MS System uses five times less solvent and eliminates the need for pre-treatment prior to injection.

### Save Time with Mass-directed Purification

Mass-directed purification saves time by targeting compounds of interest, reducing the overall number of fractions collected that require dry down, reconstitution, and analysis.



Download application notes at [www.gilson.com](http://www.gilson.com).

### Ideal for Isolation of Biologically Active Natural Products

Natural products are usually complex and can contain multiple valuable molecules. Mass-directed purification allows individual targeting and selective collection of molecules, even for those that do not provide UV signal, based on their mass to charge ratio.

Because the VERITY CPC Lab MS System does not denature fragile molecules, it is an ideal choice for natural extract fractionation and natural compound purification. Achieve 95% recovery with > 99% purity.

### Easy-to-Use

This fully automated system is controlled by GLIDER Software, praised by users for its intuitive touchscreen interface that enables easy method writing and modification of parameters.



The VERITY<sup>®</sup> CPC Process system combines efficiency, yield, and cost-effectiveness making it an attractive choice for users to produce pure molecules from mg to multi-kilograms that can be used as analytical standard or active ingredients in pharmaceutical, food, or cosmetics formulation. It combines a newly designed CPC column with a capacity range of 1 to 5 liters with the Liquid Chromatography VERITY<sup>®</sup> SKID. This most advanced CPC solution is commonly used as a remediation method to remove a non-desirable molecule from natural extracts.



### Our Solutions for the Cannabis Industry

Designed to integrate with your workflow, our cannabis purification systems set the standard for the industry and are complemented by our worldwide service and support network.

Learn more about our most popular instruments.

[Learn More](#)

## Reliable and Powerful

- The VERITY CPC Process customizable rotor benefits from a new cell design and rotation speeds ranging from 100 to 1800 rpm, allowing for processing of several tons of samples per year with higher resolution
- The accompanying VERITY SKID, provides a fast 3-liter per minute flow rate with 2% accuracy and 0.5% repeatability, which optimizes production time, cost, and quality
- The transmitters, alarms, and sensors present along the fluidic journey make for constant control and improved performance

## Easy-to-Use and Flexible

- The VERITY CPC Process system is easy-to-use and has broad applicability across natural extract, cosmetics, and pharmaceutical industries
- It allows for automated stack injections, and a preset list of methods for automated production
- The system also features automatic valves for ascending and descending modes, which allows for safer and easier use with dual rinsing and dual modes

## Safe and Compliant

- Developed with safety and compliance in mind, the VERITY CPC Process meets EU 2006/42/EU (machinery) and 2014/34/EC (ATEX) directives, with UL coming in 2021
- The system is controlled by a certified 21 CFR part 11-compliant software and includes multiple, customizable securities for improved operator safety and system preservation
- The VERITY CPC Process comes with FDA-compliant spare parts and consumables

This system benefits from Gilson's unique network of Service Engineers and Application Specialists. VERITY CPC Process owners can access local support to keep their investment running at peak performance, with applications tailored after their business strategy.



Visit [www.gilson.com](http://www.gilson.com) to learn more about our purification solutions.



Request a quote today at [www.gilson.com](http://www.gilson.com) or from your local Gilson representative.

# GEL PERMEATION CHROMATOGRAPHY (GPC)

Fully compliant with official international or governmental methods (EN 1528, 12393, EPA S19...), the VERITY® GPC Clean-up System is an ideal solution for GPC post-extraction cleanup prior to analysis of contaminants such as pesticides, semi-volatiles (i.e., PAHs), and PCBs in environmental samples, food products, and animal tissue.

By discarding high molecular weight interfering substances contained in sample extracts (lipids, proteins, cell debris, pigments humic acid, etc.), and recovering analytes of interest into a pure fraction of solvent, GPC is a simple but efficient clean-up technique to eliminate matrix effect and to protect your GC or LC analytical system from contaminating substances. By automating the process with preprogrammed methods, the VERITY GPC Cleanup leads to more reliable results and fewer sample repeats.

## GPC SYSTEM SELECTION GUIDE

VERITY® GPC Cleanup System with UV Detector



### Automated GPC Cleanup for a Variety of Substances, Monitored by UV Detection

- Improve column life and decrease downtime
- Automated cleanup of up to 80 sample extracts
- Modular system all under TRILUTION® LC Software control
- UV detector for GPC column calibration in compliance with GPC post-extraction guidelines set by the US
- Environmental Protection Agency (US EPA) and with other governments requirements
- Pre-programmed GPC methods included

Description	Part Number
GPC,GX-271 CLEANUP W/ UV DET	21110005
<b>Also available with:</b>	
<b>Without detector:</b> GPC,GX-271 CLEANUP W/O UV DET	21110006
<b>Large Throughput version with UV detector:</b> GPC,GX-281 CLEANUP W/UV DET	21110007

## FULLY AUTOMATED SYSTEM TO IMPROVE EFFICIENCY AND RELIABILITY

The VERITY GPC Cleanup is a fully automated GPC system that includes a GX 271 Liquid Handler configured as an injector/collector, which makes it an ideal tool to minimize human risk factors and improve reproducibility while protecting the technician from repetitive contact with hazardous solvents. With the ability to clean up to 80 samples extracted in the same run with high autonomy, the VERITY GPC Cleanup is a perfect tool to improve efficiency.

### Complete Workflow Integration

A large choice of racks compatible with different evaporation vessels are available to directly collect compound fractions inside, which prevents any additional manual transfer during post GPC process.

### Sample Integrity

The septum piercing capability can maintain the integrity of a sample extract by using closed tubes. Independent flow paths between injection and fraction collection avoids cross contamination and produces reliable results.

### GPC Cleanup for a Variety of Substances

The automated VERITY GPC Cleanup system is also used for a variety of substances or other chromatography application such as Isocratic High Pressure Liquid chromatography, from analytical to semi-preparative scale.

### All Under TRILUTION® LC Software Control

The VERITY GPC System is controlled by the powerful TRILUTION LC software which contains pre-programmed methods for GPC post-extraction cleanup. The software error handling and shutdown methods help to minimize solvent waste and sample loss.



The VERITY® GPC Cleanup System is configured with a GX-271 Liquid Handler equipped with 3- ways collection valve, GX Direct Injection Module, VERITY® 4020 Single Syringe Pump, VERITY® 3011 Isocratic Pump, TRILUTION® LC Software, and an optional 1741 UV-VIS Detector



Request a quote today at [www.gilson.com](http://www.gilson.com) or from your local Gilson representative.

# EXTRACTION

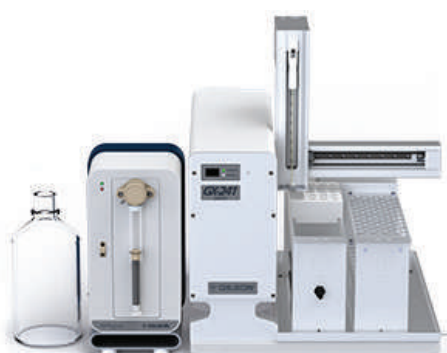
## Get the Most from your Analytical Systems with Trusted Results

Solid phase extraction (SPE) is a highly selective cleanup technique that eliminates matrix effects and concentrates compounds present as traces to improve analytical detection. The ASPEC® extraction line offers hands-free solutions that provides increased sample throughput and reliable test results while providing the traceability needed when studying drugs metabolites, contaminants, or proteins in biological, food, or environmental matrices.



## AUTOMATED EXTRACTION SYSTEM SELECTION GUIDE

ASPEC® 241 System



- Compact system for basic SPE automation
- Up to 36 samples on 1 mL cartridges, 20 on 3 mL, and 16 on 6 mL

ASPEC® 271 System



- Ultimate versatility system for basic and advanced SPE automation
- Up to 108 samples on 1 mL cartridges, 60 on 3 mL, and 48 on 6 mL
- Optional dual syringe for accurate transfer down to 10 µL
- Optional injection for direct UHPLC or LC integration
- Compatible with Gel Permeation Chromatography (GPC) and liquid-liquid extraction (LLE) and SLE cleanup applications

ASPEC® 274 System



- High throughput system for basic and advanced SPE automation
- Process four samples in parallel
- Up to 108 samples on 1 mL cartridges, 60 on 3 mL and 48 on 6 mL
- Compatible with LLE and SLE cleanup





ASPEC® 271 Large Volume System



- Ultimate versatility system for basic and advanced small- to large-volume SPE automation
- Up to 9 large volume samples on 3 mL and 6 mL cartridges
- Segregated aqueous and organic waste
- Optional dual syringe for accurate transfer down to 10  $\mu$ L
- Optional injection for direct UPLC or LC integration
- Compatible with GPC and LLE cleanup applications

ASPEC® 274 Large Volume System



- High throughput system for small- to large-volume SPE automation
- Process four samples in parallel
- Up to 32 samples on 3 mL and 6 mL cartridges
- Segregated aqueous and organic waste
- Compatible with LLE cleanup



## IMPROVE MANUAL SPE REPRODUCIBILITY

With uniform and consistent flow rate, the ASPEC® PPM (Positive Pressure Manifold) improves solid phase extraction (SPE) reproducibility and recovery, even with high viscosity samples.

It integrates easily into lab workflows, and provides a fast and simple way to prepare samples for subsequent analysis by chromatography.

### Compact and Easy to Set Up for Quick Operation

With its small footprint and only a single gas input, the ASPEC PPM is quick to set up and easily fits under fume hoods for extractions that use volatile solvents.

### Positive Pressure for Reproducible Extractions

With its integrated pressure gauge and intuitive controller, the manifold provides better flow control among samples and between runs than traditional vacuum manifolds, providing greater confidence in your data. Positive pressure ensures that all samples will elute regardless of the viscosity level.

### Parallel Clean Up

Compatible with both popular SPE cartridges and 96-well plates, the ASPEC PPM performs parallel extractions to increase throughput and productivity.

### Optimize Workflow Throughput

By combining the ASPEC PPM with PIPETMAN® multichannel pipettes or PLATEMASTER® for 96-well SPE plates, get the guarantee of accurate and fast samples management and extraction.

### One Unit - Four Formats

The base module is compatible with ASPEC SPE cartridges (1, 3, and 6 mL) and 96-well SPE plates for a high throughput clean-up.



Request a quote today at [www.gilson.com](http://www.gilson.com) or from your local Gilson representative.

ASPEC® Positive Pressure Manifold	
Description	Part Number
ASPEC® PPM Base Unit	37012000
ASPEC® PPM Manual SPE Installation Kit	37417010



The ASPEC® 274 System for positive pressure solid phase extraction (SPE) maximizes throughput by processing up to four samples in parallel. With its small footprint and multiple probes, it is the ideal choice for high-throughput SPE automation on 1, 3, or 6 mL cartridges. Combined with ASPEC® SPE Cartridges, it generates reproducible and efficient sample cleanup for clinical, forensic, doping, food, and environmental testing labs.

### Parallel Processing for Maximum Efficiency

Four-probe Z-arm enables processing of four samples in parallel, increasing throughput and efficiency.

### Positive Pressure for Reproducible Extractions

Positive pressure extraction with unique sealing cap design increases reproducibility from sample to sample. The syringe pump delivers accurate volume dispensing with reproducible flow-rate.

### Smart Design for Maximized Performance

Mobile rack technology enables multiple fractions elution and extractions per sample and additional fractions transfer in closed vials after SPE.

### Intuitive Error Handling for Trusted Results

The syringe pump pressure-sensing module provides error handling for high cartridge pressure or clogged liquid lines and monitors pressure on each fluid path individually. Innovative jet wash rinse stations minimize carryover and cross contamination.

### Versatile Software Control for Optimized Productivity

TRILUTION® LH Software allows for multiple liquid handling applications such as liquid-liquid extraction (LLE) and SPE on the same ASPEC system. Optimize throughput and efficiency by processing samples in either batch or sequential mode. Perform multiple elution and parallel solvent testing to quickly automate and optimize method development.



Request a quote today at [www.gilson.com](http://www.gilson.com) or from your local Gilson representative.



Download application notes at [www.gilson.com](http://www.gilson.com).

## CONSISTENT PERFORMANCE, RELIABLE RESULTS

Get more reliable results with ASPEC® SPE Cartridges, ready-to-use, high-quality silica and polymer cartridges. The ASPEC SPE Cartridges are available with ASPEC caps for cost-effective, automation-ready use on ASPEC automated solutions.

### Key Features of Pre-Capped Cartridges for ASPEC Automation

- Run cartridges right out of the box, saving valuable time with no need for manual capping
- Remove potential health concerns with repetitive manual operations
- Run samples faster
- Prevent run stopping due to improperly installed caps

Competitively priced versus uncapped cartridges with separated caps

### Highly Selective Solutions

High performance solid phase extraction sorbents based on specific polymers or molecularly imprinted polymers (MIP) for sample cleanup before chromatographic analytical methods. AFFINIMIP® SPE and AttractSPE™ are now available pre-capped for ASPEC automation.



#### Mycotoxins

Multimycro LCMSMS  
Patulin  
Ochratoxin A  
Zearalenone  
Fumonisin  
Deoxynivalenol...



#### Other Contaminants

Phenolics - PAHs - PFCs



#### Endocrine Disruptors

Bisphenols  
Estrogens



#### Pesticides

Glyphosate - AMPA-  
Glufosinate



#### Drugs Residues

Chloramphenicol  
Amphetamines  
Tetracyclines

## ASPEC SPE Cartridges - Retention Mechanisms Selection

Sample properties, such as matrix type and compounds of interest solubility and polarity, give a good starting point to identify the recommended sorbent and retention mechanism:

Analyte is soluble in			Analyte polarity	Recommended Phases (SILICA BASED - POLYMERIC)	
Aqueous	Sample Matrix Type	Aqueous	Non polar	ASPEC C18, ASPEC C8, ASPEC C4, ASPEC PHENYL, ASPEC CYCLOHEXYL, <b>ASPEC DVB</b>	
			Non polar/ Moderately polar	ASPEC C18 NEC, ASPEC C8, ASPEC C4, ASPEC CYANO, <b>ASPEC HLB</b>	
			Polar	ASPEC CYANO, ASPEC ACT. CARBON	
		Aqueous/Organic	Cationic/Basic	ASPEC SCX, ASPEC SCX-2, ASPEC WCX	
			Cationic/Basic (Neutral)	<b>ASPEC X-SCX, ASPEC X-WCX</b>	
			Anionic/Acid	ASPEC SAX, ASPEC SAX-2, ASPEC WAX, ASPEC WAX-2	
			Anionic/Acid (Neutral)	<b>ASPEC X-SAX, ASPEC X-WAX</b>	
		Organic	Non polar	ASPEC C18, ASPEC C8, ASPEC C4, ASPEC PHENYL, ASPEC CYCLOHEXYL, <b>ASPEC DVB, ASPEC HLB</b>	
		Organic	Aqueous	Non polar	ASPEC C18, ASPEC C8, ASPEC C4, ASPEC PHENYL, ASPEC CYCLOHEXYL, <b>ASPEC DVB, ASPEC HLB</b>
				Cationic/Basic	ASPEC SCX, ASPEC SCX-2, ASPEC WCX
Cationic/Basic (Neutral)	<b>ASPEC X-SCX, ASPEC X-WCX</b>				
Anionic/Acid	ASPEC SAX, ASPEC SAX-2, ASPEC WAX, ASPEC WAX-2				
Anionic/Acid (Neutral)	<b>ASPEC X-SAX, ASPEC X-WAX</b>				
Organic	Moderately polar		ASPEC SILICA, ASPEC FLORISIL, ASPEC ALUMINA, ASPEC CYANO, ASPEC DIOL NEC		
	Polar		ASPEC CYANO, ASPEC DIOL NEC		



# Gilson SupaTop™

SYRINGE FILTERS

## CLARIFY YOUR SAMPLES AND EXTEND THE LIFE OF YOUR ANALYTICAL SYSTEMS

For sample volumes up to 100 mL, the range of Gilson SupaTop™ Syringe Filters provides a quick, convenient, and reliable method of clarifying liquids intended for further analysis such as HPLC injection to combat particulate clogging of columns.

Gilson SupaTop Syringe Filters are available in two sizes, 13 or 25mm, each with a choice of porosity of 0.22 µm and 0.45 µm.

### Maintain Sample Integrity

- Pigment-free and sealant-free polypropylene housing
- HPLC-certified filters with low levels of UV-absorbing extractables

### Save Time and Avoid Error

- Color-coded syringe filters to quickly identify membrane and porosity used
- High burst strength and durable construction.

### A Membrane for all Your Needs

- The filter membrane should not interfere with the sample or bind proteins or other macromolecules.
- The table below provides a good starting point to identify the type of membrane used by application.



#### MEMBRANE APPLICATIONS

Application	Membrane Type
(U)HPLC solvents	PTFE or Nylon
Aqueous solution	All except PTFE
Iconic chromatography	PES or PTFE
Protein analysis	PES or PVDF
Environmental and food analysis	PTFE or Nylon
Clinical or toxicological analysis	PES
ICP/AAS metals analysis	PES or Nylon
Cell or Tissue culture media	PES

Gilson SupaTop Syringe Filters are available in Belgium, Luxembourg, the Netherlands, France, Germany, Italy, Spain, Switzerland, the United Kingdom, and the United States through Gilson direct sales only.



Contact us about filtration automation solutions at [www.gilson.com](http://www.gilson.com) or from your local Gilson representative.



Membrane	Properties	Color Code	Pore Size	13 mm Diameter		25 mm Diameter	
				Part No.	Pack of	Part No.	Pack of
PES	<p><b>Polyethersulfone (PES)</b> is widely used for the clarification of biological samples. This low binding membrane is able to resist surfactants and hydrocarbon oils but is not suitable for use with low-polar organic solvents or aromatic hydrocarbons.</p>		0.2 $\mu\text{m}$	<b>ANR1322</b> <b>ANR1322D</b>	100 1000	<b>ANR2522</b> <b>ANR2522C</b>	100 500
			0.45 $\mu\text{m}$	<b>ANR1345</b> <b>ANR1345D</b>	100 1000	<b>ANR2545</b> <b>ANR2545C</b>	100 500
MCE	<p><b>Mixed Cellulose Esters (MCE)</b> contain a blend of cellulose acetate and nitrocellulose fibers providing a more resilient membrane than CA for aqueous-based filtration. Higher binding than pure CA.</p>		0.2 $\mu\text{m}$	<b>ANM1322</b> <b>ANM1322D</b>	100 1000	<b>ANM2522</b> <b>ANM2522C</b>	100 500
			0.45 $\mu\text{m}$	<b>ANM1345</b> <b>ANM1345D</b>	100 1000	<b>ANM2545</b> <b>ANM2545C</b>	100 500
NYLON	<p><b>Polyamide (Nylon)</b> is a popular membrane with superior chemical compatibility than CA or MCE. Able to filter aqueous or mild organic solvents, this membrane is naturally hydrophilic with low extractables.</p>		0.2 $\mu\text{m}$	<b>ANN1322</b> <b>ANN1322D</b>	100 1000	<b>ANN2522</b> <b>ANN2522C</b>	100 500
			0.45 $\mu\text{m}$	<b>ANN1345</b> <b>ANN1345D</b>	100 1000	<b>ANN2545</b> <b>ANN2545C</b>	100 500
PVDF	<p><b>Polyvinylidene Fluoride (PVDF)</b> exhibits great chemical resilience being non-reactive to many solvents, acids, and bases. Appreciated for its low protein binding properties this membrane is used in biological sciences and its wide chemical compatibility range makes it ideal for HPLC sample preparation ahead of injection.</p>		0.2 $\mu\text{m}$	<b>ANV1322</b> <b>ANV1322D</b>	100 1000	<b>ANV2522</b> <b>ANV2522C</b>	100 500
			0.45 $\mu\text{m}$	<b>ANV1345</b> <b>ANV1345D</b>	100 1000	<b>ANV2545</b> <b>ANV2545C</b>	100 500
PTFE	<p><b>Polytetrafluoroethylene (PTFE)</b> has the highest chemical compatibility rating of these filters. Being naturally hydrophobic this membrane is most suited to the clarification of organic solvents and for air venting processes. Not suitable for aqueous sample filtration without pre-wetting.</p>		0.2 $\mu\text{m}$	<b>ANP1322</b> <b>ANP1322D</b>	100 1000	<b>ANP2522</b> <b>ANP2522C</b>	100 500
			0.45 $\mu\text{m}$	<b>ANP1345</b> <b>ANP1345D</b>	100 1000	<b>ANP2545</b> <b>ANP2545C</b>	100 500

# extractman®

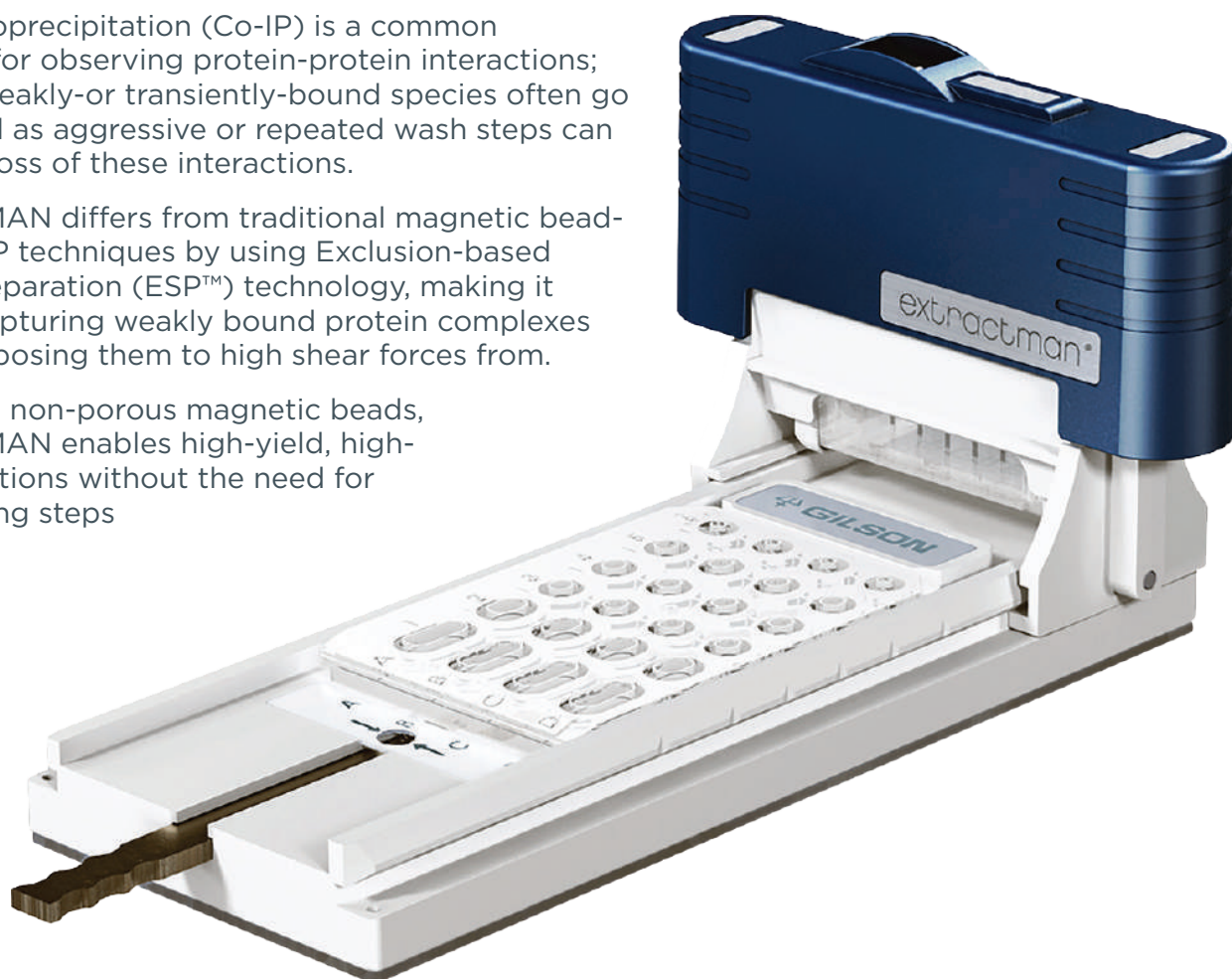
EXTRACTMAN® offers a fast and gentle paramagnetic beads-based approach to isolating target proteins and is ideal for isolating elusive, weakly-bound protein complexes critical to protein interaction research.

## Identifying Weak Proteins Interactions

Co-immunoprecipitation (Co-IP) is a common technique for observing protein-protein interactions; however, weakly-or transiently-bound species often go undetected as aggressive or repeated wash steps can result in a loss of these interactions.

EXTRACTMAN differs from traditional magnetic bead-based co-IP techniques by using Exclusion-based Sample Preparation (ESP™) technology, making it ideal for capturing weakly bound protein complexes without exposing them to high shear forces from.

Paired with non-porous magnetic beads, EXTRACTMAN enables high-yield, high-purity isolations without the need for long washing steps



Request a quote today at [www.gilson.com](http://www.gilson.com) or from your local Gilson representative.

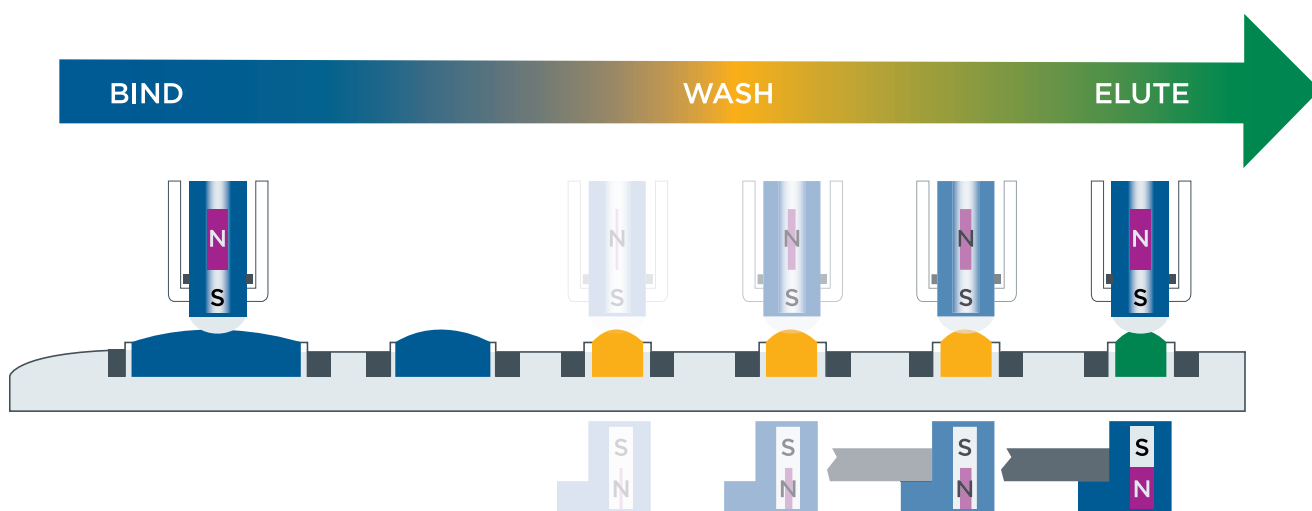


Find more tools and resources at [www.gilson.com](http://www.gilson.com).



## Rapid Isolation

EXTRACTMAN® uses surface tension and hydrophobic properties for ESP™-based extraction. This process gently and rapidly pulls bead-analyte complexes from sample to a series of washes and elute enriched and purified target compounds excluding unbound contaminants in a matter of seconds.



## Ergonomic and Easy-to-Use

Slide-based extraction gently moves four samples in parallel through isolation with a simple slide of the handle.

EXTRACTMAN has been used to rapidly isolate mRNA, DNA, and proteins from crude extracts using an assortment of commercial kits and reagent.



### EXTRACTMAN®

A Novel Platform for Target Protein Isolation

[Watch video](#)

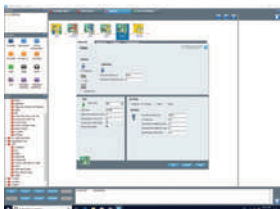
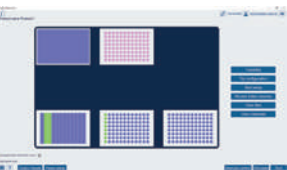
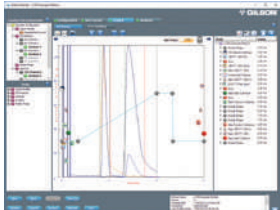
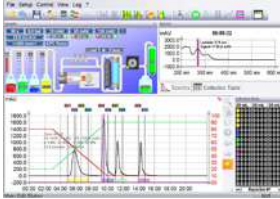
# SOFTWARE

## Software Designed by Scientists, for Scientists

Gilson offers powerful software to complement our instruments. With accommodating features, drag-and-drop functionality, and numerous supplied tasks, Gilson software packages allow effortless, complete control of instruments, allowing you to focus on the science rather than the software.



## SOFTWARE SELECTION GUIDE

TRILUTION® LH Software		TRILUTION® LH Software is a comprehensive software package for seamless automation of all liquid handling (LH) and solid phase extraction (SPE) methods. With its intuitive interface, simple drag-and-drop method creation, and application simulation, it combines flexibility and ease-of-use.
TRILUTION® Micro Software		TRILUTION® micro Software is an easy-to-learn software package for PIPETMAX®, which streamlines steps for runtime workflows. The qPCR Assistant and Normalization Assistant add-ons automate repetitive steps, tedious calculations, and sample tracking, improving reliability and traceability for PCR/qPCR and normalization runs.
TRILUTION® LC Software		TRILUTION® LC Software is a user-friendly software package for controlling high-pressure liquid chromatography systems and automated liquid handling instruments. TRILUTION LC provides fraction collection capabilities, conditional logic collection, worry-free slope collection, accurate fraction simulation, graphical drag-and-drop user interface, and graphical sample tracking.
GLIDER Software		The GLIDER Software supports the PLC Purification Systems, creating a single, advanced tool for HPLC, flash chromatography, and CPC applications.



