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USA Product Catalog 2022



The Art of Pipetting

Products for the Life Sciences

Rainin XLS+ Multichannel Pipettes

Industry-leading Channel-to-Channel Consistency



Pipet-Lite XLS+ Manual
Ergonomic design and exceptional performance
• 8- and 12-channel



E4 XLS+ Electronic
Precision across all channels
• 8- and 12-channel



Pipet-Lite XLS Adjustable Spacer
Tubes to plates with just a twist!
• 6- and 8-channel
• manual and electronic

See pages 8-11.



Pipettes

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Pipet-Lite XLS+

Performance You Can Feel

Rainin Pipet-Lite® XLS+ raises the bar on comfort, performance and control. Many volume sizes available in both LTS  and universal  formats.

Smooth operation

The sealing system on XLS+ pipettes delivers a plunger stroke that is smooth, precise and requires less force than before. Perfect for pipetting applications that require delicate control!

Highly accurate

Built to last and manufactured with premium quality materials, XLS+ pipettes are designed to deliver superior performance, year after year.

Autoclavable

XLS+ single-channel pipettes are designed for easy autoclaving where it counts: the complete liquid end, including the seals and piston. Autoclaving won't compromise performance or feel.

Total comfort

With sure-fit handles, contoured fingerhooks, lighter springs and low-drag seals, you can comfortably use Pipet-Lite XLS+ pipettes all day.

A better tip ejector

The tip ejector is made from a high density polymer that is corrosion free, autoclavable and highly resistant to chemicals. The ejector slides off in a single easy motion for cleaning.



	CATALOG No.	VOLUME RANGE	PRICE
Pipet-Lite XLS+	17014413	0.1–2 µL	\$ 496.00
	17014409	0.5–10 µL	496.00
	17014412	2–20 µL	496.00
	17014408	10–100 µL	496.00
	17014411	20–200 µL	496.00
	17014414	20–300 µL	496.00
	17014407	100–1000 µL	496.00
	17014410	200–2000 µL	496.00
	17011801	500–5000 µL	496.00
	17011795	1–10 mL	496.00

Advanced asset management

The RFID tag on board every Rainin XLS+ pipette stores calibration data that is electronically read by the Rainin Smart-Stand and PipetteX software. See page 58 for details.

Secure volume lock

The snag-proof lock design on XLS+ pipettes prevents accidental volume drift while allowing for rapid volume adjustment, even while wearing gloves.

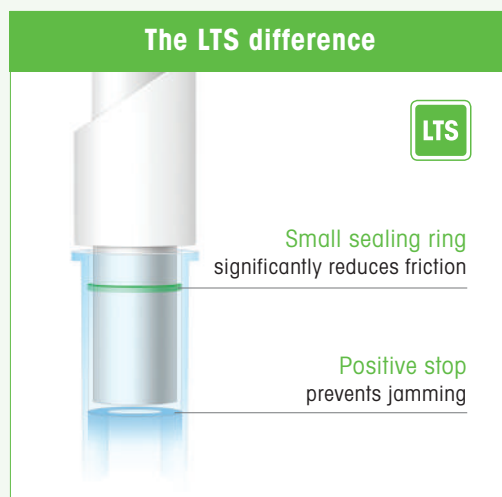


The LTS LiteTouch System

Because Pipetting Shouldn't Hurt

Minimize fatigue and risk of repetitive strain injury (RSI) with the Rainin LTS® LiteTouch® tip ejection system.

The LTS difference



The Rainin LiteTouch System dramatically reduces the amount of force required to load and eject tips. LTS pipettes work in concert with LTS tips to deliver a perfect seal every time.

- LTS tips slide easily over the shaft to create a firm, air-tight fit with minimal force.
- A thin sealing ring near the top of an LTS tip virtually eliminates friction between the tip and shaft.

LTS

	CATALOG No.	VOLUME RANGE	PRICE
Pipet-Lite XLS+	17014393	0.1–2 µL	\$ 496.00
	17014388	0.5–10 µL	496.00
	17014392	2–20 µL	496.00
	17014384	10–100 µL	496.00
	17014391	20–200 µL	496.00
	17014405	20–300 µL	496.00
	17014382	100–1000 µL	496.00
	17014390	200–2000 µL	496.00
	17011790	500–5000 µL	496.00
	17011783	1–10 mL	496.00
	17011788	2–20 mL	496.00

LTS pipettes use LTS tips.
For pipette specifications, see page 16.

► mt.com/SR-LTS

E4 XLS+

Simple, Versatile and Secure

Our easiest to use, most richly featured and secure electronic pipette. Many volume sizes available in both LTS  and universal  formats.

The E4 XLS+ is easily configured to be as simple or elaborate as your work requires.

- The large color screen, joystick control and graphic interface make moving between functions and operating the pipette easy and effortless.
- Highly customizable functions with multiple protocols that can be stored onboard for later use.

Your data is everything – trust the E4 XLS+ to deliver!



- **A “smart” charging stand!**

SmartStand charges up to four E4s simultaneously and offers a simple yet sophisticated way to track and manage every XLS brand pipette in your lab. See page 57.

Performance

An advanced microprocessor-guided stepper motor has 4,000 discrete steps for extremely accurate liquid dispensing.

The app master

For serial dilutions, filling plates, pipetting unusual liquids and performing complex pipetting steps, the E4’s versatile range of pipetting modes offer maximum convenience.

Save your protocols

Store multiple custom protocols in the onboard memory. Simultaneously review and select your protocols with a simple movement of the joystick. No more re-entering protocols over and over again!

Highly configurable

With E4’s Admin Mode, you can configure the pipette any way you want. For convenience or security, remove unwanted modes or lock in preferred settings.



GLP/GMP security

Minimize pipetting SOP deviations by locking protocol settings. Onboard service data is extremely secure and quick to access. Avoid calibration compliance errors by password protecting access to service interval alarms.

► mt.com/SR-E4

LTS

	CATALOG No.	VOLUME RANGE	PRICE
E4 XLS+	17014484	0.5–10 µL	\$ 1,123.00
	17014487	2–20 µL	1,123.00
	17014483	10–100 µL	1,123.00
	17014486	20–200 µL	1,123.00
	17014488	20–300 µL	1,123.00
	17014482	100–1000 µL	1,123.00
	17014485	200–2000 µL	1,123.00
	17012312	500–5000 µL	1,123.00
	17012313	1–10 mL	1,123.00
	17012314	2–20 mL	1,123.00

LTS pipettes use LTS tips. Li-Ion battery and wall power supply are included. For more information about LTS, see page 5. For pipette specifications, see page 16.

UNV

	CATALOG No.	VOLUME RANGE	PRICE
E4 XLS+	17014491	0.5–10 µL	\$ 1,123.00
	17014494	2–20 µL	1,123.00
	17014490	10–100 µL	1,123.00
	17014493	20–200 µL	1,123.00
	17014495	20–300 µL	1,123.00
	17014489	100–1000 µL	1,123.00
	17014492	200–2000 µL	1,123.00
	17012353	500–5000 µL	1,123.00
	17012354	1–10 mL	1,123.00

Universal pipettes use universal tips. Li-Ion battery and wall power supply are included. For pipette specifications, see page 16.

XLS+ Multichannels

Performance You Can Feel!

8 or 12 channels; volumes from 0.5–1200 µL.
Available only in LTS. LTS

E4 XLS+ Electronic Multichannel

Nothing compares with the functionality,
speed and accuracy of E4 XLS+

- Same functionality and ease of use as single-channel models
- E4 does the work with Multidispense and Autopace
- Consistent sample loading across all channels with low tip ejection forces

LTS

	CATALOG No.	VOLUME RANGE	PRICE
E4 XLS+ Electronic Multichannel	8-Channel		
	17013792	0.5–10 µL	\$ 1,946.00
	17013793	2–20 µL	1,946.00
	17013794	5–50 µL	1,946.00
	17013795	20–200 µL	1,946.00
	17013796	20–300 µL	1,946.00
	17014498	100–1200 µL	2,044.00
	12-Channel		
	17013797	0.5–10 µL	\$ 2,470.00
	17013798	2–20 µL	2,230.00
	17013799	5–50 µL	2,230.00
	17013800	20–200 µL	2,230.00
	17013801	20–300 µL	2,230.00
	17014499	100–1200 µL	2,993.00



E4 XLS+ Electronic

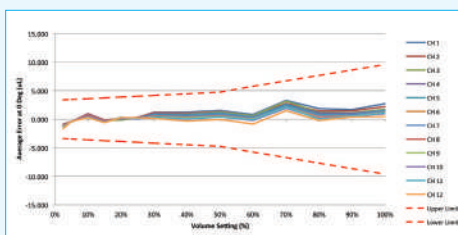


Pipet-Lite XLS+ Manual

LTS pipettes use LTS tips. Li-Ion battery and wall power supply are included. For more information about LTS, see page 5. For pipette specifications, see page 17.

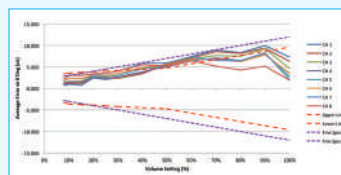
Industry-leading Channel-to-Channel Consistency

There's a reason Rainin multichannel pipettes are the market leader: ease-of-use and exceptional channel-to-channel consistency.

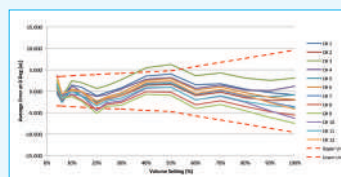


Rainin XLS+ 1200 µL

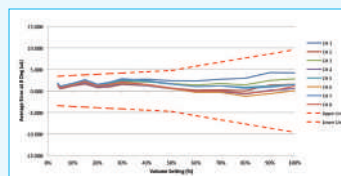
VS.



Competitor A • 1200 µL



Competitor B • 1200 µL



Competitor C • 1200 µL

Pipet-Lite XLS+ Manual Multichannel

Ergonomic design and exceptional performance

- Balanced, lightweight, reduced loading and ejection forces
- Easy quick-lock volume setting – no drift
- Rugged and durable

LTS

CATALOG No. VOLUME RANGE PRICE

8-Channel

17013802	0.5–10 µL	\$ 1,319.00
17013803	2–20 µL	1,134.00
17013804	5–50 µL	1,134.00
17013805	20–200 µL	1,134.00
17013806	20–300 µL	1,134.00
17014496	100–1200 µL	1,505.00

12-Channel

17013807	0.5–10 µL	\$ 1,510.00
17013808	2–20 µL	1,423.00
17013809	5–50 µL	1,423.00
17013810	20–200 µL	1,423.00
17013811	20–300 µL	1,423.00
17014497	100–1200 µL	2,137.00

LTS pipettes use LTS tips.
For more information about LTS, see page 5.
For pipette specifications, see page 17.

Adjustable Spacer Pipettes

Tubes to Plates with Just a Twist!

Adjust from standard 9 mm spacing to 14 mm or 19 mm;
manual or electronic 6- and 8-channel versions.
Available only in LTS. LTS

Pipet-Lite XLS Adjustable Manual Multichannel

One-hand adjustable spacing.

Fast, convenient
Quickly change from format to format in a single step

Nozzle spacing ranges
6-channel: 9–19 mm
8-channel: 9–14 mm

Multiple formats
Use with 24-, 48- and 96-well plates and
a variety of tube formats

Applications
Ideal for genomic, proteomic and cellular
assay applications

LTS

	CATALOG No.	VOLUME RANGE	PRICE
Pipet-Lite XLS Adjustable	6-Channel		
	17011841	20–300 µL	\$ 1,886.00
	17011840	100–1200 µL	1,886.00
	8-Channel		
	17011844	5–50 µL	\$ 1,886.00
	17011843	20–300 µL	1,886.00
	17011842	100–1200 µL	1,886.00

LTS pipettes use LTS tips.
For more information about LTS, see page 5.
For pipette specifications, see page 17.



E4 XLS Adjustable Electronic Multichannel

Different formats? No problem!

Easy, accurate and repeatable spacing

Just set the limiter dial and quickly move between formats by twisting the spacing control. Marks on the liquid end give fast visual confirmation of nozzle spacing. Ideal for routine micro-well work when you need to change formats quickly.



E4 XLS Adjustable	LTS		
	CATALOG No.	VOLUME RANGE	PRICE
	6-Channel		
	17012327	20–300 µL	\$ 3,189.00
	17012328	100–1200 µL	3,189.00
	8-Channel		
	17012329	5–50 µL	\$ 3,184.00
	17012330	20–300 µL	3,189.00
	17012331	100–1200 µL	3,184.00

LTS pipettes use LTS tips. Li-Ion battery and wall power supply are included. For more information about LTS, see page 5. For pipette specifications, see page 17.

Rainin Classic

Timeless Design, Exceptional Performance

An economical pipette with advanced ergonomic features not found on other pipettes in its class. Available in universal  formats.

An economical pipette with decades of expertise built in, Rainin Classic™ will deliver years of reproducible performance. Lighter spring forces, low-drag seals and a shock absorber make it easy on your hands.

Durable

Stainless steel and quality PVDF ensure fewer out-of-tolerance failures and low cost of ownership.

Lower plunger force

The Rainin Classic’s plunger force is 25% less than similar pipettes.

Comfort

The fingerhook allows a lighter grip during pipetting cycles.

Great value – lower prices!



	CATALOG No.	VOLUME RANGE	PRICE
Rainin Classic	17008648	0.1–2 µL	\$ 346.00
	17008649	0.5–10 µL	346.00
	17008650	2–20 µL	346.00
	17008651	10–100 µL	346.00
	17008652	20–200 µL	346.00
	17008653	100–1000 µL	346.00
	17008654	500–5000 µL	346.00
	17008655	1–10 mL	346.00
Starter Kit	17008708	Starter kit: PR-20, PR-200, PR-1000 and accessories	\$ 867.00

Universal pipettes use universal tips.
For pipette specifications, see page 16.



\$867
Starter Kit!

.....

20, 200 & 1000 µL
3 Hang-Ups
2 Racks of Tips

Rainin Pos-D

Positive-Displacement Pipetting

The right solution for liquids with high densities, viscosities or vapor pressures.

Rainin Pos-D™ positive displacement pipettes are ideal when pipetting liquids with high densities, viscosities or vapor pressures.

Relax!

The ergonomically designed Pos-D rests in your hand while you work.

Easy to load

Pre-assembled, sterilized disposable syringe tips are packed in convenient racks.

No cross contamination

Positive displacement prevents aerosol formation and protects samples from contamination.



		VOL		QTY		
		VOLUME RANGE		RACKS/CARTON	TIPS/CARTON	
CATALOG No.						PRICE
Pos-D Pipettes	17008575	0.5–10 µL				\$ 474.00
	17008576	3–25 µL				474.00
	17008577	20–50 µL				474.00
	17008578	10–100 µL				474.00
	17008579	50–250 µL				474.00
	17008580	100–1000 µL				474.00
Capillaries and Pistons	17008604	10 µL	3	180	✓	\$ 98.00
	17008605	25 µL	3	180	✓	98.00
	17008606	50 µL	3	180	✓	98.00
	17008607	100 µL	3	180	✓	98.00
	17008608	250 µL	3	180	✓	98.00
	17008609	1000 µL	3	180	✓	98.00
	17012264	10 µL	3	180		89.00
	17012265	25 µL	3	180		89.00
	17012266	50 µL	3	180		89.00
	17012267	100 µL	3	180		89.00
	17012268	250 µL	3	180		89.00
	17012135	1000 µL	3	180		89.00

Pipette Starter Kits

Multiple Ways to Buy New XLS+ Pipettes!

Available with SmartStand or Hang-Ups

Starter Kits with SmartStand include PipetteX software for easy pipette management (see page 58):

- Manage calibration and service for all of your pipettes
- View pipette calibration status right at your bench
- Quick charge your E4 XLS+ electronic pipettes
- Available for LTS  and universal 



	CATALOG No.	Single Channel Manual						Multichannel Manual				Single Channel Electronic			SmartStand w/ PipetteX software	Hang-Ups	PRICE
		2 µL	10 µL	20 µL	200 µL	1000 µL	5000 µL	20 µL 8-channel	200 µL 8-channel	20 µL 12-channel	200 µL 12-channel	20 µL	200 µL	1000 µL			
LTS	30386738	✓	✓	✓	✓									✓			\$ 1,696.00
	30579469	✓	✓	✓	✓										✓		1,461.00
	30386597	✓		✓	✓	✓								✓			1,575.00
	30579367	✓		✓	✓	✓										✓	1,461.00
	30386599			✓	✓	✓								✓			1,456.00
	30386737				✓	✓	✓							✓			1,696.00
	30386734			✓	✓	✓		✓						✓			2,181.00
	30386733			✓	✓	✓		✓						✓			2,181.00
	30386736			✓	✓	✓			✓					✓			2,420.00
	30386735			✓	✓	✓				✓				✓			2,420.00
	30386739						✓	✓						✓			1,935.00
	30456871			✓	✓	✓										✓	1,145.00
	30579472						✓	✓								✓	1,799.00
	30386740								✓	✓				✓			1,935.00
	30579471								✓	✓						✓	1,799.00
	30386731										✓	✓	✓	✓			3,266.00
UNV	30386598	✓		✓	✓	✓								✓			\$ 1,575.00
	30386730			✓	✓	✓								✓			1,456.00
	30456872			✓	✓	✓										✓	1,145.00
	30386732										✓	✓	✓	✓			3,266.00
	17008708*			✓	✓	✓										✓	867.00

* Rainin Classic

Fixed Volume XLS+ Pipettes

Guaranteed Volumes

Why risk the chance of delivering incorrect volumes?
Set the volume to your exact needs! Many volume sizes
available in both LTS  and universal  formats.

Accuracy and precision

Rainin Pipet-Lite XLS+ pipettes deliver the highest reproducibility for demanding workflows.

Smooth operation

The seals on XLS+ pipettes ensure consistent, controlled volume delivery from start to finish – ideal for applications that require delicate control.

Total hand comfort

With contoured handles, fingerhooks, light springs and low-drag seals, pipette all day with minimal fatigue.

Rainin LiteTouch – feel the difference!

Fixed volume pipettes are available with LTS® – our revolutionary LiteTouch® System. LTS dramatically reduces tip loading and ejection forces compared to other manual pipettes.

				
	CATALOG No.	CATALOG No.	VOLUME RANGE	PRICE
Fixed Volume Pipet-Lite XLS+	17015221	17015230	0.1–2.0 µL	\$ 322.00
	17015222	17015231	3–10 µL	322.00
	17015223	17015232	11–20 µL	322.00
	17015224	17015233	21–100 µL	322.00
	17015225	17015234	101–200 µL	322.00
	17015226	17015235	201–1000 µL	322.00
	17015227	17015236	1001–2000 µL	322.00
	17015228	17015237	2001–5000 µL	322.00
	17015229	17015238	5001 µL–10 mL	322.00

LTS pipettes use LTS tips. For more information about LTS, see page 5.
Universal pipettes use universal tips.



To order: Please contact your Rainin sales representative.

Pipette Performance Specifications

Specifications at 10%, 50% and 100% volume

All Rainin single-channel models, including:

- Manual pipettes
- Pipet-Lite XLS/ XLS+
 - Rainin Classic

- Electronic pipettes
- E4 XLS/ XLS+



PIPETTE VOLUME	VOL		INCREMENT μL		SYSTEMATIC ERROR		RANDOM ERROR	
	VOLUME	MANUAL	ELECTRONIC		%	$(\pm) \mu\text{L}$	%	$(\leq) \mu\text{L}$
Single-channel pipettes	2 μL	0.2 μL	0.002	n/a	12.0	0.024	6.0	0.012
		1 μL			2.7	0.027	1.3	0.013
		2 μL			1.5	0.030	0.7	0.014
	10 μL	1.0 μL	0.02	0.01	2.5	0.025	1.2	0.012
		5.0 μL			1.5	0.075	0.6	0.03
		10.0 μL			1.0	0.1	0.4	0.04
	20 μL	2 μL	0.02	0.02	7.5	0.15	2.0	0.04
		10 μL			1.5	0.15	0.5	0.05
		20 μL			1.0	0.2	0.3	0.06
	100 μL	10 μL	0.2	0.1	3.5	0.35	1.0	0.1
		50 μL			0.8	0.4	0.24	0.12
		100 μL			0.8	0.8	0.15	0.15
	200 μL	20 μL	0.2	0.2	2.5	0.5	1.0	0.2
		100 μL			0.8	0.8	0.25	0.25
		200 μL			0.8	1.6	0.15	0.3
	300 μL	30 μL	0.5	0.2	2.5	0.75	1.0	0.3
		150 μL			0.8	1.2	0.25	0.375
		300 μL			0.8	2.4	0.15	0.45
	1000 μL	100 μL	2	1	3.0	3.0	0.6	0.6
		500 μL			0.8	4.0	0.2	1.0
		1000 μL			0.8	8.0	0.15	1.5
	2000 μL	200 μL	2	2	3.0	6.0	0.6	1.2
		1000 μL			0.8	8.0	0.2	2.0
		2000 μL			0.8	16.0	0.12	2.4
	5000 μL	500 μL	5	5	2.4	12.0	0.6	3.0
		2500 μL			0.6	15.0	0.2	5.0
		5000 μL			0.6	30.0	0.16	8.0
	10 mL	1 mL	20	10	5.0	50.0	0.6	6.0
		5 mL			1.0	50.0	0.2	10.0
		10 mL			0.6	60.0	0.16	16.0
	20 mL	2 mL	20	20	5.0	100.0	0.6	12.0
		10 mL			1.0	100.0	0.2	20.0
		20 mL			0.6	120.0	0.16	32.0

All Rainin multichannel models, including:

Manual pipettes

- Pipet-Lite XLS/XLS+
- Pipet-Lite XLS Adjustable Spacer

Electronic pipettes

- E4 XLS/XLS+
- E4 XLS Adjustable Spacer

		VOL	INCREMENT μL	SYSTEMATIC ERROR		RANDOM ERROR – MANUAL		RANDOM ERROR – ELECTRONIC	
PIPETTE VOLUME		VOLUME	MANUAL / ELECTRONIC	%	($\pm$) μL	%	($\leq$) μL	%	($\leq$) μL
Multichannel pipettes	10 μL	1.0 μL	0.02/0.01	4	0.04	5	0.05	3	0.03
		5.0 μL		1.5	0.075	1.5	0.075	0.8	0.04
		10.0 μL		1	0.1	0.5	0.05	0.5	0.05
	20 μL	2 μL	0.02	7.5	0.15	4	0.08	3	0.06
		10 μL		1.5	0.15	1.5	0.15	1	0.1
		20 μL		1	0.2	0.5	0.1	0.3	0.06
	50 μL	5 μL	0.05	3.5	0.18	2	0.1	1.5	0.075
		25 μL		1.2	0.3	0.5	0.125	0.4	0.1
		50 μL		0.8	0.4	0.4	0.2	0.3	0.15
	200 μL	20 μL	0.2	2.5	0.5	1.2	0.24	1	0.2
		100 μL		0.8	0.8	0.25	0.25	0.25	0.25
		200 μL		0.8	1.6	0.3	0.6	0.2	0.4
	300 μL	30 μL	0.5/0.2	2.5	0.75	1.5	0.45	1	0.3
		150 μL		0.8	1.2	0.3	0.45	0.25	0.375
		300 μL		0.8	2.4	0.25	0.75	0.2	0.6
	1200 μL	100 μL	2/ 1	3.6	3.6	1	1	0.6	0.6
		600 μL		0.8	4.8	0.3	1.8	0.2	1.2
		1200 μL		0.8	9.6	0.2	2.4	0.15	1.8

Specifications subject to change without notice.



BenchSmart 96

Semi-Automated 96- and 384-well Pipetting

The precision and reproducibility of automated liquid handling with the speed and flexibility of a manual system.

The semi-automated BenchSmart™ 96 improves reproducibility by eliminating user variability when aspirating and dispensing.

- Semi-automated 96- and 384-well plate processing for genomics, proteomics, and cellular-based assays.
- BenchSmart gives users complete and precise control over the position of the pipetting head with 96 channels.
- The four tray positions save time and reduce your risk of error by minimizing the need to swap out trays and reservoirs.



Smart high-throughput

With its large touchpad, BenchSmart makes it easy to design, save and retrieve any protocol, from simple one-step procedures to complex, multi-step experiments.



Three pipetting heads

Get the precision you demand with the 0.5-20 µL head, the lab workhorse you need with the 5-200 µL head, and the multi-dispensing capability of the 100-1000 µL head.



Save time and money

BenchSmart 96 simplifies and speeds workflows by significantly reducing, if not eliminating, the need to swap out tips and reservoirs.

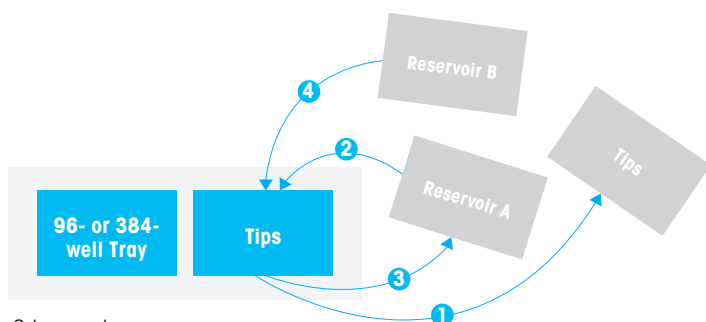


Speed your workflow

Compared to a two-tray system where reservoirs and trays need to be swapped out, a two solution protocol needs fewer liquid handling steps with BenchSmart.



4-tray BenchSmart 96



2-tray system

HEAD SIZE		LOW VOLUME 0.5-20 µL	MID VOLUME 5-200 µL	HIGH VOLUME 100-1000 µL
Performance Specifications	Systematic Error (per channel)	20 µL: ± 1% (0.2 µL) 10 µL: ± 1.2% (0.12 µL) 2 µL: ± 6% (0.12 µL) 1 µL: ± 12% (0.12 µL)	200 µL: ± 1% (2 µL) 100 µL: ± 1% (1 µL) 20 µL: ± 2% (0.4 µL) 5 µL: ± 5% (0.25 µL)	1000 µL: ± 1% (10 µL) 500 µL: ± 1% (5 µL) 100 µL: ± 2.5% (2.5 µL)
	Random Error (per channel)	20 µL: ≤ 0.8% (0.16 µL) 10 µL: ≤ 1.0% (0.1 µL) 2 µL: ≤ 5% (0.1 µL) 1 µL: ≤ 10% (0.12 µL)	200 µL: ≤ 0.4% (0.8 µL) 100 µL: ≤ 0.8% (0.8 µL) 20 µL: ≤ 1.5% (0.3 µL) 5 µL: ≤ 3.5% (0.18 µL)	1000 µL: ≤ 0.4% (4 µL) 500 µL: ≤ 0.4% (2 µL) 100 µL: ≤ 1.25% (1.25 µL)
	Volume Increments	0.02 µL	0.2 µL	1 µL

BenchSmart 96

Simplicity for Superior Performance

So intuitive, anyone in the lab can use it!

BenchSmart's wide range of application modes – from basic pipetting to advanced features like multi-dispense – make setup a snap.



BenchSmart's Application Modes Simplify Operation



Basic pipetting

Transfer individual liquid samples quickly, reproducibly and with minimal effort – everything you need for routine, everyday pipetting.



Advanced pipetting

Take greater control of your workflow by making fine adjustments – with advanced features like setting a fixed volume, volume sequencing and mixing.



Multi-dispense

Dispense multiple aliquots from a single aspirated volume – set a series of fixed volume aliquots or sequence of different volumes.



Dilute

Simplify in-tip dilution of multiple sample volumes with BenchSmart's fixed or volume sequencing features.



Reverse pipetting

Automates a procedure commonly used with viscous liquids – positioning the piston past the first stop, aspirating, then depressing only to the first stop to dispense the aliquot.

BenchSmart 96

LTS		CATALOG No.	MAX VOL	DESCRIPTION	PRICE
BenchSmart 96	30296705	20 µL	0.5-20 µL BenchSmart 96, complete		\$ 22,428.00
	30296706	200 µL	5-200 µL BenchSmart 96, complete		22,428.00
	30296707	1000 µL	100-1000 µL BenchSmart 96, complete		22,428.00
	30296708	20 µL	Pipetting head 0.5-20 µL, BenchSmart 96		8,975.00
	30296709	200 µL	Pipetting head 5-200 µL, BenchSmart 96		8,975.00
	30296780	1000 µL	Pipetting head 100-1000 µL, BenchSmart 96		8,975.00
Accs.	17010394	–	384-well adapter plate stage, white		\$ 389.00
	17010791	–	384-well adapter plate stage, black		389.00
	30321288	–	Terminal Conversion Kit		437.00

High-throughput LTS Tips

For use with BenchSmart 96 and Liquidator 96 benchtop pipettors only (1000 µL for BenchSmart only).

LTS		CATALOG No.	DESCRIPTION	VOL		QTY		FEATURES			PRICE
				MAX VOLUME		RACKS/CARTON	TIPS/CARTON	STERILIZED	FILTER	LOW RET.	
Tips in Racks	17011185	LQR LTS 20µL 960/10	20 µL	10	960						\$ 101.40
	17011186	LQR LTS 20µL S 960/10	20 µL	10	960	✓					117.60
	17011117	LQR LTS 20µL F 960/10	20 µL	10	960	✓	✓				169.00
	17010645	LQR LTS 200µL 960/10	200 µL	10	960						101.40
	17010647	LQR LTS 200µL S 960/10	200 µL	10	960	✓					117.60
	17010646	LQR LTS 200µL F 960/10	200 µL	10	960	✓	✓				169.00
	30281704	LQR LTS 1000µL 960/10	1000 µL	10	960						124.20
	30296781	LQR LTS 1000µL S 960/10	1000 µL	10	960	✓					142.20
	30296782	LQR LTS 1000µL F 960/10	1000 µL	10	960	✓	✓				202.00
	17014399	LQR LTS 20µL LS 960/10	20 µL	10	960	✓			✓		142.20
	17014400	LQR LTS 20µL FL 960/10	20 µL	10	960	✓	✓	✓			207.00
	17014401	LQR LTS 200µL LS 960/10	200 µL	10	960	✓			✓		142.20
	17014402	LQR LTS 200µL FL 960/10	200 µL	10	960	✓	✓	✓			207.00
	30296783	LQR LTS 1000µL LS 960/10	1000 µL	10	960	✓			✓		142.20
	30296784	LQR LTS 1000µL FL 960/10	1000 µL	10	960	✓	✓	✓			207.00
Tips in Stacks	17011187	LQS LTS 20µL 960/10	20 µL	10	960						\$ 101.40
	17011287	LQS LTS 20µL S 960/10	20 µL	10	960	✓					117.60
	17010648	LQS LTS 200µL 960/10	200 µL	10	960						101.40
	17010649	LQS LTS 200µL S 960/10	200 µL	10	960	✓					117.60
	17014403	LQS LTS 20µL LS 960/10	20 µL	10	960	✓			✓		142.20
	17014404	LQS LTS 200µL LS 960/10	200 µL	10	960	✓			✓		142.20

See page 25 for BenchSmart reservoirs, plates, mats and strips.

Liquidator 96

Manual High-Throughput Pipetting

Fully manual processing of 96- and 384-well plates for genomics, proteomics and cell-based assays.

- **Two volume ranges: 0.5-20 μ L and 5-200 μ L**
- **No power or programming: simply set the volume and pipette**
- **Four-position platform: process up to 3 plates at a time without stacking**

Liquidator® 96 streamlines application workflows for genomics, proteomics and cellular applications, simplifies plate replication, performs serial dilutions, plate washes or quickly moves samples between 96- and 384-well formats.

Count on Liquidator 96 to deliver the highest accuracy for PCR, qPCR, DNA sequencing and genotyping experiments. Generate precise 96-well ELISA, functional, cell viability or chemotaxis assays, all on one platform.





Easy to use

Because Liquidator doesn't require programming or significant training, anyone can be an expert in no time.

Accurate and reproducible

Both 20 µL and 200 µL Liquidator models offer superior accuracy and precision.

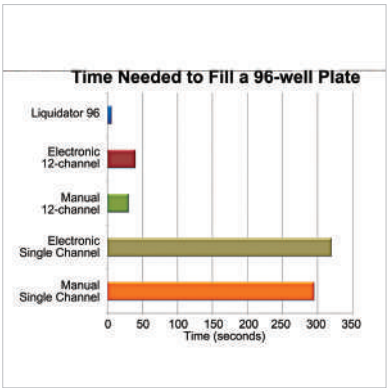
Liquidator 96 specifications

	SYSTEMATIC ERROR	RANDOM ERROR
20 µL	20 µL: ± 1.0%	20 µL: ≤ 0.8%
	10 µL: ± 1.2%	10 µL: ≤ 1.0%
	2 µL: ± 6%	2 µL: ≤ 5%
	1 µL: ± 12%	1 µL: ≤ 10%

Volume range: 0.5-20 µL
Volume increment: 0.02 µL

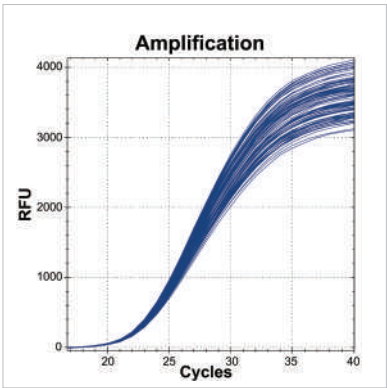
200 µL	200 µL: ± 1.0%	200 µL: ≤ 0.5%
	100 µL: ± 1.0%	100 µL: ≤ 0.8%
	20 µL: ± 2.0%	20 µL: ≤ 1.5%
	5 µL: ± 5.0%	5 µL: ≤ 3.5%

Volume range: 5-200 µL
Volume increment: 0.2 µL



Save time

Liquidator processes 96-well plates in as few as six seconds each, without sacrificing data quality.



Reduce errors

By pipetting all 96 wells simultaneously, Liquidator eliminates the risk of skipping or repeating wells or rows.

Liquidator 96

Liquidator 96

LTS

	CATALOG No.	DESCRIPTION	PRICE
LIQ 96	17014207	0.5-20 µL Benchtop Pipetting System	\$ 21,763.00
	17010335	5-200 µL Benchtop Pipetting System	21,763.00
Liquidator 96 is supplied with height adjustment posts, a 384-well adapter plate stage and three racks of tips to get you started.			
LIQ 96 Accessories	17014270	Height adjustment posts, 0.5-20 µL Liquidator	\$ 73.20
	17010396	Height adjustment posts, 5-200 µL Liquidator	72.20
	17010394	384-well adapter plate stage, white	389.00
	17010791	384-well adapter plate stage, black	389.00
	17011118	20 µL tip tray adapter, white	337.00

High-throughput LTS Tips

For use with BenchSmart 96 and Liquidator 96 benchtop pipettors only (1000 µL for BenchSmart only).

		VOL		QTY		FEATURES			PRICE
		MAX VOLUME		RACKS/CARTON	TIPS/CARTON	STERILIZED	FILTER	LOW RET	
Tips in Racks	LTS	CATALOG No.	DESCRIPTION						
		17011185	LQR LTS 20µL 960/10	20 µL	10	960			\$ 101.40
		17011186	LQR LTS 20µL S 960/10	20 µL	10	960	✓		117.60
		17011117	LQR LTS 20µL F 960/10	20 µL	10	960	✓	✓	169.00
		17010645	LQR LTS 200µL 960/10	200 µL	10	960			101.40
		17010647	LQR LTS 200µL S 960/10	200 µL	10	960	✓		117.60
		17010646	LQR LTS 200µL F 960/10	200 µL	10	960	✓	✓	169.00
		30281704	LQR LTS 1000µL 960/10	1000 µL	10	960			124.20
		30296781	LQR LTS 1000µL S 960/10	1000 µL	10	960	✓		142.20
		30296782	LQR LTS 1000µL F 960/10	1000 µL	10	960	✓	✓	202.00
		17014399	LQR LTS 20µL LS 960/10	20 µL	10	960	✓	✓	142.20
		17014400	LQR LTS 20µL FL 960/10	20 µL	10	960	✓	✓	207.00
		17014401	LQR LTS 200µL LS 960/10	200 µL	10	960	✓	✓	142.20
		17014402	LQR LTS 200µL FL 960/10	200 µL	10	960	✓	✓	207.00
		30296783	LQR LTS 1000µL LS 960/10	1000 µL	10	960	✓	✓	142.20
		30296784	LQR LTS 1000µL FL 960/10	1000 µL	10	960	✓	✓	207.00
Tips in Stacks		17011187	LQS LTS 20µL 960/10	20 µL	10	960			\$ 101.40
		17011287	LQS LTS 20µL S 960/10	20 µL	10	960	✓		117.60
		17010648	LQS LTS 200µL 960/10	200 µL	10	960			101.40
		17010649	LQS LTS 200µL S 960/10	200 µL	10	960	✓		117.60
		17014403	LQS LTS 20µL LS 960/10	20 µL	10	960	✓	✓	142.20
		17014404	LQS LTS 200µL LS 960/10	200 µL	10	960	✓	✓	142.20

Reservoirs, plates, mats and strips for BenchSmart 96 and Liquidator 96

Reusable SBS footprint polypropylene reservoirs

	CATALOG No.	DESCRIPTION	QUANTITY	PRICE
Reservoirs	17012602	Non-sterile Low-profile 96 pyramidal bottoms	5-pack	\$ 62.20
	17012603	Sterile Low-profile 96 pyramidal bottoms	5-pack, indiv. wrap	90.00
	17012604	Non-sterile Standard profile 96 pyramidal bottoms	5-pack	72.40
	17012605	Sterile Standard profile 96 pyramidal bottoms	5-pack, indiv. wrap	100.60
	17012608	Non-sterile Low-profile 8-channel V-bottom	5-pack	62.20
	17012609	Sterile Low-profile 8-channel V-bottom	5-pack	90.00
	17012606	Non-sterile Standard profile 8-channel V-bottom	5-pack	72.40
	17012607	Sterile Standard profile 8-channel V-bottom	5-pack, indiv. wrap	100.60
	17012612	Non-sterile Low-profile 12-channel V-bottom	5-pack	62.20
	17012613	Sterile Low-profile 12-channel V-bottom	5-pack, indiv. wrap	89.80
	17012610	Non-sterile Standard profile 12-channel V-bottom	5-pack	71.80
	17012611	Sterile Standard profile 12-channel V-bottom	5-pack, indiv. wrap	100.60

Deepwell plates, mats, tube strips, cap strips

Accessories	17012623	Non-sterile 2.2 mL 96-deepwell plate,	5-pack	\$ 36.20
	17012624	Sterile 2.2 mL 96-deepwell plate,	5-pack, indiv. wrap	62.20
	17012625	Non-sterile Polymer sealing mat fits 96-deepwell plate	5-pack	36.20
	17012626	Sterile Polymer sealing mat fits 96-deepwell plate	5-pack, indiv. wrap	62.20

Enhance ELISA Data Quality

ELISA data quality can be significantly improved if reagents are added simultaneously and process time is reduced. Our free white paper shows how Liquidator® 96 used for ELISA workflows is able to generate more linear ELISA standard curves.

Get your free white paper "Improving Quantitative ELISA Data" at:

► mt.com/liq96elisa



PureSpeed Applications

Simplify Proteomic and Genomic Experiments

PureSpeed® sample preparation tips can streamline many types of experiments. Here are some examples:



Immunoprecipitation

PureSpeed ProA and ProG pre-packed tips can be used with Rainin E4 XLS pipettes to perform direct and indirect immunoprecipitation. Compared to magnetic beads and loose agarose resin, PureSpeed offers a simpler protocol and delivers more concentrated immunoprecipitated samples.

With multichannel E4 XLS pipettes, PureSpeed can process up to 12 samples simultaneously.

Chromatin immunoprecipitation (ChIP)

Use PureSpeed to study the interactions between proteins and DNA in a cell. Unlike magnetic beads, loose agarose resin, spin columns and fixed staphylococcus cells, PureSpeed markedly reduces the hands-on time needed for ChIP.

For ChIP procedures, pre-packed ProA and ProG tips are able to produce highly concentrated samples. When used with the multichannel Rainin E4 XLS pipette, PureSpeed tips offer a truly parallel solution for ChIP experiments.

Recombinant and native protein purification

PureSpeed can simplify your method to capture, purify, and enrich recombinant proteins and native proteins, such as antibodies. Ni-IMAC, ProA and ProG resins can be completely saturated with recombinant proteins or antibodies.

Combined with high volume wash steps and low elution buffer volumes, PureSpeed delivers the highest concentration of purified material in as little as 15 minutes.



PureSpeed Protein Purification Tips and Accessories

	CATALOG No.	RESIN VOLUME	MAX. VOLUME	DETAILS	QUANTITY	PRICE
ProA Tips	17012561	5 µL	200 µL		12-pack	\$ 90.00
	17012562	20 µL	200 µL		12-pack	119.80
	17012568	20 µL	1000 µL		12-pack	119.80
	17012569	80 µL	1000 µL		12-pack	253.00
ProG Tips	17012563	5 µL	200 µL		12-pack	\$ 90.00
	17012564	20 µL	200 µL		12-pack	119.80
	17012570	20 µL	1000 µL		12-pack	119.80
	17012571	80 µL	1000 µL		12-pack	253.00
Ni-IMAC Tips	17012566	5 µL	200 µL		12-pack	\$ 90.00
	17012567	20 µL	200 µL		12-pack	119.80
	17012572	20 µL	1000 µL		12-pack	119.80
	17012573	80 µL	1000 µL		12-pack	253.00
Ab+ Tips	30382178	20 µL	1000 µL		12-pack	\$ 143.40
	30382179	80 µL	1000 µL		12-pack	282.00
	17012588	Accessory Kit: Base, 96-deepwell plate, ColorTrak Guides, Adapters				\$ 350.00
	17012587	E4 MicroSD Card PS Protocol PT-E4-SD				139.60

Most of the items included in the accessory kit are also available to order individually. Please go to mt.com/purespeed for a complete list and prices.

AutoRep S

Manual Repeater Pipette

Flexible volume ranges and a wide selection of syringes ensure precise performance.

The ergonomic AutoRep™ S manual repeater pipette is simple to operate, lightweight and easy on the hands.

Useful when working in the range from 2 µL to 50 mL, AutoRep S is an economical choice for repeat dispensing up to 49 aliquots without refilling.

The volume reference card and central volume wheel simplify volume setting. The two-sided volume card fits in a slot on the instrument head.



	CATALOG No.	DESCRIPTION	PRICE
AutoRep S	17013008	Manual repeater pipette, 2 µL to 50 mL	\$ 510.00
	17013009	Shelf mount	39.20
	17013010	Volume table	33.60

Rainin positive displacement syringes are ideal for repetitive pipetting of all liquids.

The wide selection of Encode™ syringes gives accurate delivery in any volume from 1 µL to 50 mL, and they are available sterile and non-sterile.

Sterile syringes are certified to be free of detectable DNA, RNase, Endotoxin and ATP. Product is sterilized with beta-radiation to obtain a SAL of 10⁻⁶. Individually wrapped.

	CATALOG No.	MAX. VOLUME	QUANTITY		PRICE
Encode Syringes	17007399	0.1 mL	100 per pkg		124.20
	17007400	0.1 mL	100 per pkg	Sterile	175.00
	17001871	0.5 mL	100 per pkg		124.20
	17001872	0.5 mL	100 per pkg	Sterile	175.00
	17013004	1 mL	100 per pkg		124.20
	17013002	1 mL	100 per pkg	Sterile	177.20
	17001873	1.25 mL	100 per pkg		124.20
	17001874	1.25 mL	100 per pkg	Sterile	175.00
	17001877	2.5 mL	100 per pkg		124.20
	17001878	2.5 mL	100 per pkg	Sterile	175.00
	17001883	5 mL	100 per pkg		124.20
	17001884	5 mL	100 per pkg	Sterile	175.00
	17013005	10 mL	100 per pkg		131.80
	17013003	10 mL	100 per pkg	Sterile	177.20
	17001875	12.5 mL	100 per pkg		124.20
	17001876	12.5 mL	100 per pkg	Sterile	175.00
	17001879	25 mL*	50 per pkg		142.20
	17001880	25 mL*	25 per pkg	Sterile	277.00
	17001881	50 mL*	25 per pkg		141.20
	17001882	50 mL*	25 per pkg	Sterile	277.00
	17000546	25/50 mL**	10 per pkg		104.60
	17000547	25/50 mL** Wrapped	5 per pkg	Sterile	101.00
	17001885	Encode set, non-sterile, 20 each: 0.5, 1.0, 1.25, 2.5, 5, 10, 12.5 mL			157.00

* Includes one adapter. ** Adapter



Upgrade Your Liquid Aspiration – It's Easy!

The Rainin QuickFlow Handle Kit – with three adapters – attaches easily to your central vacuum system



Single channel adapter

Wide range of Rainin universal-fit tips to suit your application.



Serological adapter

Fits standard glass or plastic Pasteur pipettes



Continuous flow option

Switch suction on to reduce finger strain



No-clog design

Unique channel design prevents blockage and delivers long-lasting performance.

Upgrade your system

QuickFlow handle and tubing attaches easily to your vacuum system.

Hand-saving ergonomic design

Convenient, low-force tip ejection with one hand.

Easy cleaning

The QuickFlow handle, adapters and tube is easy to clean and autoclavable.

No central vacuum? No problem!

The Rainin QuickFlow aspirator is portable, easy-to-use and includes adaptors for almost every application.



Smart features

- Variable speed settings
- Non-contact liquid level sensor
- 4L waste reservoir with carry handle
- Quick-snap connectors and tubing
- Autoclavable
- Fits in most hoods
- Single channel, 8-channel and serological adaptors

Guaranteed safety

The robust, non-contact liquid level sensor prevents overflows with auto-stop, a flashing light and audible alarm when the reservoir is full. Simple, self-sealing snap connectors keep the contents and any contamination inside the bottle.

CATALOG No.	DESCRIPTION	PRICE
30519826	QuickFlow System Includes variable speed vacuum system, 4L autoclavable reservoir with inlet/outlet snap connector cap, non-contact liquid level sensor system for reservoir, inlet and outlet vacuum tubing with snap connectors and complete handle kit.	\$ 2,535.00
30519824	QuickFlow Handle Kit – Standard Standard kit includes ergonomic handle with continuous and non-continuous flow control, three adaptors (8-channel/ universal tip, single- channel/universal tip, single Pasteur pipette), vacuum tubing and handle hook accessory.	491.00

Large Volume Bottle Top Dispensing

Disp-X – Dispense Safely and Easily

Built-in safety features prevent spills and ensure smooth, trouble-free operation.

Superior chemical compatibility

High-grade inert materials assure the purity of your reagents from the first aliquot to the last.

Safety first!

Discharge tube and closure cap prevent accidental dispensing or spilling of corrosive liquids.

Clear and easy control

Adjustable control knob facilitates volume setting.

Flexible options

Telescoping filling tubes accommodate different size bottles.



	CATALOG No.	DESCRIPTION			PRICE
Disp-X	30373527	Disp-X 0.5–5 mL bottle-top dispenser			\$ 435.00
	30373528	Disp-X 1–10 mL bottle-top dispenser			435.00
	30373529	Disp-X 2.5–25 mL bottle-top dispenser			594.00
	30373750	Disp-X 5–50 mL bottle-top dispenser			594.00
Accessories	30373751	Disp-X discharge tube	5 or 10 mL		\$ 71.40
	30373752	Disp-X discharge tube	25 or 50 mL		71.40
	30373753	Disp-X filling tube	5 or 10 mL	125–240 mm length	28.60
	30373754	Disp-X filling tube	5 or 10 mL	250–480 mm length	28.60
	30373755	Disp-X filling tube	25 or 50 mL	170–330 mm length	28.60
	30373756	Disp-X filling tube	25 or 50 mL	250–480 mm length	28.60
	30373757	Disp-X filling valve	5 or 10 mL		71.40
	30373758	Disp-X filling valve	25 or 50 mL		70.80
	30373759	Disp-X discharge valve	5 or 10 mL		71.40
	30373760	Disp-X discharge valve	25 or 50 mL		71.80

Easy Control at Your Fingertips

Rainin SP+ Pipette Controller

NEW

Blends ergonomics with state-of-the-art technology and a unique, extendable head to conquer your most challenging liquid handling needs with speed and ease.

Extendable head

Telescoping head for added comfort, particularly when operating in a laminar flow hood.

Variable speed, low force

Easily adjustable aspiration/dispense speeds offer greater flexibility with various solutions and media, and protection for sensitive cells.

Lightweight, easy to use

The ergonomic and well-balanced design makes the instrument easy to hold and operate.

Powerful battery

Delivers 15 hours of operation on single charge and up to one hour after just 10 minutes.

Wide range of consumables

Rainin SP+ works with all types of 1 mL to 100 mL serological and micro pipettes and can transfer liquid from 0.1 mL to 100 mL.



	CATALOG No.	DESCRIPTION	PRICE
Rainin SP+	30671415	Rainin SP+ pipette controller, 0.1–100 mL	\$ 577.50
	17011745	Rainin SP+ spare filter	14.40
	30671310	Magnetic Hang-Up	51.60
	30621247	Pipette adaptor	31.00

RaininService

Our Lab or Yours – You Choose.

Mail-in

- Service when you need it – no waiting to schedule!
- Fast turnaround
- ISO 17025 accredited by A2LA
- Tightly controlled environment
- 6- and 7-place METTLER TOLEDO balances
- METTLER TOLEDO MCP multichannel balances – all channels tested
- Free inbound shipping
- Free return kits (4+ pipettes)

Onsite

- We come to you!
- Perfect for labs with chain-of-custody concerns
- ISO 17025 accredited by A2LA
- METTLER TOLEDO balances
- Minimal downtime
- Pipettes are calibrated in the environment where they are used
- Experienced Rainin onsite technicians available nationwide



Why choose Rainin Service?

Flexibility, convenience and highly-trained technicians!

Choice

Our service offering includes onsite or mail-in calibration service and a wide range of plans to choose from.

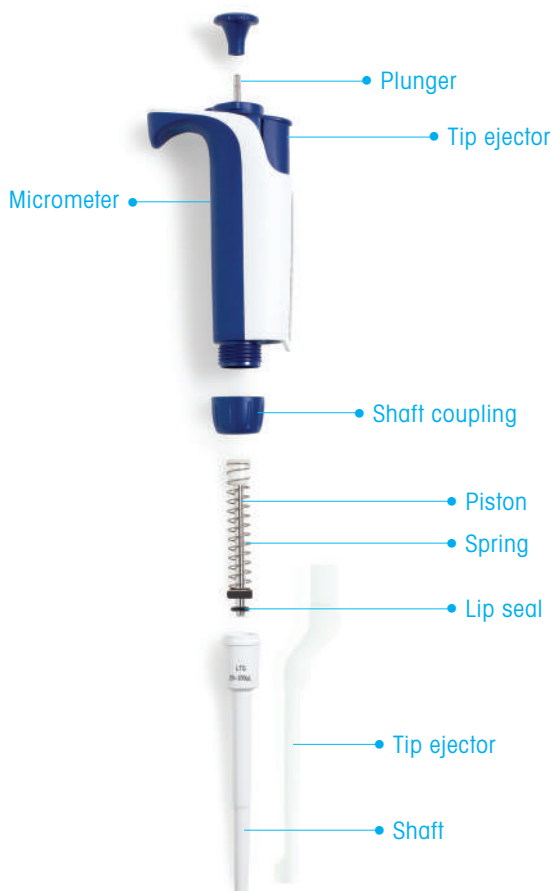
Trust

Our highly trained service experts have years of experience repairing and calibrating many different brands of pipettes. We only use Rainin parts on Rainin pipettes.

Confidence

Rainin pipette service has the knowledge, tools and certifications to deliver expert performance every time.

Every calibration includes meticulous cleaning of each component, part replacement as needed, and preventative maintenance.



Can't decide? Try our Service Finder to see which plans fit your lab's needs.

Mail-in Pipette Calibration on ShopRainin.com

Your One Stop Shop for Mail-in Calibration Services

As the world’s largest pipette service provider, Rainin makes it easy to get fast reliable service and calibration, guaranteed!

- Quick turnaround, with **four ISO 17025 accredited service labs** across North America
 - We service all brands of pipettes – most with manufacturers’ original parts (Rainin®, Eppendorf®, Gilson®, Integra®, Thermo Fisher®, Sartorius®)
- Mail-in calibration services now available on the ShopRainin e-store. Everything you need to manage mail-in pipette calibrations now in one convenient location.

 - Free inbound shipping
 - 4 or more, request our **free return kit**
 - 3 or less, or in a rush, pack them yourself and print a **complimentary inbound shipping** label

Service Plans

All plans include:

- Full preventive maintenance (PM) with seal replacement or restoration
- Liquid leak test on all nozzles
- Adjustment to manufacturer’s tolerances
- Calibration certificate with detailed results
- Calibration label

	Standard Plan	Advanced Plan	Accredited Plan
	Labs with basic service needs Perfect for Academic Research R&D	When prior performance matters Pharma Biotech Clinical research labs	For complete ISO 17025 documentation GLP/GMP, Regulated Labs
As Found (measured)		4 test weighings @ 10% and 100%	4 test weighings @ 10%, 50% and 100%
As Found (reported)		✓	✓
PM	✓	✓	✓
Calibration	✓	✓	✓
As Returned (measured)	4 test weighings @ 10% and 100%	4 test weighings @ 10% and 100%	10 test weighings @ 10%, 50% and 100%
As Returned (reported)	✓	✓	✓
Calibration Certificate	Standard Certificate	Standard Certificate	ISO 17025 Certificate

Ordering Information

STANDARD PLAN	PREVENTIVE MAINTENANCE	AS FOUND	AS RETURNED	CALIBRATION CERTIFICATE
For labs with routine service needs		n/a	4 test weighings @10% and 100%	Standard Certificate

- Full preventive maintenance (PM) with leak test and seal replacement or restoration
- Adjustment to manufacturer's tolerances
- Calibration certificate with detailed results and historical trending

CATALOG No.	DESCRIPTION	PRICE
17800031	Single channel	\$ 45.80
17800096	Multichannel All – 8 channels	123.00
17800131	Multichannel All – 12 channels	147.40
17800153	Liquidator 96	2,134.00
30451098	BenchSmart 96 Head	2,134.00

ADVANCED PLAN	PREVENTIVE MAINTENANCE	AS FOUND	AS RETURNED	CALIBRATION CERTIFICATE
When prior performance matters		4 test weighings @10% and 100%	4 test weighings @10% and 100%	Standard Certificate

This plan includes all services provided under the Standard Plan.

Plus:

- As found calibration results, including failure confirmation

CATALOG No.	DESCRIPTION	PRICE
17800040	Single channel	\$ 55.20
17800105	Multichannel All – 8 channels	169.80
17800140	Multichannel All – 12 channels	208.00
17800154	Liquidator 96	2,513.00
30451099	BenchSmart 96 Head	2,513.00

ACCREDITED PLAN	PREVENTIVE MAINTENANCE	AS FOUND	AS RETURNED	CALIBRATION CERTIFICATE
For complete ISO 17025 documentation		4 test weighings @10%, 50% and 100%	10 test weighings @10%, 50% and 100%	ISO 17025 Certificate

This plan includes all services provided under the Advanced Plan.

Plus:

- As found A2LA calibration results and failure confirmation
- A2LA calibration certificate incl. uncertainty of measurement (ISO 17025 compliant), historical trending and calibration label

CATALOG No.	DESCRIPTION	PRICE
17800048	Single channel	\$ 107.40
17800113	Multichannel All – 8 channels	325.00
17800148	Multichannel All – 12 channels	364.00
30415512	Liquidator 96	3,345.00
30451100	BenchSmart 96 Head	3,345.00

OPTIONAL SERVICES

CATALOG No.	DESCRIPTION	PRICE
17800171	DNA and RNase decontamination	\$ 26.60
30415518	Rush Service Fee*: Liquidator 96	600.00
17800408	Rush Service Fee*: BenchSmart 96 Head	600.00

* Guaranteed 48-hour in-lab turnaround time with round-trip UPS overnight shipping.

Onsite Pipette Calibration

Expert Calibration in Your Lab

Rainin makes it easy to receive state of the art ISO 17025 pipette service right in your lab. We service all brands and, regardless of plan, all pipettes we service receive:

All plans include:

- Full preventive maintenance (PM) with seal replacement or restoration
- Liquid leak test on all nozzles
- Adjustment to manufacturer’s tolerances per ISO 8655
- Calibration certificates with detailed results (except Basic Plan)
- Calibration label

Service Plans

	Service Plan	Calibration Plans		
	Basic Plan	Standard Plan	Advanced Plan	Accredited Plan
	When measurement data is not required Perfect for University Science Labs	Labs with basic service needs Perfect for Academic Research R&D	When prior performance matters Pharma Biotech Clinical research labs	For complete ISO 17025 documentation GLP/GMP, Regulated Labs
As Found (measured)			4 test weighings @ 10% and 100%	4 test weighings @ 10%, 50% and 100%
As Found (reported)			✓	✓
PM	✓	✓	✓	✓
Calibration	✓	✓	✓	✓
As Returned (measured)	4 test weighings @ 10% and 100%	4 test weighings @ 10% and 100%	4 test weighings @ 10% and 100%	4 test weighings @ 10%, 50% and 100%
As Returned (reported)	Measurements not stored or recorded	✓	✓	✓
Calibration Certificate		Standard Certificate	Standard Certificate	ISO 17025 Certificate

To schedule onsite service, call 800.472.4646 (choose option “2” or Sales).

Ordering Information

BASIC PLAN	PREVENTIVE MAINTENANCE	AS FOUND	AS RETURNED	CALIBRATION CERTIFICATE
When measurement data is not required	✓	n/a	4 test weighings @10% and 100%	n/a

- Full preventive maintenance (PM) with leak test and seal replacement or restoration
- Calibrated to Rainin on-site standard tolerances

CATALOG No.	DESCRIPTION	PRICE*
30445525	Single channel	\$ 34.20
30445526	Multichannel All – 8 channels	64.80
30445527	Multichannel All – 12 channels	80.60

STANDARD PLAN	PREVENTIVE MAINTENANCE	AS FOUND	AS RETURNED	CALIBRATION CERTIFICATE
For labs with routine service needs	✓	n/a	4 test weighings @10% and 100%	Standard Certificate

- Full preventive maintenance (PM) with leak test and seal replacement or restoration
- Calibrated to ISO 8655 or Rainin on-site standard tolerances
- Calibration certificate with detailed measurement data

CATALOG No.	DESCRIPTION	PRICE*
17800347	Single channel	\$ 45.80
17800292	Multichannel All – 8 channels	126.40
17800256	Multichannel All – 12 channels	150.80

ADVANCED PLAN	PREVENTIVE MAINTENANCE	AS FOUND	AS RETURNED	CALIBRATION CERTIFICATE
When prior performance matters	✓	4 test weighings @10% and 100%	4 test weighings @10% and 100%	Standard Certificate

This plan includes all services provided under the Standard Plan.

Plus:

- As found calibration results – including failure confirmation

CATALOG No.	DESCRIPTION	PRICE*
17800320	Single channel	\$ 56.20
17800272	Multichannel All – 8 channels	173.20
17800236	Multichannel All – 12 channels	212.00

ACCREDITED PLAN	PREVENTIVE MAINTENANCE	AS FOUND	AS RETURNED	CALIBRATION CERTIFICATE
For complete ISO 17025 documentation	✓	4 test weighings @10%, 50% and 100%	4 test weighings @10%, 50% and 100%	ISO 17025 Certificate

This plan includes all services provided under the Advanced Plan.

Plus:

- Calibrated to ISO 8655 tolerances
- ISO 17025 calibration certificate, including uncertainty of measurement (certified by A2LA), historical trending and calibration label

CATALOG No.	DESCRIPTION	PRICE*
30451900	Single channel	\$ 98.80
30451876	Multichannel All – 8 channels	273.00
30451852	Multichannel All – 12 channels	343.00

* Travel fees may apply. Contact your sales representative.

Expert Calibration and Repair

Buy Vouchers Now, Use Them Later

Purchase service vouchers when you buy your pipettes or when you have funding. Use them later – whenever you're ready for calibration!

- Valid for two years
- Use with any brand of pipette
- Eliminate separate purchase orders
- Purchase with your pipettes and tips
- Valid for **mail-in service only**

	CATALOG No.	DESCRIPTION	PRICE
Service Vouchers	17014448	Standard Single channel service voucher	\$ 45.80
	17014453	Standard Multi-ALL 8-channel service voucher	123.00
	17014456	Standard Multi-ALL 12-channel service voucher	147.40
	30415513	Standard Liquidator 96 – 96 channels, includes box & round-trip UPS Ground shipping	2,134.00
	30456199	Standard BenchSmart 96 Head – 96 channels, includes round-trip UPS Ground shipping	2,134.00
	17014449	Advanced Single channel service voucher	55.20
	17014454	Advanced Multi-ALL 8-channel service voucher	169.80
	17014457	Advanced Multi-ALL 12-channel service voucher	208.00
	30415514	Advanced Liquidator 96 – 96 channels, includes box & round-trip UPS Ground shipping	2,513.00
	30456200	Advanced BenchSmart 96 Head – 96 channels, includes round-trip UPS Ground shipping	2,513.00
	17014450	Accredited Single channel service voucher	107.40
	17014455	Accredited Multi-ALL 8-channel service voucher	325.00
	17014458	Accredited Multi-ALL 12-channel service voucher	364.00
	30415517	Accredited Liquidator 96 – 96 channels, includes box & round-trip UPS Ground shipping	3,345.00
	30456201	Accredited BenchSmart 96 Head – 96 channels, includes round-trip UPS Ground shipping	3,345.00



At Your Service!

We're here to help



Good Pipetting Practice Seminars

Earn training certificates and improve pipetting performance in your organization. Schedule an in-lab workshop on key aspects of liquid handling with your local Rainin representative. Learn how different liquid handling devices and different pipetting techniques can improve data reliability, and how ergonomics influence data production and well-being.

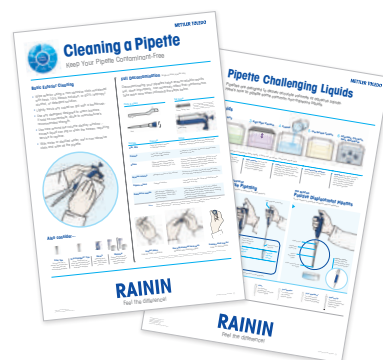
www.mt.com/gpp



Pipette Inventory Assessment

Time for a pipette review? Contact your local Rainin representative to request an inventory assessment. You'll receive a complementary summary report that includes quantity, age and ergonomic evaluation. Optimize your pipette inventory to your current laboratory workflow, eliminate redundancy and minimize your risk of using out-of-calibration pipettes.

www.mt.com/pipette-inventory



Technique Posters

From good techniques to pipette cleaning to good ergonomics, our free technique posters reinforce pipetting practices that will help ensure more consistent and accurate results.

www.mt.com/rainin-posters



- **Contact Your Sales Representative**

800 4 RAININ (800-472-4646) or
is@rainin.com

- **Contact Technical Support or Service**

Reach our technical support team at 800 4 Rainin (800-472-4646) or by email at
ts@rainin.com



The Highest Standard for Tip Purity and Performance

Rainin continuously tests and certifies its BioClean Ultra™ pipette tip products. Researchers can have absolute confidence in the integrity of their experiments and the fidelity of their data.



Why BioClean Ultra?

This table shows the thoroughness and completeness of Rainin BioClean Ultra quality testing, compared to other major tip brands. Rainin maintains the industry’s most comprehensive testing procedures.

	HUMAN DNA	BACTERIAL DNA	DNASE
BioClean Ultra™	< 0.32 pg	< 1 pg	≤ 10 ⁻⁷ KU/μL
Brand – A	"Free of"	–	10 ⁻⁵ KU/μL
Brand – B	< 0.40 fg	–	–
Brand – C	< 2 pg	< 50 fg	10 ⁻⁴ KU
Brand – D	None detected	–	None detected
Brand – E	< 1 pg	–	"Free of"
Brand – F	"Free of"	"Free of"	"Free of"
Brand – G	–	–	< 6.25 x 10 ⁻⁵ U/μL
Brand – H	< 30 pg	–	<10x ⁻⁷ KU/μL
Brand – I	< 30 pg	–	<10 ⁻⁷ KU/μL
Brand – J	"Free of"	"Free of"	"Free of"



BioClean Ultra – Guaranteed Purity

- The industry's most comprehensive testing procedures.
- The only tips certified to be both protein- and protease-free.
- Virgin polypropylene – completely inert, with no bioactive components.



Clean Manufacturing and Packaging

- Manufactured under Class 100,000 clean room conditions.
- Fully automated material handling – zero human contact.
- Strict conformance to ISO 9001 eliminates all external sources of contamination.

RNASE	ENDOTOXIN	PROTEIN	PROTEASE	ATP	PCR INHIBITORS
$\leq 10^{-9}$ KU/ μ L	≤ 0.001 EU/mL	< 2 ng/sample	≤ 500 ng/mL	$< 2 \times 10^{-12}$ mg/ μ L	None detected
10^{-9} KU/ μ L	≤ 0.05 EU/mL	–	–	–	–
< 8.6 fg	< 1 pg	–	–	< 1 fg	–
10^{-9} KU	< 0.001 EU/mL	< 1 ng/ μ L	–	$< 5.5 \times 10^{-12}$ mg	< 10 targets amplifiable
None detected	< 0.06 EU/mL	–	–	–	None detected
"Free of"	< 0.05 EU/mL	–	"Free of"	"ATP-free"	–
"Free of"	"Free of"	–	"Free of"	"ATP-free"	"Free of"
$< 3.125 \times 10^{-9}$ U/ μ L	< 0.03 EU/mL	–	–	–	–
$< 10^{-9}$ KU/ μ L	< 0.06 EU/mL	–	–	–	–
$< 10^{-9}$ KU/ μ L	≤ 0.06 EU/mL	–	–	$< 10^{-13}$ mg/ μ L	None detected
"Free of"	"Free of"	–	–	–	–

KU Kunitz Units **EU** Endotoxin Units **ng** nanogram (Factor: 10^{-9}) **pg** picogram (Factor: 10^{-12}) **fg** femtogram (Factor: 10^{-15})

"Non detected", "Free of" and "... Free" designations apparently indicate no observed contamination. No specifications or test methodology provided.

"–" no data available.

Low Retention Tips

Stop Wasting Valuable Sample!

Rainin LR low retention tips improve pipetting accuracy by minimizing residual volume, particularly when transferring liquids such as viscous samples and those with low surface tension. A great option for pipetting valuable molecular biology reagents and expensive samples.

Available in both LTS  and universal  formats.

	CATALOG No.	DESCRIPTION	VOL		QTY		FEATURES				PRICE
			MAX VOLUME		RACKS/CARTON	TIPS/CARTON	STERILIZED	WIDE-O	LOW RET	FILTER	
 ¹ Fits 2, 10 and 20 µL pipettes ² Fits 50, 100 and 200 µL pipettes	LTS	Racked Tips									
 Rack base not included with SpaceSaver. See page 49 for empty racks.	LTS	SpaceSaver									
	Bulk										

Residue with
Rainin Standard
10 µL Tip
after dispensing

Residue with
Rainin Low Retention
10 µL Tip
after dispensing

► mt.com/SR-BCU



CATALOG No. DESCRIPTION

VOL	QTY	FEATURES						PRICE
MAX VOLUME	RACKS/CARTON	TIPS/CARTON	STERILIZED	SHAFTOARD	WIDE-O	LOW RET	FILTER	

Racked Tips

30389180	RT UNV 10µL L 960A/10	10 µL	10	960				✓		\$ 89.20
30389182	RT UNV 10µL LS 960A/10	10 µL	10	960	✓			✓		97.40
30389173	RT UNV 10µL FL 960A/10	10 µL	10	960	✓			✓	✓	149.40
30389177	RT UNV 10µL GL 960A/10	10 µL	10	960		✓		✓		89.20
30389179	RT UNV 10µL GLS 960A/10	10 µL	10	960	✓	✓		✓		96.80
30389176	RT UNV 10µL FGL 960A/10	10 µL	10	960	✓	✓		✓	✓	149.40
30389190	RT UNV 20µL FL 960A/10	20 µL	10	960	✓			✓	✓	149.40
30389171	RT UNV 100µL FL 960A/10	100 µL	10	960	✓			✓	✓	149.40
30389187	RT UNV 200µL FL 960A/10	200 µL	10	960	✓			✓	✓	149.40
30389188	RT UNV 200µL FLW 960A/10	200 µL	10	960	✓		✓	✓	✓	149.40
30389192	RT UNV 250µL L 960A/10	250 µL	10	960				✓		89.20
30389196	RT UNV 250µL LW 960A/10	250 µL	10	960			✓	✓		89.20
30389194	RT UNV 250µL LS 960A/10	250 µL	10	960	✓			✓		97.40
30389197	RT UNV 250µL LSW 960A/10	250 µL	10	960	✓		✓	✓		119.80
30389137	RT UNV 300µL L 768A/8	300 µL	8	768				✓		89.20
30389138	RT UNV 300µL LS 768A/8	300 µL	8	768	✓			✓		97.40
30389139	RT UNV 300µL FL 768A/8	300 µL	8	768	✓			✓	✓	149.40
30389167	RT UNV 1000µL L 768A/8	1000 µL	8	768				✓		89.20
30389169	RT UNV 1000µL LS 768A/8	1000 µL	8	768	✓			✓		97.40
30389166	RT UNV 1000µL FL 768A/8	1000 µL	8	768	✓			✓	✓	149.40

SpaceSaver

30389284	GPS UNV 10µL GL 960A/10	10 µL	10	960		✓		✓		89.20
30389286	GPS UNV 10µL GLS 960A/10	10 µL	10	960	✓	✓		✓		97.20
30389288	GPS UNV 250µL L 960A/10	250 µL	10	960				✓		89.20
30389290	GPS UNV 250µL LS 960A/10	250 µL	10	960	✓			✓		97.20
30389280	GPS UNV 1000µL L 768A/8	1000 µL	8	768				✓		89.20
30389282	GPS UNV 1000µL LS 768A/8	1000 µL	8	768	✓			✓		96.80

Bulk

17014395	RC UNV 10µL L 1000A/1	10 µL		1000				✓		66.40
17014396	RC UNV 10µL GL 1000A/1	10 µL		1000		✓		✓		66.40
17014397	RC UNV 250µL L 1000A/1	250 µL		1000				✓		66.40
17014398	RC UNV 1000µL L 1000A/1	1000 µL		1000				✓		66.40
17015068	RC UNV 1000µL LW 1000A/1	1000 µL		1000			✓	✓		66.40

Wide-O = Wide Orifice, Low Ret = Low Retention



Fast loading

Robust secure racks make tip loading easy

Autoclavable

Two-position lid for efficient sterilization

Format options

Standard, sterilized and filter versions available

Protective

Safe from dirt and contamination

► mt.com/SR-BCU



CATALOG No.

DESCRIPTION

	VOL	QTY		FEATURES				
MAX VOLUME		RACKS/CARTON	TIPS/CARTON	STERILIZED	SHAFTGARD	WIDE-O	FILTER	PRICE
10 µL	10	960						\$ 68.60
10 µL	10	960		✓				68.60
10 µL	10	960	✓	✓				89.20
10 µL	10	960	✓					89.20
10 µL	10	960	✓				✓	137.40
10 µL	10	960	✓	✓			✓	137.40
20 µL	10	960	✓				✓	137.40
100 µL	10	960	✓				✓	137.40
100 µL	10	960	✓				✓	137.40
50 µL	10	960						68.60
50 µL	10	960			✓			75.40
50 µL	10	960	✓					89.20
100 µL	10	768						68.60
100 µL	10	768	✓					89.20
100 µL	8	768	✓				✓	137.40
100 µL	8	768						68.60
100 µL	8	768	✓					89.20
100 µL	8	768	✓				✓	137.40
100 µL	8	480						82.40
100 µL	8	480	✓					89.20
100 µL	8	480	✓				✓	137.40
100 µL	8	480						68.60
100 µL	8	480	✓					89.20

Wide-O = Wide Orifice

Eco-Friendly Refills

Less Waste, More Space

Space-saving rack refill options enhance your workflow and minimize plastic waste. Order empty racks if you don't already have them. Many volume sizes available in both LTS  and universal  formats.

Green-Pak® SpaceSaver® 80% less waste than conventional racks

Fast

Refill a rack
in seconds

Clean

Protects tips from
contamination

Convenient

Dispensing sleeve
is easy to use

Save space

Each sleeve contains
8 or 10 refills



Green-Pak Individually sealed refills

Filter tips

A great refill option
for filter tip users

Clean

Each refill is
completely sealed

Easy

Load refills without
touching the tips

Reduce Waste

75% less plastic than
a regular rack





CATALOG No. DESCRIPTION

VOL QTY FEATURES

MAX VOLUME

RACKS/CARTON

TIPS/CARTON

STERILIZED

SHAFT/GARD

FILTER

PRICE



SpaceSaver

30389291	GPS LTS 20µL 960A/10	20 µL ¹	10	960				\$ 68.80
30389297	GPS LTS 20µL S 960A/10	20 µL ¹	10	960	✓			89.20
30389299	GPS LTS 250µL 960A/10	200 µL ²	10	960				68.80
30389301	GPS LTS 250µL S 960A/10	200 µL ²	10	960	✓			89.20
30389303	GPS LTS 300µL 768A/8	300 µL	8	768				68.80
30389304	GPS LTS 300µL S 768A/8	300 µL	8	768	✓			89.20
30389292	GPS LTS 1000µL 768A/8	1000 µL	8	768				68.80
30389294	GPS-LTS 1000µL S 768A/8	1000 µL	8	768	✓			89.20



Green-Pak

30389270	GP LTS 20µL 960A/10	20 µL ¹	10	960				68.80
30389275	GP LTS 20µL S 960A/10	20 µL ¹	10	960	✓			89.20
30389274	GP LTS 20µL F 960A/10	20 µL ¹	10	960	✓		✓	137.40
30389277	GP LTS 250µL 960A/10	200 µL ²	10	960				68.80
30389278	GP LTS 250µL S 960A/10	200 µL ²	10	960	✓			89.20
30389276	GP LTS 200µL F 960A/10	200 µL ²	10	960	✓		✓	137.40
30389271	GP LTS 1000µL 768A/8	1000 µL	8	768				68.80
30389273	GP LTS 1000µL S 768A/8	1000 µL	8	768	✓			89.20
30389272	GP LTS 1000µL F 768A/8	1000 µL	8	768	✓		✓	137.40

Rack base not included with SpaceSaver.

Empty Racks

30389354	Tip Racks GPR LTS 20µL 0/10	20 µL	10					35.00
30389353	Tip Racks GPR XXX 250µL 0/10	200 µL	10					35.00
30397667	Tip Racks GPR XXX 300µL 0/8	300 µL	8					35.00
30389351	Tip Racks GPR XXX 1000µL 0/8	1000 µL	8					35.00



SpaceSaver

30389283	GPS UNV 10µL G 960A/10	10 µL	10	960		✓		\$ 68.80
30389285	GPS UNV 10µL GS 960A/10	10 µL	10	960	✓	✓		89.20
30389287	GPS UNV 250µL 960A/10	250 µL	10	960				68.80
30389289	GPS UNV 250µL S 960A/10	250 µL	10	960	✓			89.20
30397665	GPS UNV 300µL 768A/8	300 µL	8	768				68.80
30397666	GPS UNV 300µL S 768A/8	300 µL	8	768	✓			89.20
30389279	GPS UNV 1000µL 768A/8	1000 µL	8	768				68.80
30389281	GPS UNV 1000µL S 768A/8	1000 µL	8	768	✓			89.20



Green-Pak

30389258	GP UNV 10µL 960A/10	10 µL	10	960				68.80
30389265	GP UNV 10µL S 960A/10	10 µL	10	960	✓			89.20
30389263	GP UNV 10µL F 960A/10	10 µL	10	960	✓		✓	137.40
30389264	GP UNV 10µL FG 960A/10	10 µL	10	960	✓	✓	✓	137.40
30389267	GP UNV 20µL F 960A/10	20 µL	10	960	✓		✓	137.40
30389262	GP UNV 100µL F 960A/10	100 µL	10	960	✓		✓	137.40
30389266	GP UNV 200µL F 960A/10	200 µL	10	960	✓		✓	137.40
30389268	GP UNV 250µL 960A/10	250 µL	10	960				68.80
30389269	GP UNV 250µL S 960A/10	250 µL	10	960	✓			89.20
30389259	GP UNV 1000µL 768A/8	1000 µL	8	768				68.80
30389261	GP UNV 1000µL S 768A/8	1000 µL	8	768	✓			89.20
30389260	GP UNV 1000µL F 768A/8	1000 µL	8	768	✓		✓	137.40

Rack base not included with SpaceSaver.

Empty Racks

30389350	Tip Racks GPR UNV 10µL 0/10	10 µL	10					35.00
30389354	Tip Racks GPR LTS 20µL 0/10	10 µL	10			✓		35.00
30389353	Tip Racks GPR XXX 250µL 0/10	250 µL	10					35.00
30397667	Tip Racks GPR XXX 300µL 0/8	300 µL	8					35.00
30389351	Tip Racks GPR XXX 1000µL 0/8	1000 µL	8					35.00

¹ Fits 2, 10 and 20 µL pipettes ² Fits 50, 100 and 200 µL pipettes

TerraRack

The Most Eco-Friendly Rack Around

Less weight, less waste, 100% recyclable

TerraRack™ is a revolutionary concept in tip racks. Sturdy as conventional racks, yet made with less than half the plastic of standard racks and completely recyclable. In fact, the hinged TerraRack shell is made from PET, which is easily recycled.

For convenience and complete cleanliness, TerraRacks with BioClean Ultra tips come sterilized, eliminating the need to autoclave. Many volume sizes available in both LTS  and universal  formats.



Less waste

With 50% less plastic than conventional racks, TerraRacks are also extremely compressible, so racks occupy significantly less space in a waste or storage container.



100% recyclable

In addition to being completely recyclable, much of each TerraRack is composed of PETE, which is easily recycled and aggressively recovered from the plastic waste stream.



Sterilized

TerraRacks are sterilized so you can be certain that you're working with a fresh, clean rack every time.



CATALOG No.	DESCRIPTION	VOL	QTY		FEATURES			PRICE
		MAX VOLUME	RACKS/CARTON	TIPS/CARTON	STERILIZED	SHAFTGARD	FILTER	

LTS

TerraRack

17014960	TR LTS 20µL S 960A/10	20 µL ¹	10	960	✓			\$ 89.20
17014961	TR LTS 20µL F 960A/10	20 µL ¹	10	960	✓		✓	138.40
17014962	TR LTS 250µL S 960A/10	200 µL ²	10	960	✓			89.20
17014963	TR LTS 200µL F 960A/10	200 µL ²	10	960	✓		✓	138.40
17014964	TR LTS 300µL S 768A/8	300 µL	8	768	✓			89.20
17014965	TR LTS 300µL F 768A/8	300 µL	8	768	✓		✓	138.40
17014966	TR LTS 1000µL S 768A/8	1000 µL	8	768	✓			89.20
17014967	TR LTS 1000µL F 768A/8	1000 µL	8	768	✓		✓	138.40
17014968	TR LTS 1200µL S 768A/8	1200 µL	8	768	✓			89.20
17014969	TR LTS 1200µL F 768A/8	1200 µL	8	768	✓		✓	138.40

UNV

TerraRack

17014970	TR UNV 10µL S 960A/10	10 µL	10	960	✓			\$ 89.20
17014971	TR UNV 10µL F 960A/10	10 µL	10	960	✓		✓	138.40
17014972	TR UNV 10µL GS 960A/10	10 µL	10	960	✓	✓		89.20
17014973	TR UNV 10µL GF 960A/10	10 µL	10	960	✓	✓	✓	138.40
17014974	TR UNV 20µL F 960A/10	20 µL	10	960	✓		✓	138.40
17014975	TR UNV 100µL F 960A/10	100 µL	10	960	✓		✓	138.40
17014977	TR UNV 200µL F 960A/10	200 µL	10	960	✓		✓	138.40
17014976	TR UNV 250µL S 960A/10	250 µL	10	960	✓			89.20
17014978	TR UNV 300µL S 768A/8	300 µL	8	768	✓			89.20
17014979	TR UNV 300µL F 768A/8	300 µL	8	768	✓		✓	138.40
17014980	TR UNV 1000µL S 768A/8	1000 µL	8	768	✓			89.20
17014981	TR UNV 1000µL F 768A/8	1000 µL	8	768	✓		✓	138.40

TerraBase

TerraBase Accessory for TerraRack

17014982	TerraRack Base - short; 1 base to fit 10 - 300 µL TerraRack racks	\$ 21.60
17014983	TerraRack Base - tall; 1 base to fit 1000/1200 µL TerraRack racks	23.80

¹ Fits 2, 10 and 20 µL pipettes ² Fits 50, 100 and 200 µL pipettes

Double-96 Racked Tips

StableStak and StableRak

Ideal for high production environments. Perfect for multichannel pipetting!
Available in both LTS  and universal  formats.



- Higher purity standard
- Same great tip!
- Updated colors

StableStak™

Stacked double-96 racks
with 192 tips per layer.



StableRak™

Individual double-96 racks
with 192 tips per layer.



Formats

Standard, sterilized
and filter versions available

Protective

Keeps tips safe from dirt
and contamination

Fast loading

Sturdy, non-slip racks make
tip loading easy

StableRak and StableStak



Bulk Tips LTS and UNV formats



LTS

UNV

LTS

UNV

			VOL		QTY		FEATURES				PRICE
			MAX VOLUME		RACKS/CARTON	TIPS/CARTON	STERILIZED	FILTER	SHAFTGUARD	WIDE-O	
CATALOG No.	DESCRIPTION										
StableRak	17005862	SR LTS 20µL 960A/5	20 µL ¹	5	960						\$ 68.60
	17005861	SR LTS 20µL S 960A/5	20 µL ¹	5	960	✓					89.20
	17005860	SR LTS 20µL F 960A/5	20 µL ¹	5	960	✓	✓				137.40
	17005864	SR LTS 250µL 960A/5	200 µL ²	5	960						68.60
	17005863	SR LTS 250µL S 960A/5	200 µL ²	5	960	✓					89.20
	17005859	SR LTS 200µL F 960A/5	200 µL ²	5	960	✓	✓				137.40
	17005867	SR LTS 300µL 768A/4	300 µL	4	768						68.60
	17005866	SR LTS 300µL S 768A/4	300 µL	4	768	✓					89.20
	17005865	SR LTS 300µL F 768A/4	300 µL	4	768	✓	✓				137.40
	17007083	SR LTS 1000µL 768A/4	1000 µL	4	768						68.60
	17007082	SR LTS 1000µL S 768A/4	1000 µL	4	768	✓					89.20
	17007081	SR LTS 1000µL F 768A/4	1000 µL	4	768	✓	✓				137.40
	17007086	SR LTS 1200µL 768A/4	1200 µL	4	768						68.60
	17007085	SR LTS 1200µL S 768A/4	1200 µL	4	768	✓					89.20
	17007084	SR LTS 1200µL F 768A/4	1200 µL	4	768	✓	✓				137.40
StableStak	17005873	SS LTS 20µL 960A/5	20 µL ¹	5	960						\$ 68.60
	17005872	SS LTS 20µL S 960A/5	20 µL ¹	5	960	✓					89.20
	17005875	SS LTS 250µL 960A/5	200 µL ²	5	960						68.60
	17005874	SS LTS 250µL S 960A/5	200 µL ²	5	960	✓					89.20
	17005877	SS LTS 300µL 768A/4	300 µL	4	768						68.60
	17005876	SS LTS 300µL S 768A/4	300 µL	4	768	✓					89.20
	17007090	SS LTS 1000µL 768A/4	1000 µL	4	768						68.60
	17007089	SS LTS 1000µL S 768A/4	1000 µL	4	768	✓					89.20
	17005857	SR UNV 300µL 768/4	300 µL	4	768						\$ 68.60
Bulk Tips	17001128	RC LTS 20µL 1000A/1	20 µL ¹		1000						\$ 52.80
	17001118	RC LTS 250µL 1000A/1	200 µL ²		1000						52.80
	17001132	RC LTS 300µL 1000A/1	300 µL		1000						52.80
	17001129	RC LTS 1000µL 1000A/1	1000 µL		1000						52.80
	17006324	RC LTS 1200µL 1000A/1	1200 µL		1000						52.80
	17001130	RC LTS 2000µL 1000A/1	2000 µL		1000						107.00
	17001133	RC LTS 5000µL 1000A/1	5000 µL		1000						119.80
	17001119	RC LTS 10mL 200A/1	10 mL		200						69.60
	17005940*	RC LTS 10mL S 75A/*	10 mL		75	✓					112.60
	17001131	RC LTS 20mL 100A/1	20 mL		100						69.60
	17005941*	RC LTS 20mL S 50A/*	20 mL		50	✓					83.20
Bulk Tips	17001124	RC UNV 10µL 1000A/10	10 µL		1000						\$ 52.80
	17001123	RC UNV 10µL G 1000A/10	10 µL		1000			✓			52.80
	17001116	RC UNV 250µL 1000A/1	250 µL		1000						52.80
	17001127	RC UNV 250µL W 1000A/1	250 µL		1000				✓		52.80
	17001121	RC UNV 1000µL 1000A/1	1000 µL		1000						52.80
	17001125	RC UNV 2000µL 1000A/1	2000 µL		1000						107.00
	17001126	RC UNV 2500µL 1000A/1	2500 µL		1000						107.00
	17001117	RC UNV 5000µL 1000A/1	5000 µL		1000						120.80
	17001122	RC UNV 10mL 200A/1	10 mL		200						69.60
	17005939*	RC UNV 10mL S 75A/*	10 mL		75	✓					113.80

Specialty Tips

Unique Tips for Special Applications

LTS

**Extended-length tips**

For tall narrow tube work.
BioClean Ultra.

102 mm long

Rainin extended-length LTS tips reach to the bottom of blocks, tall vials, flasks, 100 mm tubes, etc.

Narrow diameter

These tips will pass through 8 mm ID penetrable septa, such as on specimen collection kits.

LTS

UNV

**Wide-orifice tips**

Ideal for delicate samples.
BioClean Ultra.

For samples with mammalian cells or high-molecular-weight DNA. 1.5 mm wide orifice minimizes shear forces on delicate samples and flow resistance for viscous samples. 200 and 1000 µL.

UNV

**ShaftGard™ 10µL tips**

Avoid cross-contamination.
BioClean Ultra.

Tip protects shaft, tip ejector

Shaft and tip ejector are protected from contamination, reducing the need to decontaminate or sterilize the shaft and tip ejector when working with biological, radioactive or other critical samples.

UNV

**Gel-Well™**

Load gels in thin wells.

Dispense samples into thin wells in electrophoretic slab gel apparatus or in sample recovery. Flexible ultra-thin micro-capillary is ideal for DNA sequencing and protein separation. Autoclaving at 1 bar and 121°C up to 15 minutes is possible without significant capillary shrinkage or closure.

- Flat or round tip ends
- Certified free from RNase and DNase

Gel-Well tips are not available in BioClean Ultra.



	CATALOG No.	DESCRIPTION	VOL		QTY		FEATURES					PRICE
			MAX VOLUME		RACKS/CARTON	TIPS/CARTON	STERILIZED	WIDE-O	LOW RET	FILTER	X-LENGTH	
Racked Tips	30389251	RT LTS 250µL X 768A/8	200 µL ²	8	768					✓		\$ 112.60
	30389252	RT LTS 250µL SX 768A/8	200 µL ²	8	768	✓				✓		120.80
	30389242	RT LTS 200µL FX 768A/8	200 µL ²	8	768	✓			✓	✓		188.20
	30389222	RT LTS 1000µL X 768A/8	1000 µL	8	768					✓		112.60
	30389224	RT LTS 1000µL SX 768A/8	1000 µL	8	768	✓				✓		120.80
	30389223	RT LTS 1000µL FX 768A/8	1000 µL	8	768	✓			✓	✓		188.20
	30389247	RT LTS 250µL W 960A/10	200 µL ²	10	960		✓					\$ 82.40
	30389248	RT LTS 250µL LW 960A/10	200 µL ²	10	960		✓	✓				89.20
	30389249	RT LTS 250µL SW 960A/10	200 µL ²	10	960	✓	✓					97.40
	30389250	RT LTS 250µL LSW 960A/10	200 µL ²	10	960	✓	✓	✓				119.80
	30389241	RT LTS 200µL FLW 960A/10	200 µL	10	960	✓	✓	✓	✓			149.40
	30389217	RT LTS 1000µL W 768A/8	1000 µL	8	768		✓					82.40
	30389219	RT LTS 1000µL LW 768A/8	1000 µL	8	768		✓	✓				89.20
	30389220	RT LTS 1000µL SW 768A/8	1000 µL	8	768	✓	✓					97.40
	30389221	RT LTS 1000µL LSW 768A/8	1000 µL	8	768	✓	✓	✓				119.80
	30389218	RT LTS 1000µL FLW 768A/8	1000 µL	8	768	✓	✓	✓	✓			149.40

² Fits 50, 100 and 200 µL pipettes



			VOL	QTY		FEATURES							
			MAX VOLUME	RACKS/CARTON	TIPS/CARTON	STERILIZED	GEL-WELL	SHAFTGARD	WIDE-O	LOW RET	FILTER	PRICE	
Racked Tips	30389174	RT UNV 10µL G 960A/10	10 µL	10	960			✓				\$ 68.60	
	30389178	RT UNV 10µL GS 960A/10	10 µL	10	960	✓		✓				89.20	
	30389175	RT UNV 10µL FG 960A/10	10 µL	10	960	✓		✓			✓	137.40	
	30389195	RT UNV 250µL W 960A/10	250 µL	10	960				✓			75.40	
	30389196	RT UNV 250µL LW 960A/10	250 µL	10	960				✓	✓		89.20	
	30389197	RT UNV 250µL LSW 960A/10	250 µL	10	960	✓			✓	✓		119.80	
	30389188	RT UNV 200µL FLW 960A/10	250 µL	10	960	✓			✓	✓	✓	149.40	
Bulk	17001127	RC UNV 250µL W 1000A/1	250 µL		1000				✓			52.80	
	17015068	RC UNV 1000µL LW 1000A/1	1000 µL		1000				✓	✓		66.40	
Refills	30389283*	GPS UNV 10µL G 960A/10	10 µL	10	960			✓				68.80	
	30389285*	GPS UNV 10µL GS 960A/10	10 µL	10	960	✓		✓				89.20	
	30389264	GP UNV 10µL FG 960A/10	10 µL	10	960	✓		✓			✓	137.40	
Racks	17002375	GelWell 10µL GT-10-2	10 µL	1	200		✓	0.17 mm, flat				93.60	
	17002377	GelWell 10µL GT-10-4	10 µL	1	200		✓	0.37 mm, flat				104.80	
	17002380	GelWell 10µL GT-10-6	10 µL	1	200		✓	0.57 mm, round				51.80	
	17002379	GelWell 250µL GT-250-6	250 µL	1	200		✓	0.57 mm, round				52.80	
	17002378	GelWell 250µL GT-250-4	250 µL	1	200		✓	0.37 mm, flat				109.20	
	17002376	GelWell 250µL GT-250-2	250 µL	1	200		✓	0.17 mm, round				143.40	

Wide-O = Wide Orifice, Low Ret = Low Retention *Green-Pak SpaceSaver

Flexible, integrated and easy to implement

Pipette Management Simplified

- Assign locations, users and groups.
- Search, filter, custom reports and schedules.
- Know everything about your pipettes.

- See all calibration data.
- Schedule calibrations.
- All critical pipette data is now located in one single database.



Track

Manage

Simplify

- The Bluetooth® wireless technology-enabled SmartStand electronically transmits pipette serial numbers, calibration and other relevant data to PipetteX.
- Rainin calibration certificates are electronically transmitted and linked to your pipette.
- Eliminate time-consuming reading of serial numbers, barcodes or stickers.

	CATALOG No.	DESCRIPTION	PRICE
PipetteX Software	30475913	PipetteX - Site	\$ 1,410.00
	30475915	PipetteX - Unlimited	5,280.00
	30478260	PipetteX - Site, Renewal	1,410.00
	30478262	PipetteX - Unlimited, Renewal	5,280.00

SmartStand

The Intelligent Pipette Stand

The Rainin SmartStand™ is an intelligent, easy-to-use pipette asset management system for busy labs and lab managers who want to:

- Reduce out-of-service/specification-related costs
- Proactively manage compliance
- Save time on recordkeeping and reporting



	CATALOG No.	DESCRIPTION	PRICE
Pipette Stands	30312897	SmartStand stand with PipetteX basic software	720.00
	17001255	Universal Carousel Stand for seven pipettes	143.60
	17003024	Hang-Ups, magnetic, for three pipettes	78.00
	17004992	Shelf Hang-Ups for three pipettes	78.00
	17006638	Adapters for E4XLS with Hang-Ups, carousel	38.80

Rainin SmartCheck

Fast Pipette Accuracy Verification

Reduce experimental errors, between-calibration compliance failures and improve pipetting technique.

Trust your pipettes! SmartCheck is a quick and easy way to verify that your pipettes are working properly. It takes very little space on the bench-top so you can use it every day.

Avoid expensive rework

Reduce out-of-tolerance challenges such as having to re-do expensive experiments or incur costly downstream process waste.

60 seconds or less!

Pipette verification in less than a minute: SmartCheck provides a clear Pass/Fail indication following a simple process with just four gravimetric measurements.

Verify any brand of pipette

Verify the performance of any brand of pipette dispensing volumes between 10 – 1000 µL. You can verify individual channels of multichannel pipettes too.

Ideal for regulated environments

SmartCheck is the only verification tool that can operate within a 21 CFR Part 11 compliant process (requires PipetteX software).



	CATALOG No.	DESCRIPTION	PRICE
SmartCheck	30564095	SmartCheck SLS1010S	\$ 1,375.00
	30448961	Function Test Kit	447.00
	30448967	EasyScan RFID LAN set	1,265.00

With PipetteX, You're in Control

Bringing order to your collection of pipettes

PipetteX™ asset management software, together with SmartStand, SmartCheck and Rainin calibration services, is a unique pipette tracking and calibration management system. Using the RFID chip embedded in every Rainin XLS/XLS+ pipette, PipetteX automatically tracks and manages calibration data, pipette usage and location.

- Automatic transfer of calibration documentation from service center to software
- Controls all elements of calibration tracking and movement
- 21 CFR Part 11 compliant management system
- Integrated in-line pipette validations



A simple, unified system for tracking and managing pipettes (all manufacturers)

Place any Rainin XLS-brand pipette on a SmartStand to instantly see the pipette's calibration status and service details right at the bench. PipetteX connects to SmartStand via Bluetooth or USB drive to automatically transfer serial numbers, service and other data to the PipetteX database.

PipetteX maintains a complete history of your entire pipette inventory including calibration certificates and verification reports. This makes it easy to track the status, location, calibration and service schedule for any pipette.

That's pipette management...simplified!

► mt.com/SR-PX

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Rainin SP+ Pipette Controller



Don't wait – upgrade your lab to the new pipette controller today!

For more information on the Rainin SP+ pipette controller, see page 33.

METTLER TOLEDO