

Shop RAININ

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USA Product Catalog 2024



EarthRack

It's compostable!

Made of rapidly-renewable plant fiber



Werner Maas
General Manager

Rainin is very pleased to introduce EarthRack – an industry-leading advance in greener lab technology. Because different labs have different needs, EarthRack is the latest addition to our line of earth-friendlier, more sustainable liquid-handling solutions (see page 46).

We have – for decades – sought to reduce waste and promote reuse. Our GreenPak SpaceSaver refill system, introduced in 1995 and copied by practically every pipette tip manufacturer worldwide, reduces plastic rack waste by up to 85%. TerraRack is notable not just because it's made from 50% less plastic, but is mostly made from highly recyclable #1 PET (like water bottles) rather than traditional, seldom-recycled #5 polypropylene. And with EarthRack we've now replaced most plastic rack components with purified and wholly compostable plant fiber.

Reducing waste, promoting reuse and using less energy in our own operations is also critically important to us. Through our Zero Waste initiative we are close to becoming a zero landfill waste operation by the end of 2024. We sent nothing to landfill for two months in 2023, so I am confident that we will achieve zero waste every day by 2025.

More and more technologies and materials are becoming greener and you can count on Rainin to continue to innovate in this vitally important area. I encourage you to periodically visit our sustainability site – www.mt.com/greenerpipetting – to keep abreast of our current endeavors and latest accomplishments.



Doing our part!

We're committed to achieving zero waste in our manufacturing and operations by 2025.



Introducing EarthRack!

Made mostly from purified cellulose fiber, EarthRack's base and lid can be composted, placed bins with paper recycling and will biodegrade with no net increase in carbon when landfilled.

See pages 48.

Greener Products

A range of options to reduce plastic waste.

Starts on page 46.

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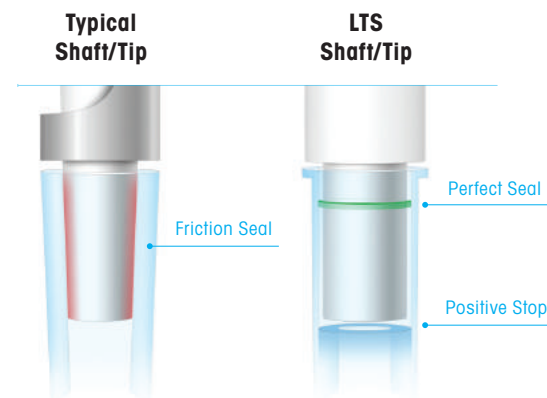
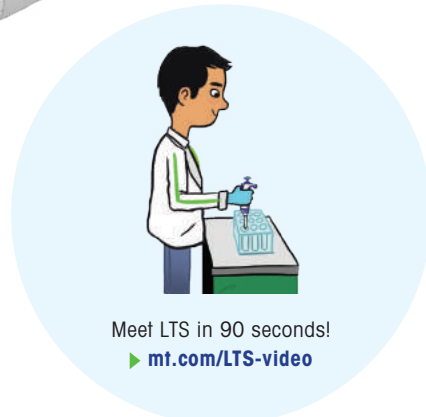
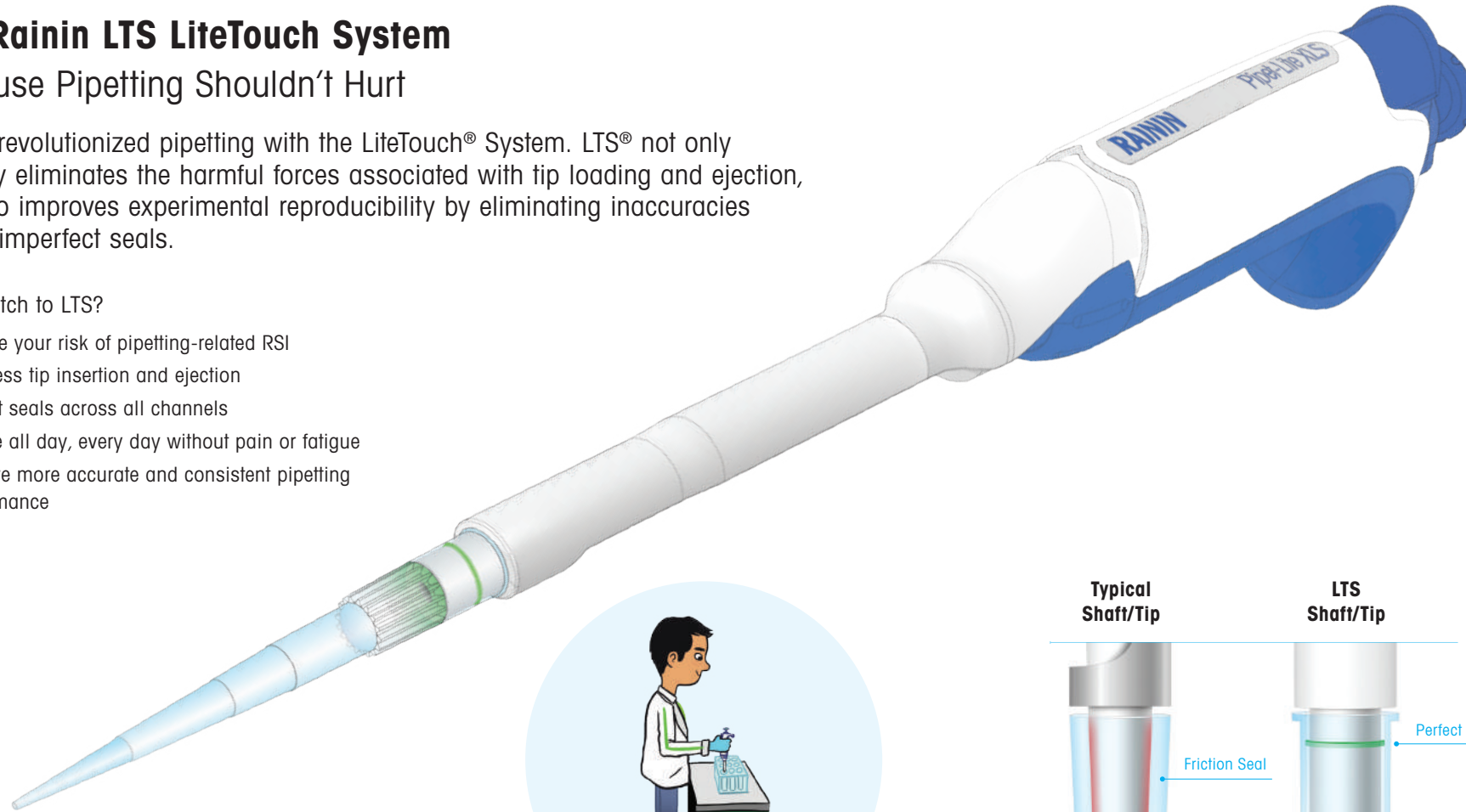
The Rainin LTS LiteTouch System

Because Pipetting Shouldn't Hurt

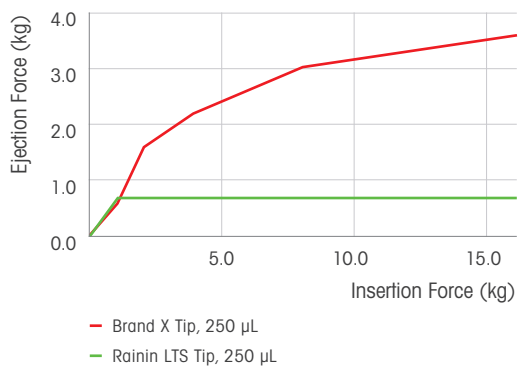
Rainin revolutionized pipetting with the LiteTouch® System. LTS® not only virtually eliminates the harmful forces associated with tip loading and ejection, but also improves experimental reproducibility by eliminating inaccuracies due to imperfect seals.

Why switch to LTS?

- Reduce your risk of pipetting-related RSI
- Effortless tip insertion and ejection
- Perfect seals across all channels
- Pipette all day, every day without pain or fatigue
- Achieve more accurate and consistent pipetting performance



Good ergonomics = better, more consistent results



Accuracy requires consistency, yet consistency is difficult to maintain when a user's hands are fatigued or in pain. Pipetting is highly repetitive and the effects of pipetting forces – jamming tips onto shafts, then struggling to eject them – are cumulative, hence the documented relationship between pipetting accuracy and the effects of pipetting forces.

At 0.6 kg, LTS all but eliminates tip loading/ejecting forces, so users face none of the debilitating issues one experiences when working with standard tips.

Effortless tip loading and ejection

Achieving a reliable seal with standard tips relies heavily on the strength (and persistence) of the user. Conventional pipette shaft-ends and tips are cone-shaped, so a tight seal relies on the strength of the user and pliability of the tip material. What's more, tip geometries vary from manufacturer to manufacturer, affecting the seal consistency and the accuracy of dispensed volumes.

LTS shafts and tips are cylindrical with a unique sealing ring inside the tip. Tips slide easily onto the shaft, stop when properly seated and make a perfect seal every time. Once seated, LTS tips won't fall off, yet slide off easily when pushed by the ejector.

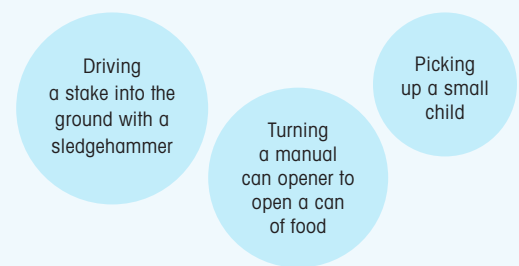
Are you at risk?

- **Pipetting** is one of the most repetitive tasks in the laboratory.
- **More than 30%** of all workplace injuries are musculoskeletal disorders, including repetitive strain injuries and cumulative trauma disorders (injuries associated with repetition, excessive force and poor posture).
- Pipettes without LTS require up to **12 kg* of force** to complete a pipetting cycle.
- Forces should not exceed 30% of maximum average strength capacity:



- You are at risk if:
 - You pipette more than **an hour a day** or **300 hours a year**.
 - You use non-LTS pipettes that can require up to **12 kg* of force**.
- Prevention is the key to reducing musculoskeletal disorders and repetitive strain injuries.



*What is 12 kg of force is equal to?



Download our pipetting ergonomics white paper
[mt.com/pipetting-ergo](https://www.mt.com/pipetting-ergo)

Rainin 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.




Advanced asset management
The RFID tag on board every Rainin XLS+ pipette stores calibration data that is electronically read by the Rainin SmartStand and PipetteX software. See page 67 for details.


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

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.

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	\$ 570.00
	17014409	0.5–10 µL	570.00
	17014412	2–20 µL	570.00
	17014408	10–100 µL	570.00
	17014411	20–200 µL	570.00
	17014414	20–300 µL	570.00
	17014407	100–1000 µL	570.00
	17014410	200–2000 µL	570.00
	17011801	500–5000 µL	570.00
	17011795	1–10 mL	570.00

Universal pipettes use universal tips. For pipette specifications, see page 20.

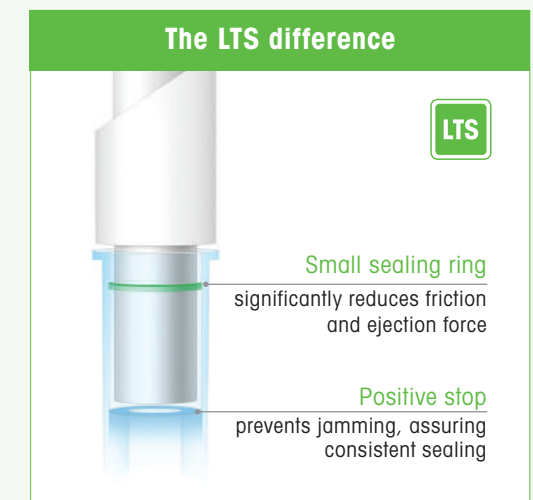
			
	CATALOG No.	VOLUME RANGE	PRICE
Pipet-Lite XLS+	17014393	0.1–2 µL	\$ 570.00
	17014388	0.5–10 µL	570.00
	17014392	2–20 µL	570.00
	17014384	10–100 µL	570.00
	17014391	20–200 µL	570.00
	17014405	20–300 µL	570.00
	17014382	100–1000 µL	570.00
	17014390	200–2000 µL	570.00
	17011790	500–5000 µL	570.00
	17011783	1–10 mL	570.00
	17011788	2–20 mL	570.00

LTS pipettes use LTS tips. For pipette specifications, see page 20

You Deserve LTS

Happy Hands Yield Better Results!

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





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, minimizing ejection force.
- Positive stop prevents over insertion of the tip and assures an airtight seal.

Rainin 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!



GLP/GMP security

Minimize deviations to your pipetting SOPs 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.



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 65.

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.

mt.com/SR-E4

			
	CATALOG No.	VOLUME RANGE	PRICE
E4 XLS+	17014484	0.5–10 µL	\$ 1,286.00
	17014487	2–20 µL	1,286.00
	17014483	10–100 µL	1,286.00
	17014486	20–200 µL	1,286.00
	17014488	20–300 µL	1,286.00
	17014482	100–1000 µL	1,286.00
	17014485	200–2000 µL	1,286.00
	17012312	500–5000 µL	1,286.00
	17012313	1–10 mL	1,286.00
	17012314	2–20 mL	1,286.00

LTS pipettes use LTS tips. Li-Ion battery and wall power supply are included. For more information about LTS, see page 4. For pipette specifications, see page 20.

			
	CATALOG No.	VOLUME RANGE	PRICE
E4 XLS+	17014491	0.5–10 µL	\$ 1,286.00
	17014494	2–20 µL	1,286.00
	17014490	10–100 µL	1,286.00
	17014493	20–200 µL	1,286.00
	17014495	20–300 µL	1,286.00
	17014489	100–1000 µL	1,286.00
	17014492	200–2000 µL	1,286.00
	17012353	500–5000 µL	1,286.00
17012354	1–10 mL	1,286.00	

Universal pipettes use universal tips. Li-Ion battery and wall power supply are included. For pipette specifications, see page 20.

Rainin 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



E4 XLS+ Electronic

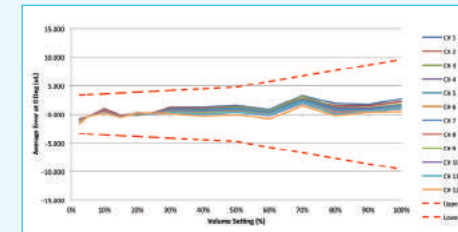
Pipet-Lite XLS+ Manual

	CATALOG No.	VOLUME RANGE	PRICE
E4 XLS+ Electronic Multichannel	8-Channel		
	17013792	0.5–10 µL	\$ 2,233.00
	17013793	2–20 µL	2,233.00
	17013794	5–50 µL	2,233.00
	17013795	20–200 µL	2,233.00
	17013796	20–300 µL	2,233.00
	17014498	100–1200 µL	2,346.00
	12-Channel		
	17013797	0.5–10 µL	\$ 2,835.00
	17013798	2–20 µL	2,557.00
	17013799	5–50 µL	2,557.00
	17013800	20–200 µL	2,557.00
17013801	20–300 µL	2,557.00	
17014499	100–1200 µL	3,432.00	

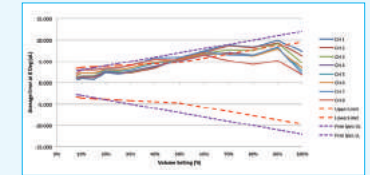
LTS pipettes use LTS tips. Li-Ion battery and wall power supply are included. For more information about LTS, see page 4. For pipette specifications, see page 21.

Industry-leading Channel-to-Channel Consistency

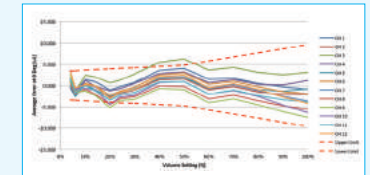
There's a reason Rainin multichannel pipettes are the market leader: ease-of-use and exceptional channel-to-channel consistency.



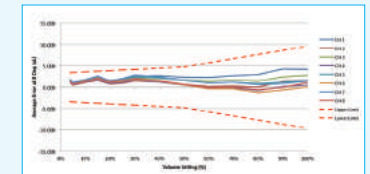
Rainin XLS+ 1200 µL



Competitor A • 1200 µL



Competitor B • 1200 µL



Competitor C • 1200 µL

vs.

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

	CATALOG No.	VOLUME RANGE	PRICE
Pipet-Lite XLS+ Manual Multichannel	8-Channel		
	17013802	0.5–10 µL	\$ 1,513.00
	17013803	2–20 µL	1,302.00
	17013804	5–50 µL	1,302.00
	17013805	20–200 µL	1,302.00
	17013806	20–300 µL	1,302.00
	17014496	100–1200 µL	1,724.00
	12-Channel		
	17013807	0.5–10 µL	\$ 1,734.00
	17013808	2–20 µL	1,631.00
	17013809	5–50 µL	1,631.00
	17013810	20–200 µL	1,631.00
17013811	20–300 µL	1,631.00	
17014497	100–1200 µL	2,449.00	

LTS pipettes use LTS tips. For more information about LTS, see page 4. For pipette specifications, see page 21.

Rainin 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. 

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	\$ 2,161.00
	17011840	100–1200 µL	2,161.00
	8-Channel		
	17011844	5–50 µL	\$ 2,161.00
	17011843	20–300 µL	2,161.00
17011842	100–1200 µL	2,161.00	

LTS pipettes use LTS tips. For more information about LTS, [see page 4](#). For pipette specifications, [see page 21](#).

► mt.com/SR-AS

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.

LTS

	CATALOG No.	VOLUME RANGE	PRICE
E4 XLS Adjustable	6-Channel		
	17012327	20–300 µL	\$ 3,658.00
	17012328	100–1200 µL	3,658.00
	8-Channel		
	17012329	5–50 µL	\$ 3,653.00
	17012330	20–300 µL	3,658.00
17012331	100–1200 µL	3,653.00	

LTS pipettes use LTS tips. Li-Ion battery and wall power supply are included. For more information about LTS, [see page 4](#). For pipette specifications, [see page 21](#).



Reservoirs for Multichannel Pipettes

- Capacity 75 mL
- Available with and without lid
- Great addition for repeat dispensing

	CATALOG No.	QUANTITY	PRICE
	30852500	Reservoir with lid, non-sterilized	25/pack \$ 125.00
	30852501	Reservoir without lid, non-sterilized	50/pack 145.00



Rainin NanoRep

Electronic Repeater Pipette

Automatically dispense up to 1,000 aliquots – with no contact necessary from vessel to vessel.

- Lightweight, comfortable grip
- Transfer volatile, viscous and dense liquids
- No Touch Off dispense
- Aliquots as low as 100 nL, with increments as low as 10 nL – down to 1/10,000th the nominal volume of any syringe tip
- Up to 1,000 aliquots from one aspiration



Conserve samples, reagents and syringe tips with up to 1,000 aliquots per tip: 100 µL (shown), 10 mL, 50 mL

Avoid contact contamination with No Touch Off™ dispense – down to 100-nanoliter aliquots



NanoRep syringe tips | Specifications

Tip Vol. mL	Systematic Error			
	1%	10%	50%	100%
0.1	1 µL ± 8% (0.080 µL)	10 µL ± 1.6% (0.16 µL)	50 µL ± 0.90% (0.45 µL)	100 µL ± 0.90% (0.90 µL)
10	100 µL ± 2% (2.0 µL)	1 mL ± 0.40% (4.0 µL)	5 mL ± 0.40% (20 µL)	10 mL ± 0.30% (30 µL)
50	500 µL ± 2% (10 µL)	5 mL ± 0.25% (12.5 µL)	25 mL ± 0.25% (62.5 µL)	50 mL ± 0.25% (125 µL)

Tip Vol. mL	Random Error			
	1%	10%	50%	100%
0.1	1 µL ≤ 12% (0.12 µL)	10 µL ≤ 2.5% (0.25 µL)	50 µL ≤ 0.80% (0.40 µL)	100 µL ≤ 0.50% (0.50 µL)
10	100 µL ≤ 3% (3.0 µL)	1 mL ≤ 0.35% (3.5 µL)	5 mL ≤ 0.20% (10 µL)	10 mL ≤ 0.15% (15 µL)
50	500 µL ≤ 3.5% (17.5 µL)	5 mL ≤ 0.45% (22.5 µL)	25 mL ≤ 0.20% (50 µL)	50 mL ≤ 0.10% (50 µL)

Tip Volume

mL	Min. Aliquot* µL	Min. Incr.** µL
0.1	0.1	0.01
10	10	1
50	50	5


*Min. Aliquot = Smallest dispensable volume/tip.
**Min. Increment = Lowest incremental adjustment/tip.

CATALOG No.	DESCRIPTION	PRICE
30568171	Electronic NanoRep repeater pipette (includes: charging cable, Hang-Up and 10 mL syringe tip)	\$ 1,775.00
17012878	Wall Power Supply	77.20
30584027	Hang-Ups (for pipettes with fingerhook)	92.85
30575784	NanoRep stand	121.00

	CATALOG No.	MAX. VOLUME	QUANTITY	PRICE
NanoRep Syringe Tips	30575705	0.1 mL	100 per pkg	\$ 175.80
	30575777	0.1 mL	25 per pkg	55.60
	30575707	10 mL	100 per pkg	175.80
	30575779	10 mL	25 per pkg	55.60
	30575789	50 mL	25 per pkg	76.20
	30575781	50 mL	25 per pkg	87.60

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 materials assure durability, 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, for improved ergonomics.

Great value – lower prices!

	CATALOG No.	VOLUME RANGE	PRICE
Rainin Classic	17008648	0.1–2 µL	\$ 396.00
	17008649	0.5–10 µL	396.00
	17008650	2–20 µL	396.00
	17008651	10–100 µL	396.00
	17008652	20–200 µL	396.00
	17008653	100–1000 µL	396.00
	17008654	500–5000 µL	396.00
Starter Kit	17008708	Starter kit: PR-20, PR-200, PR-1000 and accessories	\$ 995.00

Universal pipettes use universal tips.
For pipette specifications, see page 20.



\$995 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.





CATALOG No.	VOL		QTY		PRICE	
	VOLUME RANGE	RACKS/CARTON	TIPS/CARTON	STERILIZED		
Pos-D Pipettes	17008575	0.5–10 µL			\$ 545.00	
	17008576	3–25 µL			545.00	
	17008577	20–50 µL			545.00	
	17008578	10–100 µL			545.00	
	17008579	50–250 µL			545.00	
	17008580	100–1000 µL			545.00	
Capillaries and Pistons	17008604	10 µL	3	180	✓	\$ 111.20
	17008605	25 µL	3	180	✓	111.20
	17008606	50 µL	3	180	✓	111.20
	17008607	100 µL	3	180	✓	111.20
	17008608	250 µL	3	180	✓	111.20
	17008609	1000 µL	3	180	✓	111.20
	17012264	10 µL	3	180		100.80
	17012265	25 µL	3	180		100.80
	17012266	50 µL	3	180		100.80
	17012267	100 µL	3	180		100.80
	17012268	250 µL	3	180		100.80
	17012135	1000 µL	3	180		100.80

Pipette Starter Kits

Multiple Ways to Buy New Rainin XLS+ Pipettes!

Available with SmartStand or Hang-Ups

Starter Kits with SmartStand include PipetteX software for easy pipette management (see page 65):

- 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			
LTS	30386738	✓	✓	✓	✓									✓		\$ 1,945.00
	30579469	✓	✓	✓	✓										✓	1,677.00
	30386597	✓		✓	✓	✓								✓		1,806.00
	30579367	✓		✓	✓	✓									✓	1,677.00
	30386599			✓	✓	✓								✓		1,672.00
	30386737				✓	✓	✓							✓		1,945.00
	30386734			✓	✓	✓		✓						✓		2,500.00
	30386733			✓	✓	✓			✓					✓		2,500.00
	30386736			✓	✓	✓				✓				✓		2,778.00
	30386735			✓	✓	✓					✓			✓		2,778.00
	30386739							✓	✓					✓		2,217.00
	30456871			✓	✓	✓									✓	1,317.00
	30579472							✓	✓						✓	2,063.00
	30386740									✓	✓			✓		2,217.00
30579471									✓	✓			✓		2,063.00	
30386731											✓	✓	✓	✓	3,746.00	
UNV	30386598	✓		✓	✓	✓								✓		\$ 1,806.00
	30386730			✓	✓	✓								✓		1,672.00
	30456872			✓	✓	✓									✓	1,317.00
	30386732										✓	✓	✓	✓		3,746.00
	17008708*			✓	✓	✓								✓		995.00

* 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 LifeTouch – feel the difference!

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

	LTS	UNV	CATALOG No.	CATALOG No.	VOLUME RANGE	PRICE
Fixed Volume Pipet-Lite XLS+			17015221	17015230	0.1–2.0 µL	\$ 369.00
			17015222	17015231	3–10 µL	369.00
			17015223	17015232	11–20 µL	369.00
			17015224	17015233	21–100 µL	369.00
			17015225	17015234	101–200 µL	369.00
			17015226	17015235	201–1000 µL	369.00
			17015227	17015236	1001–2000 µL	369.00
			17015228	17015237	2001–5000 µL	369.00
			17015229	17015238	5001 µL–10 mL	369.00

LTS pipettes use LTS tips. For more information about LTS, see page 4. 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	%	$(\pm) \mu\text{L}$	%	$(\leq) \mu\text{L}$	
2 μL	0.2 μL	0.002	n/a	12	0.024	6.0	0.012	
	1 μL			2.7	0.027	1.3	0.013	
	2 μL			1.5	0.030	0.70	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	0.60	0.030	
	10.0 μL			1.0	0.10	0.40	0.040	
20 μL	2 μL	0.02	0.02	7.5	0.15	2.0	0.040	
	10 μL			1.5	0.15	0.50	0.050	
	20 μL			1.0	0.20	0.30	0.060	
100 μL	10 μL	0.2	0.1	3.5	0.35	1.0	0.10	
	50 μL			0.80	0.40	0.24	0.12	
	100 μL			0.80	0.80	0.15	0.15	
200 μL	20 μL	0.2	0.2	2.5	0.50	1.0	0.20	
	100 μL			0.80	0.80	0.25	0.25	
	200 μL			0.80	1.6	0.15	0.30	
300 μL	30 μL	0.5	0.2	2.5	0.75	1.0	0.30	
	150 μL			0.80	1.2	0.25	0.375	
	300 μL			0.80	2.4	0.15	0.45	
1000 μL	100 μL	2	1	3.0	3.0	0.60	0.60	
	500 μL			0.80	4.0	0.20	1.0	
	1000 μL			0.80	8.0	0.15	1.5	
2000 μL	200 μL	2	2	3.0	6.0	0.60	1.2	
	1000 μL			0.8	8.0	0.20	2.0	
	2000 μL			0.8	16	0.12	2.4	
5000 μL	500 μL	5	5	2.4	12	0.60	3.0	
	2500 μL			0.60	15	0.20	5.0	
	5000 μL			0.60	30	0.16	8.0	
10 mL	1 mL	20	10	5.0	50	0.60	6.0	
	5 mL			1.0	50	0.20	10	
	10 mL			0.60	60	0.16	16	
20 mL	2 mL	20	20	5.0	100	0.60	12	
	10 mL			1.0	100	0.20	20	
	20 mL			0.60	120	0.16	32	

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



PIPETTE VOLUME	VOL		INCREMENT μL		SYSTEMATIC ERROR		RANDOM ERROR – MANUAL		RANDOM ERROR – ELECTRONIC	
	VOLUME	MANUAL / ELECTRONIC	%	$(\pm) \mu\text{L}$	%	$(\leq) \mu\text{L}$	%	$(\leq) \mu\text{L}$		
10 μL	1.0 μL	0.02/0.01	4.0	0.040	5.0	0.050	3.0	0.030		
	5.0 μL		1.5	0.075	1.5	0.075	0.80	0.040		
	10.0 μL		1.0	0.10	0.50	0.050	0.50	0.050		
20 μL	2 μL	0.02	7.5	0.15	4.0	0.080	3.0	0.060		
	10 μL		1.5	0.15	1.5	0.15	1.0	0.10		
	20 μL		1.0	0.20	0.5	0.10	0.30	0.060		
50 μL	5 μL	0.05	3.5	0.175	2.0	0.10	1.5	0.075		
	25 μL		1.2	0.30	0.50	0.125	0.40	0.10		
	50 μL		0.80	0.40	0.40	0.20	0.30	0.15		
200 μL	20 μL	0.2	2.5	0.50	1.2	0.24	1.0	0.20		
	100 μL		0.80	0.80	0.25	0.25	0.25	0.25		
	200 μL		0.80	1.6	0.30	0.60	0.20	0.40		
300 μL	30 μL	0.5/0.2	2.5	0.75	1.5	0.45	1.0	0.30		
	150 μL		0.80	1.2	0.30	0.45	0.25	0.375		
	300 μL		0.80	2.4	0.25	0.75	0.20	0.60		
1200 μL	100 μL	2/ 1	3.6	3.6	1.0	1.0	0.60	0.60		
	600 μL		0.80	4.8	0.30	1.8	0.20	1.2		
	1200 μL		0.80	9.6	0.20	2.4	0.15	1.8		

Specifications subject to change without notice.

96-Channel Pipetting

Faster, More Accurate Workflows

By making it possible to perform experiments more efficiently, accurately and reliably, 96-channel pipettors have become indispensable tools in many life science laboratories. They can significantly reduce the time and effort required to perform experiments, while providing higher accuracy and reproducibility. They are particularly useful in life science applications that involve large-scale screenings, such as drug discovery, ELISAs, proteomics and cell-based assays.

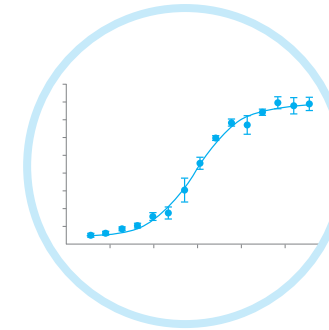
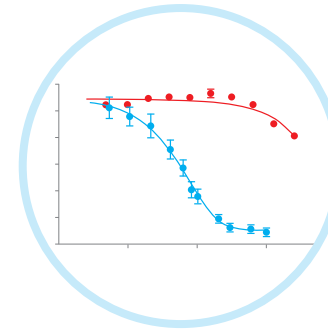
Unlike single- and multi-channel pipettes, which are more prone to human error and inconsistencies, manual and semi-automated 96-channel pipettors are ideal for research and scale-up, and can often provide more reliable and reproducible results. They also dispense small volumes of liquid with high accuracy, which is important in many life science applications that require precise measurements.

Rainin offers 96-channel pipettors to meet your exact need.

- **MicroPro** – our most compact, affordable and advanced semi-automated 96-channel pipettor.
- **BenchSmart 96** – with four plate-trays, ideal for labs that do a lot of multi-plate work.
- **Liquidator 96** – perfect for researchers who want to manually-control every aspect of their workflow.

	MicroPro	BenchSmart 96	Liquidator 96
96/384-Well Plate Applications	●	●	●
Interchangeable Heads	●	●	●
Suitable for BSL/PCR Cabinets	●	●	●
Small Footprint	●	●	●
Low Cost	●	●	●
Volume Range	0.5-20 µL 5-300 µL	0.5-20 µL 5-200 µL 100-1000 µL	0.5-20 µL 5-200 µL

How can a 96-channel pipettor speed your workflow?

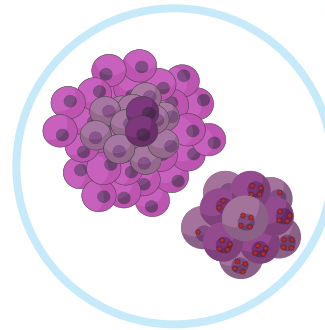


ELISA Assays

Enzyme-Linked Immunosorbent Assays (ELISA) are a commonly method for detecting and quantifying proteins or small molecules in biological samples. Using a 96-channel pipettor, you can simultaneously transfer the reagents to multiple wells or wash wells, significantly reducing the time and effort needed to perform an ELISA assay.

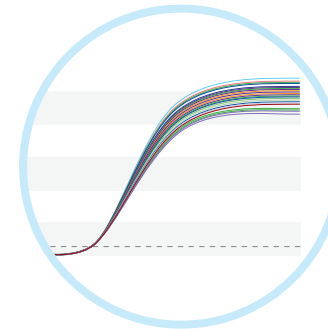
High-Throughput Screening

A 96-channel pipettor enables you to significantly increase your screening capacity and streamline workflows. You can quickly and accurately screen large numbers of samples for various applications, such as genomic, drug screening or proteomics research.



Cell-Based Assays

Cell-based assays are used to study the behavior of cells in response to various stimuli. Using a 96-channel pipettor, you can quickly and accurately transfer cells, reagents and other components to multiple wells, enabling you to perform high-throughput cell-based assays.



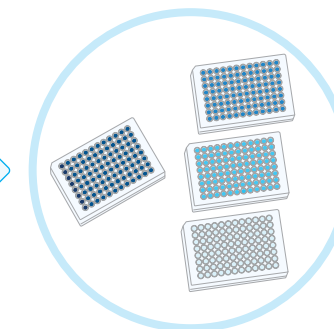
PCR/qPCR Amplification

Polymerase Chain Reaction (PCR) is a method used to amplify DNA and RNA sequences. Using a 96-channel pipettor, you can quickly and accurately transfer the reagents needed for PCR amplification, streamlining the process and increasing the throughput.



Plate Replication

Plate replication is commonly used in life science research to create multiple copies of a plate for analysis. Using a 96-channel pipettor, you can quickly and accurately transfer the contents of a mother plate to multiple daughter plates, increasing efficiency and reducing the chance of errors.



DNA Sequencing

DNA sequencing is a critical technique used in genomics research. Using a 96-channel pipettor, researchers can quickly and accurately accomplish the many sample preparation steps often involved prior to DNA sequencing.

Rainin MicroPro

Affordable, Portable 96-Channel Pipetting

MicroPro simplifies and streamlines 96- and 384-well microplate work, from filling plates to complex, multi-step workflows.



Compact, highly affordable and easy to use, the MicroPro wirelessly connects to a high resolution touchscreen for an intuitive and user-friendly experience.

- 20 µL and 300 µL models
- Weighs just over 11 pounds!
- Save/retrieve complex workflows
- Intuitive touchscreen interface
- 10x speed control



Simplify your workflows

From the touchless tip ejection and programmable Pipetting Depth Recall™ to saving complex, multistep protocols, the MicroPro boosts productivity and improves reproducibility.



Your Research Assistant

MicroPro goes beyond simply adding and mixing reagents by offering convenient features such as aliquot dispensing, sample dilution with mixing and multi-aspirate with mixing.



Custom Protocols

Custom protocols are easy to create and allow you to build and save a tailored sequence of instruction and liquid handling steps that exactly match the needs of your protocols.

▶ mt.com/SR-MP



MicroPro Tips

The innovative and proprietary design of the MicroPro pipette tips and tip cartridges requires minimal force for tip loading of all 96 tips. This significant force reduction allows MicroPro to be small and light in weight – currently the smallest benchtop on the market! MicroPro tips work with the Rainin MicroPro instrument only. They are available as low-retention tips in 20 µL and 300 µL volume sizes, sterilized and sterilized with filter.



MicroPro

	CATALOG No.	MAX VOL	DESCRIPTION	PRICE
MicroPro	30835029	20 µL	0.5-20 µL MicroPro 20	\$ 12,500.00
	30835028	300 µL	5-300 µL MicroPro 300	12,500.00
	30835030		Two-Tray Dual Nest, MPR 96/96	1,500.00

See page 30 for high-throughput MicroPro tips.

Rainin 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 high-throughput 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.

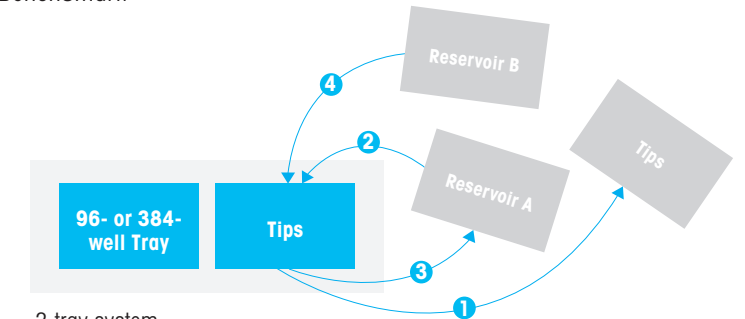


Speed your workflow

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

BenchSmart 96



	CATALOG No.	MAX VOL	DESCRIPTION	PRICE
BST 96	30296705	20 µL	0.5-20 µL BenchSmart 96, complete	\$ 25,725.00
	30296706	200 µL	5-200 µL BenchSmart 96, complete	25,725.00
	30296707	1000 µL	100-1000 µL BenchSmart 96, complete	25,725.00
	30296708	20 µL	Pipetting head 0.5-20 µL, BenchSmart 96	10,355.00
	30296709	200 µL	Pipetting head 5-200 µL, BenchSmart 96	10,355.00
	30296780	1000 µL	Pipetting head 100-1000 µL, BenchSmart 96	10,355.00
Accs.	17010394	-	384-well adapter plate stage, white	\$ 449.00
	17010791	-	384-well adapter plate stage, black	449.00
	30321288	-	Terminal Conversion Kit	505.00

See page 30 for high-throughput LTS tips. For reservoirs, plates, mats and strips, see page 29.

► mt.com/SR-BST96

Rainin Liquidator 96

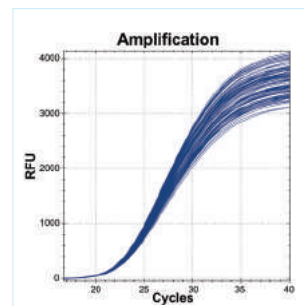
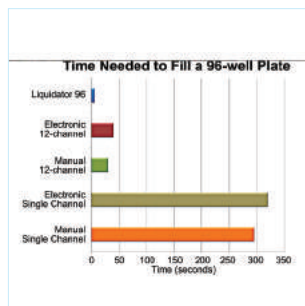
Manual High-Throughput Pipetting

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

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.

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



Easy to use

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

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.

► mt.com/SR-LIQ96



Liquidator 96

LTS

	CATALOG No.	MAX VOL	DESCRIPTION	PRICE
LIQ 96	17014207	20 µL	0.5-20 µL Benchtop Pipetting System	\$ 24,958.00
	17010335	200 µL	5-200 µL Benchtop Pipetting System	24,958.00

Liquidator 96 is supplied with height adjustment posts, a 384-well adapter plate stage and three racks of tips to get you started.

	CATALOG No.	DESCRIPTION	PRICE
LIQ 96 Accs.	17014270	Height adjustment posts, 0.5-20 µL Liquidator	\$ 84.40
	17010396	Height adjustment posts, 5-200 µL Liquidator	83.20
	17010394	384-well adapter plate stage, white	449.00
	17010791	384-well adapter plate stage, black	449.00
	17011118	20 µL tip tray adapter, white	389.00

Reservoirs, plates, mats and strips

Reusable SBS footprint polypropylene reservoirs

	CATALOG No.	DESCRIPTION	PRICE
Reservoirs	17012602	Non-sterile Low-profile 96 pyramidal bottoms	5-pack \$ 71.60
	17012603	Sterile Low-profile 96 pyramidal bottoms	5-pack, ind. wrap 103.80
	17012604	Non-sterile Standard profile 96 pyramidal bottoms	5-pack 83.40
	17012605	Sterile Standard profile 96 pyramidal bottoms	5-pack, ind. wrap 116.00
	17012608	Non-sterile Low-profile 8-channel V-bottom	5-pack 71.60
	17012609	Sterile Low-profile 8-channel V-bottom	5-pack 103.80
	17012606	Non-sterile Standard profile 8-channel V-bottom	5-pack 83.40
	17012607	Sterile Standard profile 8-channel V-bottom	5-pack, ind. wrap 116.00
	17012612	Non-sterile Low-profile 12-channel V-bottom	5-pack 71.60
	17012613	Sterile Low-profile 12-channel V-bottom	5-pack, ind. wrap 103.40
	17012610	Non-sterile Standard profile 12-channel V-bottom	5-pack 82.80
	17012611	Sterile Standard profile 12-channel V-bottom	5-pack, ind. wrap 116.00

Deepwell plates, mats, tube strips, cap strips

	CATALOG No.	DESCRIPTION	PRICE
Accessories	17012623	Non-sterile 2.2 mL 96-deepwell plate,	5-pack 41.80
	17012624	Sterile 2.2 mL 96-deepwell plate,	5-pack, ind. wrap 71.60
	17012625	Non-sterile Polymer sealing mat fits 96-deepwell plate	5-pack 41.80
	17012626	Sterile Polymer sealing mat fits 96-deepwell plate	5-pack, ind. wrap 71.60
	17012630	Sterile 1.2 mL racked microtube strips (8x12)	box of 300 69.00

Tips for 96-Channel Platforms

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	
17011185	LQR LTS 20µL 960/10	20 µL	10	960					\$ 114.80
17011186	LQR LTS 20µL S 960/10	20 µL	10	960	✓				133.40
17011117	LQR LTS 20µL F 960/10	20 µL	10	960	✓	✓			191.60
17010645	LQR LTS 200µL 960/10	200 µL	10	960					114.80
17010647	LQR LTS 200µL S 960/10	200 µL	10	960	✓				133.40
17010646	LQR LTS 200µL F 960/10	200 µL	10	960	✓	✓			191.60
30281704	LQR LTS 1000µL 960/10	1000 µL	10	960					140.80
30296781	LQR LTS 1000µL S 960/10	1000 µL	10	960	✓				161.20
30296782	LQR LTS 1000µL F 960/10	1000 µL	10	960	✓	✓			228.00
17014399	LQR LTS 20µL LS 960/10	20 µL	10	960	✓		✓		161.20
17014400	LQR LTS 20µL FL 960/10	20 µL	10	960	✓	✓	✓		236.00
17014401	LQR LTS 200µL LS 960/10	200 µL	10	960	✓		✓		161.20
17014402	LQR LTS 200µL FL 960/10	200 µL	10	960	✓	✓	✓		236.00
30296783	LQR LTS 1000µL LS 960/10	1000 µL	10	960	✓		✓		161.20
30296784	LQR LTS 1000µL FL 960/10	1000 µL	10	960	✓	✓	✓		236.00
17011187	LQS LTS 20µL 960/10	20 µL	10	960					\$ 114.80
17011287	LQS LTS 20µL S 960/10	20 µL	10	960	✓				133.40
17010648	LQS LTS 200µL 960/10	200 µL	10	960					114.80
17010649	LQS LTS 200µL S 960/10	200 µL	10	960	✓				133.40
17014403	LQS LTS 20µL LS 960/10	20 µL	10	960	✓		✓		161.20
17014404	LQS LTS 200µL LS 960/10	200 µL	10	960	✓		✓		161.20



MicroPro Tips in Racks

MicroPro Tips	CATALOG No.	DESCRIPTION	VOL	QTY	FEATURES	PRICE
	63305398	MPR 20µL LS 4800/50	20 µL	50 4800	✓	\$ 498.00
	63305397	MPR 20µL LF 4800/50	20 µL	50 4800	✓ ✓ ✓	686.00
	63305400	MPR 300µL LS 4800/50	300 µL	50 4800	✓ ✓ ✓	463.00
	63305399	MPR 300µL LF 4800/50	300 µL	50 4800	✓ ✓ ✓	667.00



Specifications for 96-Channel Platforms

MODEL/MAX. VOLUME	20 µL	200 µL	1000 µL
Head Size	LOW VOLUME 0.5 – 20 µL	MID VOLUME 5 – 200 µL	HIGH VOLUME 100 – 1000 µL
Systematic Error (per channel)	20 µL: ± 1.0% (0.20 µL) 10 µL: ± 1.2% (0.12 µL) 2 µL: ± 6.0% (0.12 µL) 1 µL: ± 12% (0.12 µL)	200 µL: ± 1.0% (2.0 µL) 100 µL: ± 1.0% (1.0 µL) 20 µL: ± 2.0% (0.40 µL) 5 µL: ± 5.0% (0.25 µL)	1000 µL: ± 1.0% (10 µL) 500 µL: ± 1.0% (5.0 µL) 100 µL: ± 2.5% (2.5 µL)
Random Error (per channel)	20 µL: ≤ 0.80% (0.16 µL) 10 µL: ≤ 1.0% (0.10 µL) 2 µL: ≤ 5.0% (0.10 µL) 1 µL: ≤ 10% (0.10 µL)	200 µL: ≤ 0.40% (0.80 µL) 100 µL: ≤ 0.80% (0.80 µL) 20 µL: ≤ 1.5% (0.30 µL) 5 µL: ≤ 3.5% (0.175 µL)	1000 µL: ≤ 0.40% (4.0 µL) 500 µL: ≤ 0.40% (2.0 µL) 100 µL: ≤ 1.25% (1.25 µL)
Volume Increments	0.02 µL	0.2 µL	1 µL

MODEL/MAX. VOLUME	20 µL	200 µL
Volume Range	2 – 20 µL	5 – 200 µL
Systematic Error (per channel)	20 µL: ± 1.0% (0.20 µL) 10 µL: ± 1.2% (0.12 µL) 2 µL: ± 6.0% (0.12 µL) 1 µL: ± 12% (0.12 µL)	200 µL: ± 1.0% (2.0 µL) 100 µL: ± 1.0% (1.0 µL) 20 µL: ± 2.0% (0.40 µL) 5 µL: ± 5.0% (0.25 µL)
Random Error (per channel)	20 µL: ≤ 0.80% (0.16 µL) 10 µL: ≤ 1.0% (0.10 µL) 2 µL: ≤ 5.0% (0.10 µL) 1 µL: ≤ 10% (0.12 µL)	200 µL: ≤ 0.50% (1.00 µL) 100 µL: ≤ 0.80% (0.80 µL) 20 µL: ≤ 1.5% (0.30 µL) 5 µL: ≤ 3.5% (0.175 µL)
Volume Increments	0.02 µL	0.2 µL

MODEL/MAX. VOLUME	20 µL	300 µL
Volume Range	2 – 20 µL	5 – 300 µL
Systematic Error (per channel)	20 µL: ± 1.0% (0.20 µL) 10 µL: ± 1.5% (0.15 µL) 2 µL: ± 5.0% (0.10 µL)	300 µL: ± 1.0% (3.0 µL) 150 µL: ± 1.5% (2.25 µL) 30 µL: ± 1.5% (0.45 µL) 15 µL: ± 2.0% (0.30 µL)
Random Error (per channel)	20 µL: ≤ 0.5% (0.10 µL) 10 µL: ≤ 1.0% (0.10 µL) 2 µL: ≤ 3.0% (0.06 µL)	300 µL: ≤ 1.0% (3.0 µL) 150 µL: ≤ 1.0% (1.50 µL) 30 µL: ≤ 1.0% (0.30 µL) 15 µL: ≤ 2.0% (0.30 µL)
Volume Increments	0.01 µL	0.1 µL

Rainin SP+ Pipette Controller

Easy Control at Your Fingertips

Superior ergonomics, state-of-the-art technology and a unique, extendable head to conquer your larger volume 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.



Specific Applications

- Cell culture
- Bacteria and yeast culture
- Sample prep (DNA/RNA/protein extraction)

Environment

- On the bench
- In the biosafety – and chemical-hood

Liquid Transfer

- Buffer
- Chemicals
- Media

Rainin Serological Pipettes for SP+

Pipet with confidence

- Compatible with all universal pipette controllers
- Free of RNase, DNase and endotoxin, and are non-pyrogenic
- Built-in filter protects pipette controller from contamination
- Convenient graduations



	CATALOG No.	DESCRIPTION	PRICE
Rainin SP+	30671415	Rainin SP+ pipette controller, 0.1–100 mL	\$ 662.00
	17011745	Rainin SP+ spare filter	16.60
	30671310	Magnetic Hang-Up	59.40
	30621247	Pipette adaptor	35.80

	CATALOG No.	SIZE	MAX. VOL.	QUANTITY	PRICE
Serological Pipettes	30749261	1 mL	1.3 mL	200 per pack	Sterilized \$ 43.80
	30749262	2 mL	2.8 mL	200 per pack	Sterilized 51.40
	30749263	5 mL	8 mL	100 per pack	Sterilized 30.80
	30749264	10 mL	13 mL	100 per pack	Sterilized 36.00
	30749265	25 mL	33 mL	50 per pack	Sterilized 36.00
	30749266	50 mL	60 mL	50 per pack	Sterilized 77.20

► mt.com/SR-SPplus

Rainin QuickFlow

Portable Easy-to-Use Aspirator

Smart features

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

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 – UNV 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.	\$ 2,907.00
30551530	QuickFlow System – LTS 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.	\$ 2,907.00
30519824	QuickFlow Handle Kit – UNV Standard UNV 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.	565.00
30551534	QuickFlow Handle Kit – LTS LTS 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.	576.00

► mt.com/SR-QF

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

8-channel adapter

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.

Rainin 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 aliquot range from 2 µL to 5 mL, AutoRep S is an economical choice for repeat dispensing up to 49 aliquots without refilling.

The wide selection of Encode™ syringes in sizes from 0.1 mL to 50 mL is available in sterile and non-sterile.

	CATALOG No.	DESCRIPTION	PRICE
AutoRep S	17013008	Manual repeater pipette volume range: 2 µL to 5 mL	\$ 586.00
	17013009	Shelf mount	45.20
	17013010	Volume table	38.80

	CATALOG No.	MAX. VOLUME	QUANTITY		PRICE
Encode Syringes	17007399	0.1 mL	100 per pkg		\$ 140.80
	17007400	0.1 mL	100 per pkg	Sterile	198.20
	17001871	0.5 mL	100 per pkg		140.80
	17001872	0.5 mL	100 per pkg	Sterile	198.20
	17013004	1 mL	100 per pkg		140.80
	17013002	1 mL	100 per pkg	Sterile	200.80
	17001873	1.25 mL	100 per pkg		140.80
	17001874	1.25 mL	100 per pkg	Sterile	198.20
	17001877	2.5 mL	100 per pkg		140.80
	17001878	2.5 mL	100 per pkg	Sterile	198.20
	17001883	5 mL	100 per pkg		140.80
	17001884	5 mL	100 per pkg	Sterile	198.20
	17013005	10 mL	100 per pkg		149.40
	17013003	10 mL	100 per pkg	Sterile	200.80
	17001875	12.5 mL	100 per pkg		140.80
	17001876	12.5 mL	100 per pkg	Sterile	198.20
	17001879	25 mL*	50 per pkg		161.20
	17001880	25 mL*	25 per pkg	Sterile	314.00
17001881	50 mL*	25 per pkg		160.00	
17001882	50 mL*	25 per pkg	Sterile	314.00	

* Includes one adapter. For complete syringe offering, please visit mt.com/rainin



mt.com/SR-AR

Rainin Disp-X

Large Volume Bottle Top Dispensing

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	\$ 498.00		
	30373528	Disp-X 1–10 mL bottle-top dispenser	498.00		
	30373529	Disp-X 2.5–25 mL bottle-top dispenser	681.00		
	30373750	Disp-X 5–50 mL bottle-top dispenser	681.00		
Accessories	30373751	Disp-X discharge tube	5 or 10 mL	\$ 82.40	
	30373752	Disp-X discharge tube	25 or 50 mL	82.40	
	30373753	Disp-X filling tube	5 or 10 mL	125–240 mm length	33.00
	30373754	Disp-X filling tube	5 or 10 mL	250–480 mm length	33.00
	30373755	Disp-X filling tube	25 or 50 mL	170–330 mm length	33.00
	30373756	Disp-X filling tube	25 or 50 mL	250–480 mm length	33.00
	30373757	Disp-X filling valve	5 or 10 mL		82.40
	30373758	Disp-X filling valve	25 or 50 mL		81.80
	30373759	Disp-X discharge valve	5 or 10 mL		82.40
	30373760	Disp-X discharge valve	25 or 50 mL		82.80

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

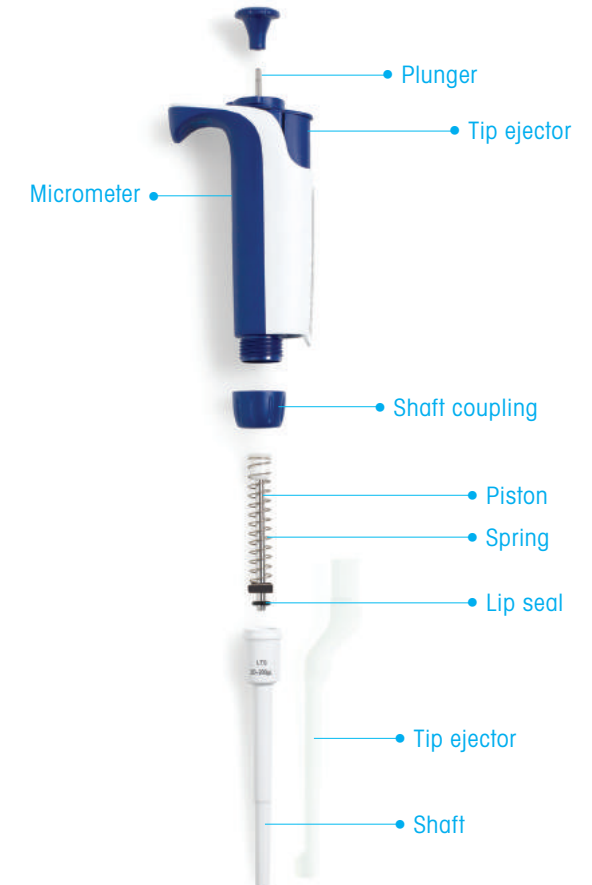
Our highly trained service experts have years of experience repairing and calibrating many different brands of pipettes. We only use Rainin parts on Rainin pipettes.

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®)
- We service all pipettes – single channels, multichannels and all Rainin benchtop pipettors
- Free inbound shipping
 - 4 or more, request a **free return kit**
 - 3 or less, or in a rush, pack them yourself and print a **complimentary inbound shipping label**

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.

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	Accredited+ Plan
	Labs with basic service needs 	When prior performance matters 	For complete ISO 17025 documentation 	ISO 8655 and 17025 compliance
As Found	N/A	4 Test weighings @ 10, 100 %	4 Test weighings @ 10, 50, 100 %	10 Test weighings @ 10, 50, 100 %
As Returned	4 Test weighings @ 10, 100 %	4 Test weighings @ 10, 100 %	10 Test weighings @ 10, 50, 100 %	10 Test weighings @ 10, 50, 100 %
Preventive Maintenance	Yes	Yes	Yes	Yes
Calibration Certificate	Non-accredited	Non-accredited	Accredited	Accredited
Compliance	ISO 8655-7 Annex A	ISO 8655-7 Annex A	ISO 8655-7:2022	ISO 8655-6:2022

Ordering Information

Standard Plan		
As Found	N/A	
As Returned	4 test weighings @ 10, 100%	
<ul style="list-style-type: none"> • 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	\$ 51.80
17800096	Multichannel All – 8 channels	139.00
17800131	Multichannel All – 12 channels	166.40
17800153	Liquidator 96	2,407.00
30451098	BenchSmart 96 Head	2,407.00
30848615	MicroPro	2,407.00

Advanced Plan		
As Found	4 test weighings @ 10, 100%	
As Returned	4 test weighings @ 10, 100%	
This plan includes all services provided under the Standard Plan. PLUS: <ul style="list-style-type: none"> • As found calibration results, including failure confirmation 		
CATALOG No.	DESCRIPTION	PRICE
17800040	Single channel	\$ 62.20
17800105	Multichannel All – 8 channels	191.80
17800140	Multichannel All – 12 channels	234.00
17800154	Liquidator 96	2,840.00
30451099	BenchSmart 96 Head	2,840.00
30848616	MicroPro	2,840.00

Accredited Plan		
As Found	4 test weighings @ 10, 50, 100%	
As Returned	10 test weighings @ 10, 50, 100%	
This plan includes all services provided under the Advanced Plan. PLUS: <ul style="list-style-type: none"> • 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	\$ 121.20
17800113	Multichannel All – 8 channels	367.00
17800148	Multichannel All – 12 channels	411.00
30415512	Liquidator 96	3,779.00
30451100	BenchSmart 96 Head	3,779.00
30848617	MicroPro	3,779.00

Accredited+ Plan		
As Found	10 test weighings @ 10, 50, 100%	
As Returned	10 test weighings @ 10, 50, 100%	
This plan includes all services provided under the Accredited Plan. PLUS: <ul style="list-style-type: none"> • Full compliance to ISO 8655:2022 part 6 and meets all quality standards 		
CATALOG No.	DESCRIPTION	PRICE
30829339	Single channel	\$ 174.20
30829341	Multichannel All – 8 channels	555.00
30829342	Multichannel All – 12 channels	660.00

Optional Services		
DNA/RNase decontamination		
CATALOG No.	DESCRIPTION	PRICE
17800171	Single channel	\$ 29.80
17800401	Multichannel	59.60
30932020	96-Channel	178.80

Onsite Pipette Calibration





Expert Calibration in Your Lab

Rainin makes it easy to receive state-of-the-art ISO 17025-accredited pipette service right in your lab. We service all brands.

Regardless of plan, all pipettes we service receive:

- Full preventive maintenance (PM) with seal replacement or restoration
- Liquid leak test on all nozzles
- Calibrated to ISO 8655:2022 tolerances
- 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 	Labs with basic service needs 	When prior performance matters 	For complete ISO 17025 documentation 
As Found	N/A	N/A	4 Test weighings @ 10% and 100%	4 Test weighings @ 10%, 50% and 100%
As Returned	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%
Preventive Maintenance	Yes	Yes	Yes	Yes
Calibration Certificate	N/A	Non-accredited	Non-accredited	Accredited
Compliance	N/A	ISO 8655-7 Annex A	ISO 8655-7 Annex A	ISO 8655-7 Annex A

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

Ordering Information

Basic Plan		
As Found	N/A	
As Returned	4 test weighings @ 10, 100%	
<ul style="list-style-type: none"> • Full preventive maintenance (PM) with leak test and seal replacement or restoration 		
CATALOG No.	DESCRIPTION	PRICE*
30445525	Single channel	\$ 38.60
30445526	Multichannel All – 8 channels	73.20
30445527	Multichannel All – 12 channels	91.00

Standard Plan		
As Found	N/A	
As Returned	4 test weighings @ 10, 100%	
<ul style="list-style-type: none"> • Full preventive maintenance (PM) with leak test and seal replacement or restoration • Calibration certificate with detailed measurement data 		
CATALOG No.	DESCRIPTION	PRICE*
17800347	Single channel	\$ 51.80
17800292	Multichannel All – 8 channels	142.60
17800256	Multichannel All – 12 channels	170.40

Advanced Plan		
As Found	4 test weighings @ 10, 100%	
As Returned	4 test weighings @ 10, 100%	
This plan includes all services provided under the Standard Plan. PLUS: <ul style="list-style-type: none"> • As found calibration results – including failure confirmation 		
CATALOG No.	DESCRIPTION	PRICE*
17800320	Single channel	\$ 63.40
17800272	Multichannel All – 8 channels	195.60
17800236	Multichannel All – 12 channels	239.00

Accredited Plan		
As Found	4 test weighings @ 10, 50, 100%	
As Returned	4 test weighings @ 10, 50, 100%	
This plan includes all services provided under the Advanced Plan. PLUS: <ul style="list-style-type: none"> • ISO 17025 calibration certificate, including uncertainty of measurement (certified by A2LA), historical trending and calibration label 		
CATALOG No.	DESCRIPTION	PRICE*
30451900	Single channel	\$ 111.60
30451876	Multichannel All – 8 channels	308.00
30451852	Multichannel All – 12 channels	388.00

* Travel fees may apply. Contact your sales representative.

Expert Calibration and Repair

Buy Vouchers Now, Use Them When You Need Them

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

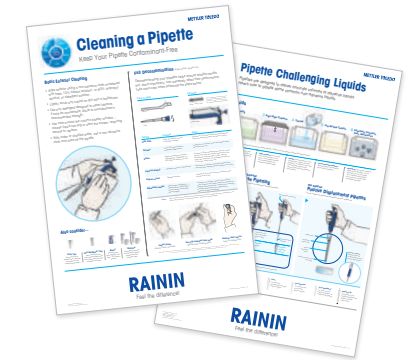
- Valid for two years
- Use with any brand of pipette
- Eliminate separate purchase orders
- Purchase with your pipettes and tips
- Valid for **mail-in service only**

CATALOG No.	DESCRIPTION	PRICE
17014448	Standard Single channel service voucher	\$ 51.80
17014453	Standard Multi-ALL 8-channel service voucher	139.00
17014456	Standard Multi-ALL 12-channel service voucher	166.40
30415513	Standard Liquidator 96 – 96 channels, includes box & round-trip UPS Ground shipping	2,407.00
30456199	Standard BenchSmart 96 Head – 96 channels, includes round-trip UPS Ground shipping	2,407.00
17014449	Advanced Single channel service voucher	62.20
17014454	Advanced Multi-ALL 8-channel service voucher	191.80
17014457	Advanced Multi-ALL 12-channel service voucher	234.00
30415514	Advanced Liquidator 96 – 96 channels, includes box & round-trip UPS Ground shipping	2,840.00
30456200	Advanced BenchSmart 96 Head – 96 channels, includes round-trip UPS Ground shipping	2,840.00
17014450	Accredited Single channel service voucher	121.20
17014455	Accredited Multi-ALL 8-channel service voucher	367.00
17014458	Accredited Multi-ALL 12-channel service voucher	411.00
30415517	Accredited Liquidator 96 – 96 channels, includes box & round-trip UPS Ground shipping	3,779.00
30456201	Accredited BenchSmart 96 Head – 96 channels, includes round-trip UPS Ground shipping	3,779.00

Service Vouchers

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, choose option "3") or by email at tech.support@rainin.com

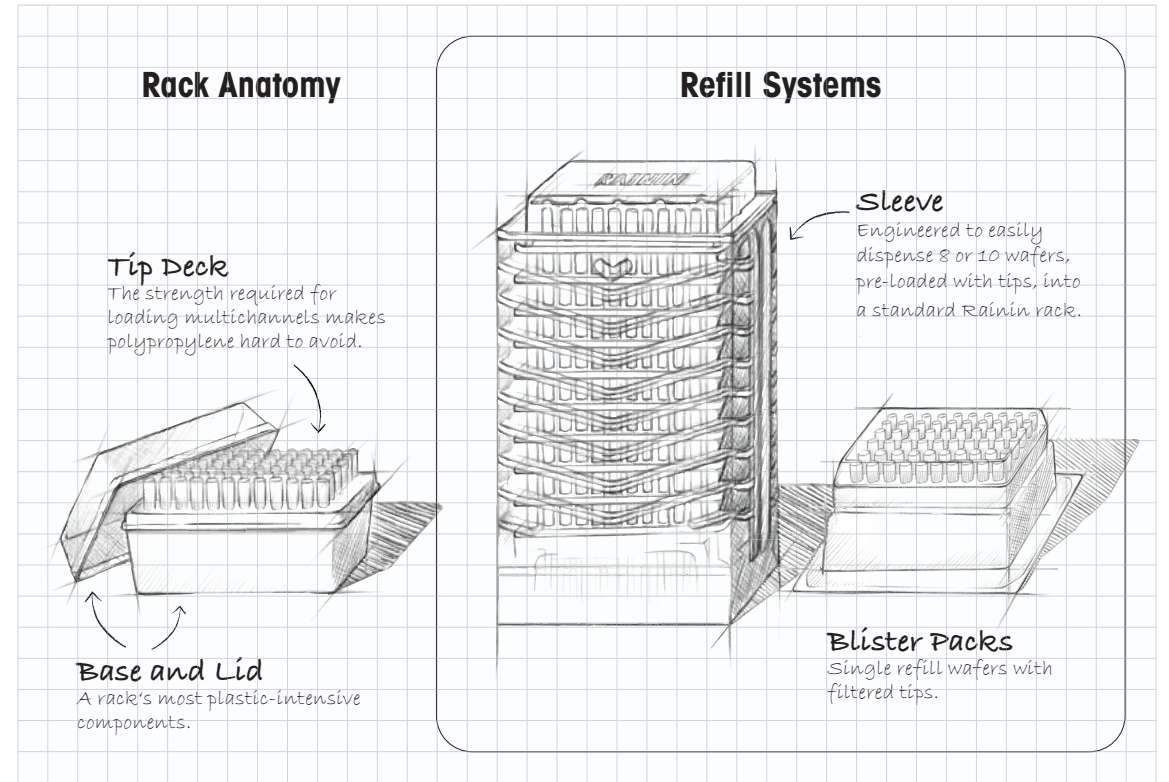
Reduce Plastic Waste with Rainin

Greener Tip Rack Solutions

Rainin offers a number of waste-saving pipette tip rack options to help meet your sustainability objectives. We've taken a three-pronged approach to reducing plastic rack waste:

- Reducing the amount of plastic – particularly #5 polypropylene that, when recycled, downcycles into lower-quality products (e.g., doormats, crates, etc.).
- Replacing polypropylene with PET, which is more widely-recycled and recycled PET can be made into the same or similar products (water bottles, TerraRacks, etc.).
- Avoiding plastic components, instead using natural, compostable materials like plant fiber.

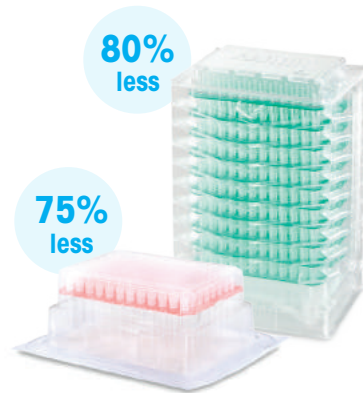
Plastic savings shown below are calculated using our current standard 1000 µL polypropylene tip rack as the baseline. Components used for the calculation include the rack base, lid, tip deck, sleeve (refills) and any plastic wrapping – tips are not included. Actual plastic savings percentages vary slightly by rack size (10 µL racks are smaller than 1000 µL racks). Our current standard rack, which we introduced in 2018, uses 20% less polypropylene than the rack it replaced, so the amount of plastic saved shown below is on top of the already-reduced plastic rack.



~98% less



82% less plastic



75% less

80% less



60% less



50% less



Baseline

Bulk Tips
The most sustainable rack is the rack you don't use, which makes manually refilling spent racks and wafers with BioClean Ultra tips in bulk a reasonable option for some labs.

EarthRack
EarthRack eliminates plastic waste almost entirely. Other than the thin polypropylene tip deck, EarthRack is made entirely from compostable, rapidly renewable plant fiber. EarthRack uses up to 82% less plastic than the Rainin standard rack.

Green-Pak
Green-Pak and Green-Pak SpaceSaver refill systems for Rainin standard racks reduce plastic waste by up to 80%. Green-Pak's SpaceSaver sleeve and Green-Pak sealed refill packs are both made from highly-recyclable #1 PET.

StableStak
Rainin StableStak multilayer system is designed for high-production multichannel work. With five layers mounted on a sturdy base and 192 tips per layer, each StableStak is equivalent to 10 96-tip racks.

TerraRack
Not only composed of 50% less plastic than the Rainin standard rack, TerraRack is made almost entirely from #1 PET – the same plastic as in water bottles and the most commonly recycled plastic worldwide. Easy to disassemble and compress, TerraRacks take up considerably less volume as waste.


Rainin Standard Rack
Like most pipette tip racks, Rainin standard racks are 100% polypropylene (#5), which is prized for strength and durability. This rack was reengineered in 2018 to reduce the amount of polypropylene it contains by 20%.

Rainin EarthRack


Compostable, Biodegradable Tip Rack

EarthRack is made primarily from refined cellulose that is easy to compost and is biodegradable. Because the small, recyclable polypropylene tip deck is the only plastic component, EarthRack significantly reduces plastic use and waste.

Available in 20 µL, 200 µL and 1000 µL.

Rainin LTS LifeTouch System only. 



CATALOG No.	DESCRIPTION	VOL		QTY		FEATURES		PRICE
		MAX VOLUME		RACKS/CARTON	TIPS/CARTON	STERILIZED	FILTER	
 EarthRack 30807966	ER LTS 20µL F 960G/10	20 µL		10	960	✓	✓	\$ 172.40
30807967	ER LTS 200µL F 960G/10	200 µL		10	960	✓	✓	172.40
30808038	ER LTS 1000µL F 768G/8	1000 µL		8	768	✓	✓	172.40

mt.com/SR-BCG

EarthRack is

Rainin EarthRack products are certified to be BioClean Green – a comprehensive testing process and specifications developed specifically for cellulose-based tip racks.

Because EarthRack is derived from natural, plant-based materials, BioClean Green employs a broader, more intrusive quality testing procedure to assure the absence of biological contaminants. For example, the use of cellulose requires an additional test for chloroplast DNA. Testing for DNase and RNase has been expanded to include three separate tests for each nuclease for complete assurance of tip performance.

Specifications

BioClean Green Test Limits of Detection (LODs)

Human DNA	<0.32 pg
Bacterial DNA	<0.032 pg
Plant (chloroplast) DNA	<0.032 pg
DNase (three tests)	
• Gel electrophoresis	≤10 ⁻⁷ KU/µL
• Kunitz Assay	≤10 ⁻⁴ KU/µL
• qPCR	≤10 ⁻⁶ KU/µL
RNase (three tests)	
• Gel electrophoresis	≤10 ⁻⁶ KU/µL
• Kunitz Assay	≤10 ⁻⁶ KU/µL
• RT-qPCR	≤10 ⁻⁶ KU/µL
Endotoxin (LPS)	≤0.01 EU/mL
Protein	<2 ng/tip
Protease	<500 ng/mL
PCR inhibitors	None detected



Earth Friendly

EarthRack's lid and base are composed of a biodegradable bamboo and sugar cane cellulose material that can be composted at municipal facilities. If deposited in a landfill, they will biodegrade.



Reduces Plastic Waste

With up to 75% less plastic than conventional racks, adopting EarthRack can help organizations meet their sustainability objectives.



Less Carbon

When composted, incinerated or deposited into a landfill, EarthRack's cellulose components contribute no net increase in atmospheric CO₂. Carbon absorbed during initial plant growth is simply returned to the atmosphere.

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 (they are not autoclavable).

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.

ml.com/SR-BCU

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

LTS

TerraRack	17014960	TR LTS 20µL S 960A/10	20 µL ¹	10	960	✓			\$ 101.20
	17014961	TR LTS 20µL F 960A/10	20 µL ¹	10	960	✓		✓	156.80
	17014962	TR LTS 250µL S 960A/10	200 µL ²	10	960	✓			101.20
	17014963	TR LTS 200µL F 960A/10	200 µL ²	10	960	✓		✓	156.80
	17014964	TR LTS 300µL S 768A/8	300 µL	8	768	✓			101.20
	17014965	TR LTS 300µL F 768A/8	300 µL	8	768	✓		✓	156.80
	17014966	TR LTS 1000µL S 768A/8	1000 µL	8	768	✓			101.20
	17014967	TR LTS 1000µL F 768A/8	1000 µL	8	768	✓		✓	156.80
	17014968	TR LTS 1200µL S 768A/8	1200 µL	8	768	✓			101.20
	17014969	TR LTS 1200µL F 768A/8	1200 µL	8	768	✓		✓	156.80

UNV

TerraRack	17014970	TR UNV 10µL S 960A/10	10 µL	10	960	✓			\$ 101.20
	17014971	TR UNV 10µL F 960A/10	10 µL	10	960	✓		✓	156.80
	17014972	TR UNV 10µL GS 960A/10	10 µL	10	960	✓	✓		101.20
	17014973	TR UNV 10µL GF 960A/10	10 µL	10	960	✓	✓	✓	156.80
	17014974	TR UNV 20µL F 960A/10	20 µL	10	960	✓		✓	156.80
	17014975	TR UNV 100µL F 960A/10	100 µL	10	960	✓		✓	156.80
	17014977	TR UNV 200µL F 960A/10	200 µL	10	960	✓		✓	156.80
	17014976	TR UNV 250µL S 960A/10	250 µL	10	960	✓			101.20
	17014978	TR UNV 300µL S 768A/8	300 µL	8	768	✓			101.20
	17014979	TR UNV 300µL F 768A/8	300 µL	8	768	✓		✓	156.80
	17014980	TR UNV 1000µL S 768A/8	1000 µL	8	768	✓			101.20
	17014981	TR UNV 1000µL F 768A/8	1000 µL	8	768	✓		✓	156.80

TerraBase	TerraBase Accessory for TerraRack		PRICE
17014982	TerraRack Base - short; 1 base to fit 10 - 300 µL TerraRack racks		\$ 24.80
17014983	TerraRack Base - tall; 1 base to fit 1000/1200 µL TerraRack racks		27.60

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

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



Recycled PET!

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



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	CATALOG No.	DESCRIPTION	VOL		QTY		FEATURES			PRICE
			MAX VOLUME	RACKS/CARTON	TIPS/CARTON	STERILIZED	SHAFT/GARD	FILTER		
	30389291	GPS LTS 20µL 960A/10	20 µL ¹	10	960					\$ 78.00
	30389297	GPS LTS 20µL S 960A/10	20 µL ¹	10	960	✓				101.20
	30389299	GPS LTS 250µL 960A/10	200 µL ²	10	960					78.00
	30389301	GPS LTS 250µL S 960A/10	200 µL ²	10	960	✓				101.20
	30389303	GPS LTS 300µL 768A/8	300 µL	8	768					78.00
	30389304	GPS LTS 300µL S 768A/8	300 µL	8	768	✓				101.20
	30389292	GPS LTS 1000µL 768A/8	1000 µL	8	768					78.00
	30389294	GPS-LTS 1000µL S 768A/8	1000 µL	8	768	✓				101.20
	30389270	GP LTS 20µL 960A/10	20 µL ¹	10	960					78.00
	30389275	GP LTS 20µL S 960A/10	20 µL ¹	10	960	✓				101.20
	30389274	GP LTS 20µL F 960A/10	20 µL ¹	10	960	✓		✓		155.80
	30389277	GP LTS 250µL 960A/10	200 µL ²	10	960					78.00
	30389278	GP LTS 250µL S 960A/10	200 µL ²	10	960	✓				101.20
	30389276	GP LTS 200µL F 960A/10	200 µL ²	10	960	✓		✓		155.80
	30389271	GP LTS 1000µL 768A/8	1000 µL	8	768					78.00
	30389273	GP LTS 1000µL S 768A/8	1000 µL	8	768	✓				101.20
30389272	GP LTS 1000µL F 768A/8	1000 µL	8	768	✓		✓		155.80	
	30389354	Tip Racks GPR LTS 20µL 0/10	20 µL	10						39.80
	30389353	Tip Racks GPR XXX 250µL 0/10	200 µL	10						39.80
	30397667	Tip Racks GPR XXX 300µL 0/8	300 µL	8						39.80
	30389351	Tip Racks GPR XXX 1000µL 0/8	1000 µL	8						39.80
	30389283	GPS UNV 10µL G 960A/10	10 µL	10	960		✓	✓		\$ 78.00
	30389285	GPS UNV 10µL GS 960A/10	10 µL	10	960	✓	✓			101.20
	30389287	GPS UNV 250µL 960A/10	250 µL	10	960					78.00
	30389289	GPS UNV 250µL S 960A/10	250 µL	10	960	✓				101.20
	30397665	GPS UNV 300µL 768A/8	300 µL	8	768					78.00
	30397666	GPS UNV 300µL S 768A/8	300 µL	8	768	✓				101.20
	30389279	GPS UNV 1000µL 768A/8	1000 µL	8	768					78.00
	30389281	GPS UNV 1000µL S 768A/8	1000 µL	8	768	✓				101.20
	30389258	GP UNV 10µL 960A/10	10 µL	10	960					78.00
	30389265	GP UNV 10µL S 960A/10	10 µL	10	960	✓				101.20
	30389263	GP UNV 10µL F 960A/10	10 µL	10	960	✓		✓		155.80
	30389264	GP UNV 10µL FG 960A/10	10 µL	10	960	✓	✓	✓		155.80
	30389267	GP UNV 20µL F 960A/10	20 µL	10	960	✓		✓		155.80
	30389262	GP UNV 100µL F 960A/10	100 µL	10	960	✓		✓		155.80
	30389266	GP UNV 200µL F 960A/10	200 µL	10	960	✓		✓		155.80
	30389268	GP UNV 250µL 960A/10	250 µL	10	960					78.00
	30389269	GP UNV 250µL S 960A/10	250 µL	10	960	✓				101.20
	30389259	GP UNV 1000µL 768A/8	1000 µL	8	768					78.00
	30389261	GP UNV 1000µL S 768A/8	1000 µL	8	768	✓				101.20
	30389260	GP UNV 1000µL F 768A/8	1000 µL	8	768	✓		✓		155.80
	30389350	Tip Racks GPR UNV 10µL 0/10	10 µL	10						39.80
	30389354	Tip Racks GPR LTS 20µL 0/10	10 µL	10			✓			39.80
	30389353	Tip Racks GPR XXX 250µL 0/10	250 µL	10						39.80
	30397667	Tip Racks GPR XXX 300µL 0/8	300 µL	8						39.80
	30389351	Tip Racks GPR XXX 1000µL 0/8	1000 µL	8						39.80

Rack base not included with SpaceSaver.

Rack base not included with SpaceSaver.

Double-96 Racked Tips

StableStak and StableRak

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

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 (StableRak only)

Protective

Keeps tips safe from debris, dust and contamination

Fast-loading

Sturdy, non-slip racks make tip loading easy

mt.com/SR-BCU

StableRak and StableStak



Bulk Tips LTS and UNV formats



CATALOG No.	DESCRIPTION	VOL		QTY		FEATURES				PRICE
		MAX VOLUME		RACKS/CARTON	TIPS/CARTON	STERILIZED	FILTER	SHAFTGUARD	WIDE-O	
17005862	SR LTS 20µL 960A/5	20 µL ¹		5	960					\$ 77.80
17005861	SR LTS 20µL S 960A/5	20 µL ¹		5	960	✓				101.20
17005860	SR LTS 20µL F 960A/5	20 µL ¹		5	960	✓	✓			155.80
17005864	SR LTS 250µL 960A/5	200 µL ²		5	960					77.80
17005863	SR LTS 250µL S 960A/5	200 µL ²		5	960	✓				101.20
17005859	SR LTS 200µL F 960A/5	200 µL ²		5	960	✓	✓			155.80
17005867	SR LTS 300µL 768A/4	300 µL		4	768					77.80
17005866	SR LTS 300µL S 768A/4	300 µL		4	768	✓				101.20
17005865	SR LTS 300µL F 768A/4	300 µL		4	768	✓	✓			155.80
17007083	SR LTS 1000µL 768A/4	1000 µL		4	768					77.80
17007082	SR LTS 1000µL S 768A/4	1000 µL		4	768	✓				101.20
17007081	SR LTS 1000µL F 768A/4	1000 µL		4	768	✓	✓			155.80
17007086	SR LTS 1200µL 768A/4	1200 µL		4	768					77.80
17007085	SR LTS 1200µL S 768A/4	1200 µL		4	768	✓				101.20
17007084	SR LTS 1200µL F 768A/4	1200 µL		4	768	✓	✓			155.80
17005873	SS LTS 20µL 960A/5	20 µL ¹		5	960					\$ 77.80
17005872	SS LTS 20µL S 960A/5	20 µL ¹		5	960	✓				101.20
17005875	SS LTS 250µL 960A/5	200 µL ²		5	960					77.80
17005874	SS LTS 250µL S 960A/5	200 µL ²		5	960	✓				101.20
17005877	SS LTS 300µL 768A/4	300 µL		4	768					77.80
17005876	SS LTS 300µL S 768A/4	300 µL		4	768	✓				101.20
17007090	SS LTS 1000µL 768A/4	1000 µL		4	768					77.80
17007089	SS LTS 1000µL S 768A/4	1000 µL		4	768	✓				101.20
17005857	SR UNV 300µL 768/4	300 µL		4	768					\$ 77.80
17001128	RC LTS 20µL 1000A/1	20 µL ¹			1000					\$ 59.80
17001118	RC LTS 250µL 1000A/1	200 µL ²			1000					59.80
17001132	RC LTS 300µL 1000A/1	300 µL			1000					59.80
17001129	RC LTS 1000µL 1000A/1	1000 µL			1000					59.80
17006324	RC LTS 1200µL 1000A/1	1200 µL			1000					59.80
17001130	RC LTS 2000µL 1000A/1	2000 µL			1000					121.40
17001133	RC LTS 5000µL 1000A/1	5000 µL			1000					135.80
17001119	RC LTS 10mL 200A/1	10 mL			200					78.80
17005940*	RC LTS 10mL S 75A/*	10 mL			75	✓				127.60
17001131	RC LTS 20mL 100A/1	20 mL			100					78.80
17005941*	RC LTS 20mL S 50A/*	20 mL			50	✓				94.20
17001124	RC UNV 10µL 1000A/10	10 µL			1000					\$ 59.80
17001123	RC UNV 10µL G 1000A/10	10 µL			1000		✓			59.80
17001116	RC UNV 250µL 1000A/1	250 µL			1000					59.80
17001127	RC UNV 250µL W 1000A/1	250 µL			1000			✓		59.80
17001121	RC UNV 1000µL 1000A/1	1000 µL			1000					59.80
17001125	RC UNV 2000µL 1000A/1	2000 µL			1000					121.40
17001126	RC UNV 2500µL 1000A/1	2500 µL			1000					121.40
17001117	RC UNV 5000µL 1000A/1	5000 µL			1000					136.80
17001122	RC UNV 10mL 200A/1	10 mL			200					78.80
17005939*	RC UNV 10mL S 75A/*	10 mL			75	✓				129.00

*individually wrapped Wide-O = Wide Orifice ¹ Fits 2, 10 and 20 µL pipettes ² Fits 50, 100 and 200 µL pipettes 55

Racked Tips

SBS Standard Tip Packaging

Removable-cover Racks

Removable-cover racks – easy, practical, convenient packaging. Many volume sizes available in both LTS and universal formats.

- 20% less plastic than the original RT rack!
- Locking latch
- Removable hinged lid
- BioClean Ultra-certified
- Use with Green-Pak and SpaceSaver refills
- Available with Low Retention tips (see page 60)



Fast loading

Robust secure racks make tip loading easy

Autoclavable

15 psi, 121°C, 20 minutes

Format options

Standard, sterilized and filter versions available

Protective

Safe from dirt and contamination

mt.com/SR-BCU



Racked Tips

CATALOG No.	DESCRIPTION	VOL		QTY		FEATURES					PRICE
		MAX VOLUME		RACKS/CARTON	TIPS/CARTON	STERILIZED	SHAFTGUARD	WIDE-O	FILTER		
30389200	RT LTS 20µL 960A/10	20 µL ¹	10	960							\$ 77.80
30389228	RT LTS 20µL S 960A/10	20 µL ¹	10	960	✓						101.20
30389225	RT LTS 20µL F 960A/10	20 µL ¹	10	960	✓			✓			155.80
30389243	RT LTS 250µL 960A/10	200 µL ²	10	960							77.80
30389247	RT LTS 250µL W 960A/10	200 µL ²	10	960			✓				93.40
30389245	RT LTS 250µL S 960A/10	200 µL ²	10	960	✓						101.20
30389249	RT LTS 250µL SW 960A/10	200 µL ²	10	960	✓		✓				110.40
30389239	RT LTS 200µL F 960A/10	200 µL ²	10	960	✓				✓		155.80
30389253	RT LTS 300µL 768A/8	300 µL	10	768							77.80
30389255	RT LTS 300µL S 768A/8	300 µL	8	768	✓						101.20
30389254	RT LTS 300µL F 768A/8	300 µL	8	768	✓				✓		155.80
30389211	RT LTS 1000µL 768A/8	1000 µL	8	768							77.80
30389217	RT LTS 1000µL W 768A/8	1000 µL	8	768			✓				93.40
30389215	RT LTS 1000µL S 768A/8	1000 µL	8	768	✓						101.20
30389220	RT LTS 1000µL SW 768A/8	1000 µL	8	768	✓		✓				110.40
30389212	RT LTS 1000µL F 768A/8	1000 µL	8	768	✓				✓		155.80
30389230	RT LTS 1200µL 768A/8	1200 µL	8	768							77.80
30389234	RT LTS 1200µL S 768A/8	1200 µL	8	768	✓						101.20
30389231	RT LTS 1200µL F 768A/8	1200 µL	8	768	✓				✓		155.80
30389236	RT LTS 2000µL 480A/8	2000 µL	8	480							93.40
30389238	RT LTS 2000µL S 480A/8	2000 µL	8	480	✓						101.20
30389237	RT LTS 2000µL F 480A/8	2000 µL	8	480	✓				✓		155.80
30389256	RT LTS 5000µL 192A/8	5000 µL	8	192							77.80
30389257	RT LTS 5000µL S 192A/8	5000 µL	8	192	✓						101.20

¹ Fits 2, 10 and 20 µL pipettes

² Fits 50, 100 and 200 µL pipettes



Racked Tips

CATALOG No.	DESCRIPTION	VOL		QTY		FEATURES					PRICE
		MAX VOLUME		RACKS/CARTON	TIPS/CARTON	STERILIZED	SHAFTGUARD	WIDE-O	FILTER		
30389163	RT UNV 10µL 960A/10	10 µL	10	960							\$ 77.80
30389174	RT UNV 10µL G 960A/10	10 µL	10	960			✓				77.80
30389178	RT UNV 10µL GS 960A/10	10 µL	10	960	✓		✓				101.20
30389181	RT UNV 10µL S 960A/10	10 µL	10	960	✓						101.20
30389172	RT UNV 10µL F 960A/10	10 µL	10	960	✓				✓		155.80
30389175	RT UNV 10µL FG 960A/10	10 µL	10	960	✓		✓		✓		155.80
30389189	RT UNV 20µL F 960A/10	20 µL	10	960	✓				✓		155.80
30389170	RT UNV 100µL F 960A/10	100 µL	10	960	✓				✓		155.80
30389186	RT UNV 200µL F 960A/10	200 µL	10	960	✓				✓		155.80
30389191	RT UNV 250µL 960A/10	250 µL	10	960							77.80
30389195	RT UNV 250µL W 960A/10	250 µL	10	960				✓			85.40
30389193	RT UNV 250µL S 960A/10	250 µL	10	960	✓						101.20
30389058	RT UNV 300µL 768A/8	300 µL	10	768							77.80
30389059	RT UNV 300µL S 768A/8	300 µL	10	768	✓						101.20
30389136	RT UNV 300µL F 768A/8	300 µL	8	768	✓				✓		155.80
30389164	RT UNV 1000µL 768A/8	1000 µL	8	768							77.80
30389168	RT UNV 1000µL S 768A/8	1000 µL	8	768	✓						101.20
30389165	RT UNV 1000µL F 768A/8	1000 µL	8	768	✓				✓		155.80
30389183	RT UNV 2000µL 480A/8	2000 µL	8	480							93.40
30389185	RT UNV 2000µL S 480A/8	2000 µL	8	480	✓						101.20
30389184	RT UNV 2000µL F 480A/8	2000 µL	8	480	✓				✓		155.80
30389198	RT UNV 5000µL 192A/8	5000 µL	8	192							77.80
30389199	RT UNV 5000µL S 192A/8	5000 µL	8	192	✓						101.20

Wide-O = Wide Orifice

Low Retention Tips

Stop Wasting Valuable Sample!

Superhydrophobic Rainin LR low retention tips minimize residual volume, particularly when transferring viscous samples and liquids 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		
Racked Tips	30389227	RT LTS 20µL L 960A/10	20 µL ¹	10	960				✓		\$ 101.20
	30389229	RT LTS 20µL LS 960A/10	20 µL ¹	10	960	✓		✓			110.40
	30389226	RT LTS 20µL FL 960A/10	20 µL ¹	10	960	✓		✓	✓		169.20
	30389244	RT LTS 250µL L 960A/10	200 µL ²	10	960			✓			101.20
	30389248	RT LTS 250µL LW 960A/10	200 µL ²	10	960		✓	✓			101.20
	30389246	RT LTS 250µL LS 960A/10	200 µL ²	10	960	✓		✓			110.40
	30389250	RT LTS 250µL LSW 960A/10	200 µL ²	10	960	✓	✓	✓			135.80
	30389240	RT LTS 200µL FL 960A/10	200 µL ²	10	960	✓		✓	✓		169.20
	30389241	RT LTS 200µL FLW 960A/10	200 µL ²	10	960	✓	✓	✓	✓		169.20
	30389160	RT LTS 300µL L 768A/8	300 µL	8	768			✓			101.20
	30389161	RT LTS 300µL LS 768A/8	300 µL	8	768	✓		✓			110.40
	30389162	RT LTS 300µL FL 768A/8	300 µL	8	768	✓		✓	✓		169.20
	30389214	RT LTS 1000µL L 768A/8	1000 µL	8	768			✓			101.20
	30389216	RT LTS 1000µL LS 768A/8	1000 µL	8	768	✓		✓			110.40
	30389213	RT LTS 1000µL FL 768A/8	1000 µL	8	768	✓		✓	✓		169.20
	30389219	RT LTS 1000µL LW 768A/8	1000 µL	8	768		✓	✓			101.20
	30389221	RT LTS 1000µL LSW 768A/8	1000 µL	8	768	✓	✓	✓			135.80
	30389218	RT LTS 1000µL FLW 768A/8	1000 µL	8	768	✓	✓	✓	✓		169.20
	30389233	RT LTS 1200µL L 768A/8	1200 µL	8	768			✓			101.20
	30389235	RT LTS 1200µL LS 768A/8	1200 µL	8	768	✓		✓			110.40
30389232	RT LTS 1200µL FL 768A/8	1200 µL	8	768	✓		✓	✓		169.20	
SpaceSaver	30389296	GPS LTS 20µL L 960A/10	20 µL ¹	10	960			✓			\$ 101.20
	30389298	GPS LTS 20µL LS 960A/10	20 µL ¹	10	960	✓		✓			110.20
	30389300	GPS LTS 250µL L 960A/10	200 µL ²	10	960			✓			101.20
	30389302	GPS LTS 250µL LS 960A/10	200 µL ²	10	960	✓		✓			110.20
	30389885	GPS LTS 300µL LS 768A/8	300 µL	8	768	✓		✓			101.20
	30389293	GPS LTS 1000µL L 768A/8	1000 µL	8	768			✓			101.20
	30389295	GPS LTS 1000µL LS 768A/8	1000 µL	8	768	✓		✓			110.20
Bulk	17014340	RC LTS 20µL L 1000A/1	20 µL		1000			✓			\$ 75.20
	17014341	RC LTS 250µL L 1000A/1	200 µL		1000			✓			75.20
	17014342	RC LTS 1000µL L 1000A/1	1000 µL		1000			✓			75.20

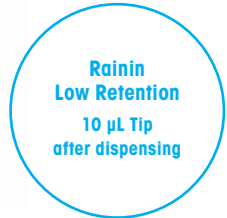
¹ Fits 2, 10 and 20 µL pipettes

² Fits 50, 100 and 200 µL pipettes

Rack base not included with SpaceSaver. See page 53 for empty racks.



Residual liquid with...



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	CATALOG No.	DESCRIPTION	VOL		QTY		FEATURES				PRICE
			MAX VOLUME	RACKS/CARTON	TIPS/CARTON	STERILIZED	SHAFT GUARD	WIDE-O	LOW RET	FILTER	
Racked Tips	30389180	RT UNV 10µL L 960A/10	10 µL	10	960				✓		\$ 101.20
	30389182	RT UNV 10µL LS 960A/10	10 µL	10	960	✓			✓		110.40
	30389173	RT UNV 10µL FL 960A/10	10 µL	10	960	✓			✓	✓	169.20
	30389177	RT UNV 10µL GL 960A/10	10 µL	10	960		✓		✓		101.20
	30389179	RT UNV 10µL GLS 960A/10	10 µL	10	960	✓	✓		✓		109.60
	30389176	RT UNV 10µL FGL 960A/10	10 µL	10	960	✓	✓		✓	✓	169.20
	30389190	RT UNV 20µL FL 960A/10	20 µL	10	960	✓			✓	✓	169.20
	30389171	RT UNV 100µL FL 960A/10	100 µL	10	960	✓			✓	✓	169.20
	30389187	RT UNV 200µL FL 960A/10	200 µL	10	960	✓			✓	✓	169.20
	30389188	RT UNV 200µL FLW 960A/10	200 µL	10	960	✓		✓	✓	✓	169.20
	30389192	RT UNV 250µL L 960A/10	250 µL	10	960				✓		101.20
	30389196	RT UNV 250µL LW 960A/10	250 µL	10	960				✓	✓	101.20
	30389194	RT UNV 250µL LS 960A/10	250 µL	10	960	✓			✓		110.40
	30389197	RT UNV 250µL LSW 960A/10	250 µL	10	960	✓		✓	✓		135.80
	30389137	RT UNV 300µL L 768A/8	300 µL	8	768				✓		101.20
	30389138	RT UNV 300µL LS 768A/8	300 µL	8	768	✓			✓		110.40
	30389139	RT UNV 300µL FL 768A/8	300 µL	8	768	✓			✓	✓	169.20
	30389167	RT UNV 1000µL L 768A/8	1000 µL	8	768				✓		101.20
30389169	RT UNV 1000µL LS 768A/8	1000 µL	8	768	✓			✓		110.40	
30389166	RT UNV 1000µL FL 768A/8	1000 µL	8	768	✓			✓	✓	169.20	
SpaceSaver	30389284	GPS UNV 10µL GL 960A/10	10 µL	10	960			✓		✓	\$ 101.20
	30389286	GPS UNV 10µL GLS 960A/10	10 µL	10	960	✓	✓		✓		110.20
	30389288	GPS UNV 250µL L 960A/10	250 µL	10	960				✓		101.20
	30389290	GPS UNV 250µL LS 960A/10	250 µL	10	960	✓			✓		110.20
	30389280	GPS UNV 1000µL L 768A/8	1000 µL	8	768				✓		101.20
30389282	GPS UNV 1000µL LS 768A/8	1000 µL	8	768	✓			✓		109.60	
Bulk	17014395	RC UNV 10µL L 1000A/1	10 µL		1000				✓		\$ 75.20
	17014396	RC UNV 10µL GL 1000A/1	10 µL		1000				✓		75.20
	17014397	RC UNV 250µL L 1000A/1	250 µL		1000				✓		75.20
	17014398	RC UNV 1000µL L 1000A/1	1000 µL		1000				✓		75.20
	17015068	RC UNV 1000µL LW 1000A/1	1000 µL		1000				✓	✓	75.20

Rack base not included with SpaceSaver. See page 53 for empty racks.

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

Specialty Tips

Unique Tips for Special Applications



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.



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.



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.

	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						✓	\$ 127.60
	30389252	RT LTS 250µL SX 768A/8	200 µL ²	8	768	✓					✓	136.80
	30389242	RT LTS 200µL FX 768A/8	200 µL ²	8	768	✓				✓	✓	213.00
	30389222	RT LTS 1000µL X 768A/8	1000 µL	8	768						✓	127.60
	30389224	RT LTS 1000µL SX 768A/8	1000 µL	8	768	✓					✓	136.80
	30389223	RT LTS 1000µL FX 768A/8	1000 µL	8	768	✓				✓	✓	213.00
	30389247	RT LTS 250µL W 960A/10	200 µL ²	10	960		✓					\$ 93.40
	30389248	RT LTS 250µL LW 960A/10	200 µL ²	10	960		✓	✓				101.20
	30389249	RT LTS 250µL SW 960A/10	200 µL ²	10	960	✓	✓					110.40
	30389250	RT LTS 250µL LSW 960A/10	200 µL ²	10	960	✓	✓	✓				135.80
	30389241	RT LTS 200µL FLW 960A/10	200 µL	10	960	✓	✓	✓	✓			169.20
	30389217	RT LTS 1000µL W 768A/8	1000 µL	8	768		✓					93.40
	30389219	RT LTS 1000µL LW 768A/8	1000 µL	8	768		✓	✓				101.20
	30389220	RT LTS 1000µL SW 768A/8	1000 µL	8	768	✓	✓					110.40
30389221	RT LTS 1000µL LSW 768A/8	1000 µL	8	768	✓	✓	✓				135.80	
30389218	RT LTS 1000µL FLW 768A/8	1000 µL	8	768	✓	✓	✓	✓			169.20	

² Fits 50, 100 and 200 µL pipettes

	CATALOG No.	DESCRIPTION	VOL		QTY		FEATURES				PRICE	
			MAX VOLUME	RACKS/CARTON	TIPS/CARTON	STERILIZED	SHAFTGARD	WIDE-O	LOW RET	FILTER		
Racked Tips	30389174	RT UNV 10µL G 960A/10	10 µL	10	960		✓					\$ 77.80
	30389178	RT UNV 10µL GS 960A/10	10 µL	10	960	✓	✓					101.20
	30389175	RT UNV 10µL FG 960A/10	10 µL	10	960	✓	✓				✓	155.80
	30389195	RT UNV 250µL W 960A/10	250 µL	10	960			✓				85.40
	30389196	RT UNV 250µL LW 960A/10	250 µL	10	960			✓	✓			101.20
	30389197	RT UNV 250µL LSW 960A/10	250 µL	10	960	✓		✓	✓			135.80
30389188	RT UNV 200µL FLW 960A/10	250 µL	10	960	✓		✓	✓	✓		169.20	
Bulk	17001127	RC UNV 250µL W 1000A/1	250 µL		1000			✓				\$ 59.80
	17015068	RC UNV 1000µL LW 1000A/1	1000 µL		1000			✓	✓			75.20
Refills	30389283*	GPS UNV 10µL G 960A/10	10 µL	10	960		✓					\$ 78.00
	30389285*	GPS UNV 10µL GS 960A/10	10 µL	10	960	✓	✓					101.20
	30389264	GP UNV 10µL FG 960A/10	10 µL	10	960	✓	✓				✓	155.80

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



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.



Tested and Certified 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.

Why BioClean Ultra?

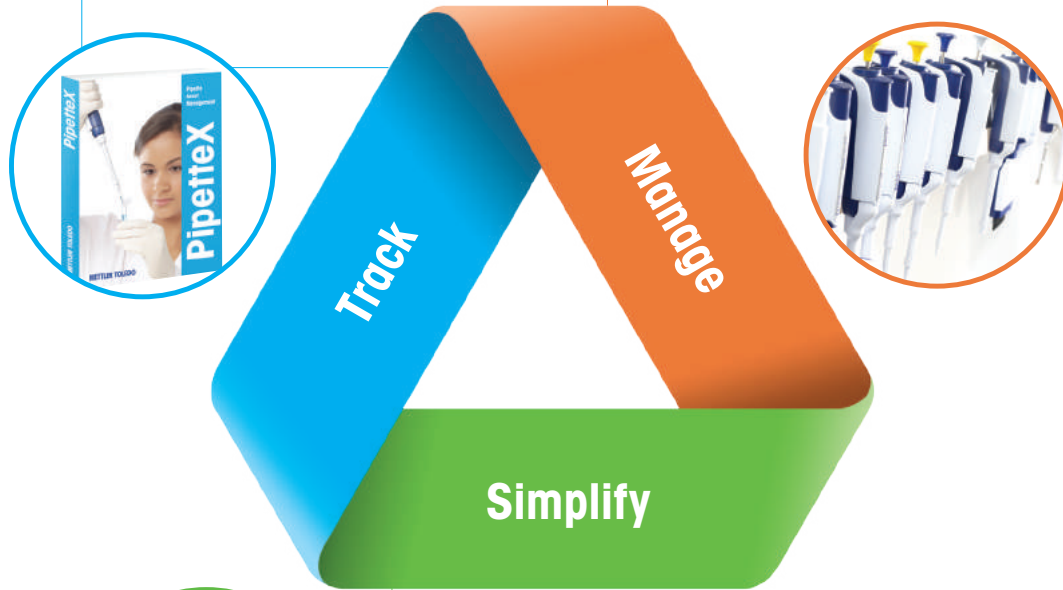
This table shows the thoroughness and completeness of Rainin BioClean Ultra quality testing, compared to other major tip brands. Rainin maintains the industry's most comprehensive testing procedures.

	HUMAN DNA	BACTERIAL DNA	DNASE	RNASE	ENDOTOXIN	PROTEIN	PROTEASE	ATP	PCR INHIBITORS
BioClean Ultra™	< 0.32 pg	< 1 pg	≤ 10 ⁻⁷ KU/μL	≤ 10 ⁻⁹ KU/μL	≤ 0.001 EU/mL	< 2 ng/sample	≤ 500 ng/mL	< 2 x 10 ⁻¹² mg/μL	None detected
Brand – A	"Free of"	–	10 ⁻⁶ KU/μL	10 ⁻⁹ KU/μL	≤ 0.05 EU/mL	–	–	–	–
Brand – B	< 0.40 fg	–	–	< 8.6 fg	< 1 pg	–	–	< 1 fg	–
Brand – C	< 2 pg	< 50 fg	10 ⁻⁴ KU	10 ⁻⁹ KU	< 0.001 EU/mL	<1ng/μL	–	< 5.5 x 10 ⁻¹² mg	< 10 targets amplifiable
Brand – D	None detected	–	None detected	None detected	< 0.06 EU/mL	–	–	–	None detected
Brand – E	< 1 pg	–	"Free of"	"Free of"	< 0.05 EU/mL	–	"Free of"	"ATP-free"	–
Brand – F	"Free of"	"Free of"	"Free of"	"Free of"	"Free of"	–	"Free of"	"ATP-free"	"Free of"
Brand – G	–	–	< 6.25 x 10 ⁻⁵ U/μL	< 3.125 x 10 ⁻⁹ U/μL	< 0.03 EU/mL	–	–	–	–
Brand – H	< 30 pg	–	<10x ⁻⁷ KU/μL	< 10 ⁻⁹ KU/μL	< 0.06 EU/mL	–	–	–	–
Brand – I	< 30 pg	–	<10 ⁻⁷ KU/μL	< 10 ⁻⁹ KU/μL	≤ 0.06 EU/mL	–	–	< 10 ⁻¹³ mg/μL	None detected
Brand – J	"Free of"	"Free of"	"Free of"	"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.

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.



- 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	\$1,625.00
	30475915	PipetteX - Unlimited	6,091.00
	30478260	PipetteX - Site, Renewal	1,625.00
	30478262	PipetteX - Unlimited, Renewal	6,091.00

Rainin SmartStand The Intelligent Pipette Stand

By reading the RFID chip that's in every Rainin XLS and XLS+ brand pipette, SmartStand instantly displays the compliance status for up to four pipettes – manual or electronic. Pick up a pipette and SmartStand's color LCD screen switches to a detailed view of that pipette's service and calibration status. Works seamlessly with PipetteX too!



	CATALOG No.	DESCRIPTION	PRICE
Pipette Stands	30312897	SmartStand stand with PipetteX basic software	\$ 830.00
	17001255	Universal Carousel Stand for seven pipettes	165.60
	17003024	Hang-Ups, magnetic, for three pipettes	90.00
	17004992	Shelf Hang-Ups for three pipettes	90.00
	17006638	Adapters for E4XLS with Hang-Ups, carousel	44.80

Rainin SmartCheck

Verify the Accuracy of Any Pipette

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 benchtop 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	\$ 1,574.00
	30448961	Function Test Kit	515.00
	30448967	EasyScan RFID LAN set	1,459.00

[mt.com/SR-SC](https://www.mt.com/SR-SC)

Rainin PipetteX

Software to Simplify Pipette Management

PipetteX™ uses the RFID tag embedded in every Rainin XLS pipette to automatically track and manage calibration data, pipette usage and location. Our simple software solution integrates with SmartStand, SmartCheck and Rainin Service to create a powerful, easy-to-use pipette tracking and calibration management system.

- 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
- Manage all brands of pipettes



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](https://www.mt.com/SR-PX)

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Rainin MicroPro

Portable 96-Channel Pipetting

New!

- Weighs just over 11 pounds!
- 20 μ L and 300 μ L models
- Easy to use
- Affordable



Streamline your 96- and 384-well microplate work!

For more information on the new MicroPro, see page 24.

METTLER TOLEDO